Trading forward: The Paris Bourse in the nineteenth century

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\section*{ABSTRACT}
Contrary to what law and finance theory would predict, the Paris Bourse was highly liquid at the turn of the twentieth century: the traded volumes amounted to four times the French GDP. This magnitude was mainly due to forward trading. The Bourse had developed as a forward market, despite a ban on forward transactions. The guild-like body running the Bourse played a key role in legitimizing and regulating these operations, previously equated with gambling. The 1885 legalizing act initiated a new field of law (‘securities law’) and paved the way for the heyday of the Paris Bourse.

\section*{1. Introduction}
‘Law and Finance’ theory considers that civil-law countries have lower financial development than common-law countries because of their weaker legal protection of corporate shareholders and creditors. Consequently, firms in civil-law countries have restricted access to external finance. This harms their performances and reinforces ownership concentration.\textsuperscript{1} At the macro level, it contributes to lower economic growth.\textsuperscript{2} Among civil-law countries, France scores poorly, because of the slower adaptation of its institutions to changing business needs.\textsuperscript{3}

Not only do critics of the ‘Law and Finance’ approach highlight its ahistorical character, they also contest its main argument: in the nineteenth century, judicial interpretation and legislative production were substantial, \textit{both} in common-law and civil-law countries\textsuperscript{4} In a special issue of this journal, the guest editors concluded that ‘business history suggests that legal origins do not matter’\textsuperscript{5} and formulated an ambitious agenda. They called for research on the early development of stock markets in European civil-law economies, in order to document interactions between regulators and regulated organizations as well as actual business practices, beyond formal rules.

The ‘Law and Finance’ debate usually focuses on the number and capitalization of domestic listed firms (shares and corporate bonds). According to the finance and growth literature,\textsuperscript{6} as well as historical studies on financial development,\textsuperscript{7} these metrics are less important than liquidity for economic growth. The higher the liquidity, the lower is the risk premium that investors demand. The lower the cost of capital for issuers, the larger the issuance of securities
and, hence, the higher the investment. Even though ‘overtrading’ triggers manias, panics, and crashes,8 scholars often neglect trading volumes9 because of the difficulties in putting together historical series.

Drawing on newly available archival records,10 we contribute to the ‘Law and Finance’ debate by documenting a striking counter-example: the early development of the Paris Bourse, second only to London in Europe before the First World War. We provide original estimates of the traded volumes at the Paris Bourse at the turn of the twentieth century. These volumes amounted to four times the French GDP (counted on both sides).11 This magnitude was mainly due to forward trading, which was three times the size of GDP. Since its creation in 1724, the Bourse had been primarily a forward market, despite a ban on such operations: until their legalization in 1885, they were equated with gambling. This illegality threatened the official stockbrokers’ main business. They coordinated their business strategies and collective actions through the Compagnie des Agents de Change (CAC).12 This is why we document the key role played by this guild-like body in the process that led from the legitimation to the legalization of forward operations.

We bring to light the formal and informal rules and the actual practices through which forward contracts were negotiated. We explain the disputed adaptation of these rules and practices to business needs and regulators’ expectations by analyzing the organization of the Bourse and the guild running it, its rivalries with other financial organizations, and the dynamic power plays with judges and the government. By seeking to organize the fair ordering of trading through social control, institutional innovations, and legal strategies, the CAC built the legitimacy of forward operations and eventually obtained their full legal recognition.

The process was disputed and non-linear: it consisted in a ‘rolling relation’ that dialectally relates law and finance.13 Nevertheless, the 1885 Act made possible the creation a new field of law – securities law (droit boursier) – that had been hindered by the controversies on forward operations. The first securities law passed in 1890 allowed further regulatory changes that culminated in the 1898 reform of the Paris financial center. This reform enhanced the transparency of financial transactions and supported the development of listed securities. It also stabilized the Bourse by effectively dealing with counterparty risk and significantly decreased transaction costs.14 Consequently, traded volumes as a ratio of GDP reached heights similar to the 2006 level.

The rest of the paper is structured as follows. The next section explains the dual structure of the Paris financial center, assesses its development and addresses the question of financial liquidity and stability. Section 3 describes the legislation on forward operations and stockbrokerage; it relates the pivotal role of the jurisprudence. The fourth section analyzes the stockbrokers’ strategies to cope with the threats incurred by legal uncertainties. They raised their social status, strengthened the reliability of the organization of the Bourse and developed actions to shape the jurisprudence. Section 5 focuses on the 1885 law that legalized forward operations and its consequences. It recalls previous legislative proposals and debates; it analyzes the consequences of the legalization for the Paris financial center. The final section concludes.

2. Liquidity and stability

At the dawn of the twentieth century, Western financial markets were thriving. The Paris financial center was at its apex due to its genuine dual structure. The tension between the
stability and liquidity of stock markets was the subject of intense debate. Although liquidity was already considered a crucial quality of stock markets, frequent financial crises affected both the financing of the economy and personal wealth. In France, the debate focused on the legal status of forward operations.\(^{15}\)

### 2.1. The dual structure of the Paris financial center

The market microstructure literature traditionally emphasizes the benefits, for both investors and issuers, of a consolidated and transparent market. It considers such a consolidation as the consequence of competition. The benefits of consolidation result from positive externalities of liquidity and the reduction of information asymmetries in the price discovery process. A more recent literature emphasizes the advantages of differentiated markets. If investors and issuers are heterogeneous enough in terms of risk aversion, information, costs structure and patience, a variety of differentiated markets may emerge. For instance, informed investors may prefer an opaque market because they can take advantage of their superior information, whereas uninformed investors may opt for a transparent market.\(^{16}\)

Recent research on the history of stock exchanges indicates that financial centres developed even though they did not have a single, open stock exchange as in London.\(^{17}\) In the nineteenth century, the Paris financial centre hosted two differentiated markets: the regulated Bourse and the OTC-like *Coulisse*. The Bourse was a transparent and regulated exchange. This order-driven market was organized by the CAC. It was formed of 60 official pure brokers (*agents de change*) entitled with the legal monopoly on transactions. By acting as a central counterparty, the CAC provided a collective guaranty to protect investors from losses. The price discovery mechanism based on open-outcry continuous auctions made possible the daily publication of the official list with the prices of all completed transactions. By contrast, the *Coulisse* was an informal and illegal market organization. Its participants – the *coulissiers* – acted both as brokers and jobbers, thus providing immediacy to the transactions. Membership was free. The *Coulisse* was an opaque market with no central counterparty: transactions were bilateral; prices were neither systematically registered nor published.

The differences between the two markets led to specialization and competition. The *Coulisse* specialized in securities that did not satisfy the high listing requirements of the Bourse. Competition between the two markets concerned the most liquid foreign and French government bonds.\(^{18}\) Professional investors were mainly bankers and banks. They collected orders from their clients and performed proprietary trading. Thanks to the size of their clientele and the magnitude of their financial resources, these banks became the largest clients of the two Parisian markets. To attract them, *agents* and *coulissiers* had to concede huge rebates on fees. From the 1860s onward, branch banks took off nationally and abroad.

### 2.2. The heyday of the Paris financial center

Assessing the competitiveness of European stock exchanges would require systematic comparative measures of the transactions costs. These measures are not available.\(^{19}\) Nonetheless, diriment transaction costs in France would be at odds with the well-established financial development of Paris, a fortiori in the context of the gold-standard free capital movement.
The dual structure of the Paris financial center contributed to its development throughout the nineteenth century. Its heyday corresponded to the so-called Belle Époque. The capitalization of securities listed at the Bourse almost doubled from 78 billion of francs in 1880 to 141 billion in 1913 (4 to 5 times French GDP). Similar data for the Coulisse do not exist. Nonetheless, the number of securities traded there more than doubled over the same period (from 155 to 346). By comparison, the number of securities at the Bourse rose from 1,105 in 1880 to 2,604 in 1913. The capitalization of domestic equity and private bonds in 1913 put Paris in the same league as common law countries even though these metrics do not take into account the key strengths of Paris.

Not only was Paris prominent, but it was also attractive. At the Bourse, the increase in the capitalization between 1880 and 1913 was stronger for foreign securities (factor 2.25 for foreign securities vs. 1.5 for French ones). The capitalization of foreign securities outweighed the capitalization of domestic securities. The Coulisse underwent a similar trend (factor 2.5 vs. 2).

Original estimates of traded volumes indicate that between 1899 and 1906, the Paris financial center traded six times the value of French GDP. The Bourse was preponderant: it traded four times the GDP, while the Coulisse accounted for the rest (Figure 1). In 2006, the overall volumes traded at the Paris Stock Exchange were of the same magnitude.

Forward operations provided most of the liquidity. In the early 1800s, forward trading exceeded the volume of cash transactions by a factor of 10. In the 1830s, the ratio was 1 to 50. For the Belle Époque, Figure 2 compares two series: the volumes of spot transactions handled by the clearing house of the Bourse, and the volumes of forward transactions settled through the actual delivery of securities. Available archival data for 1906 indicate the magnitude of the phenomenon captured by these series. Only 11% of the forward volumes

Figure 1. Traded volumes in Paris (as a ratio of French GDP, transactions counted on both sides).
ended with the actual delivery of securities. These data confirm that secondary sources: forward operations settled through the actual delivery of securities were residual.

Nevertheless, delivered forward-traded securities multiplied by four between 1877 and 1881. Under the assumption that these proportions did not vary from the 1870s to the dawn of the twentieth century, forward-traded volumes in 1881 amounted to five times the French GDP. After the 1882 crash, volumes stagnated until 1887. Then, they followed an upward trend until the First World War. Spot transactions followed a similar trend, although they only accounted for 0.7 times the GDP in 1881.

At the beginning of the twentieth century forward volumes corresponded to three times the GDP, against 0.7 times for the spot transactions (Figure 1). By comparison, forward traded volumes accounted for 81% of the traded volumes at the Paris Stock Exchange in 1906 while the derivatives only accounted for 60% of the overall traded volumes in 2006.28

2.3. The crucial role of forward trading

The development of the Paris financial center was not linear. Financial crises were exacerbated by the illegality of forward operations. They were performed without deposit of securities and money. Most of them were settled by the payment of the difference between the transaction prices and the repurchase prices, with no actual delivery of the securities.29 Although they were the most common instruments for trading since the foundation of the Bourse, forward operations were equated with gambling.

Legislators refused to recognize them, but without forgoing their contribution to the development of the market, and more specifically to the issuance of public debt. This ambiguity explains why public authorities did not strictly support forward operations. Clients could therefore trade with no risk and endanger the solvency of their brokers: if they won, they cashed in; when they lost, they could refuse to pay. Defaulting clients could be kicked out of the Bourse by the official brokers, but the Coulisse as well as six regional exchanges mitigated this threat.

Figure 2. Cleared spot transactions and settled forward transactions at the Paris Bourse, 1872–1912 (in billions of current francs).
Because of the ban on forward operations, the push for a greater liquidity by large market participants, especially the branch banks, amplified the systemic risk. In the wake of a large public investment in the French railway network, the Freycinet plan, volumes soared. The crash followed in 1882: the second largest French exchange (Lyon) collapsed, the Banque de France bailed out the Paris Bourse and the Coulisse temporarily disappeared. This mayhem showed the limits of prohibition. Without legalizing forward transactions, the stabilization of the market would have required to sacrifice liquidity. Consequently, the 1885 Act legalized forward trading.

The CAC played a key role in the process that led from the legitimization to the legalization of forward operations. Banking regulation did not exist and bankers’ orders, on behalf of their clients or on their own, were intermediated through agents or coulissiers. Therefore, bankers were favorable to the legalization of forward operations, which would have made agents and coulissiers more robust and hence mitigated counterparty risk. Bankers expressed this positive stance through collective actions such as petitions, contributions to parliamentary commissions, and position papers from the Chamber of Commerce.

Spot and forward trading performed by coulissiers was deemed illegal, since civil-court judges systematically considered that all transactions on listed and unlisted securities fell under the jurisdiction of the agents de change. Had forward operations have been legal, forward trading by coulissiers would still have been considered illegal because of their infringement of the agents’ official monopoly (the so-called ‘exception de coulisse’).

The official brokers were the only financial profession subject to a specific regulation. The illegality of forward operations clashed with their official status. Moreover, the CAC extended its guarantee to forward operations, in order to maintain a competitive edge against the coulissiers, to meet public authorities’ demand for a safer market and hence justify the monopoly. That is why the CAC and its members were the most committed to the legal recognition of forward operations.

3. Institutional threats to forward trading

The ban on forward operations clashed with the legal status of the agents de change. The discrepancy between their actual business practices and the legal framework attributed a pivotal role to the judges. The head of the CAC described this situation as a ‘Sword of Damocles’.

3.1. The legal ban on forward operations

The ban on forward operations appeared in the 1724 decree that had instituted the Paris Bourse, in the aftermath of the collapse of Law’s system. For similar reasons – restraining ‘speculation’ and the disorders it caused among the Parisian business community – the ban was re-enacted by decree in 1786. Forward operations were deemed fictitious, and hence illegal, unless the transactions were settled within two months by the actual delivery of the securities that the seller was obliged to possess when the contract was made. During the French Revolution, manipulations were so severe that the Bourse was officially closed and forward traders could be fined, pilloried and jailed.

The Napoleonic codes did not directly address forward operations. The preliminaries to the 1804 Civil Code indicate that the lawmakers were still impressed by the financial disorders
of the Revolution. Therefore, anti-speculative views prevailed, as stated in the 1795 law on
the police of the Bourse and in the 1802 decree on exchanges constitution.\textsuperscript{33} Risk could be
the object of a contract (e.g., an insurance contract), but the Civil Code did not recognize
uncertainty as a ‘serious cause’ for contracting. Uncertainty-based contracts – and forward
contracts were deemed such – were therefore equated with bets and gambling was not given
any legal protection (art. 1965, on the so-called ‘exception de jeu [the bet exception]’).

The 1805 financial crisis and economic downturn had caused the default of at least 10
stockbrokers and hence increased government mistrust. Consequently, the draft of the
Commercial Code was revised, in order to ‘moralize’ finance through specific rules for stock-
brokers.\textsuperscript{34} Yet the 1807 Code of Commerce only devoted 17 articles to them and three to the
organization of stock exchanges. If strictly interpreted by judges, these rules would have
prevented stockbrokers from carrying out forward operations without the prior deposit of
securities or cash. For instance article 85, paragraph 3 prohibited them from granting credit
to their clients.

Most importantly, there was no specific rule in the Code on securities trading. Article 90
only mentioned that securities trading would be regulated by pending governmental reg-
ulation. Precisely because of the issue of forwarding operations, this regulation was only
passed in 1890, after their legalization. The silence of the law had two crucial consequences:
on the one hand, judges were free to base their decisions on the prohibitions decreed by
the Ancien Régime; on the other hand, the organization of trading activities relied on the
CAC, without its rules having been recognized by the government as required by law. Courts
judged them as private rules.

In 1809, Reynier’s infamous bankruptcy discredited the Bourse and its intermediaries in
general: his forward operations on French public bonds amounted to 1,305,000 francs (ca.
2% of all the public debt), forcing 19 stockbrokers out of business. This affair profoundly
shaped the rules on financial transactions, which were added in the 1810 Penal code:\textsuperscript{35}
Articles 419, 421 and 422 equated the forward sale of public bonds without previous deposit
with forbidden betting, punishable by a custodial sentence and a heavy fine. Until the 1885
law, the legal framework remained unchanged: it was hostile to forward operations, with
room for judicial interpretations according to the circumstances, in particular to tame the
market through its official intermediaries.\textsuperscript{36}

\textbf{3.2. The monopoly of the agents de change}

The financial intermediation from the Ancien Régime survived the French revolution as a
contested monopoly granted by the government to a guild of appointed merchants. The
1791 Le Chapelier Law banned guilds and unions, and proclaimed free enterprise.
Consequently, brokerage was liberalized. But the financial disorders of the last decade of
the century were so intense that the public authorities soon restored a legal monopoly for
financial intermediation, as they did for other activities.\textsuperscript{37} The only persons entitled to per-
form financial intermediation were the agents de change appointed by the Ministry of Finance
and holders of an office (officiers ministériels). In addition to the hybrid status there was a
numerus clausus: no more than 60 official stockbrokers were entitled to join the CAC. The
Syndic chaired its peer-elected governing body, the Chambre Syndicale. The organizational
features of the system of office were restored as a governmental device of financial
intermediation.\textsuperscript{38}
Article 76 of the 1807 Code of Commerce broadly defined the agents’ monopoly, to cover the trading of ‘public bonds and other securities that can be quoted [effets publics et autres susceptibles d’être cotés]’. Prosecutors and agents could have sued the coulissiers for their infringement of the monopoly. Legal proceedings were exceptional, even though the latter always lost. The government informally favored retaliation solely in the case of durable bearish speculation by the coulissiers on public bonds, while it appreciated their activity when they contributed to the success of public bond issues and the international strength of the financial centre. Agents only sued in 1859 when the coulissiers’ market share threatened their existence. On this occasion, the legal status of forward operations was part of the jurisdictional dispute: since the legal bans only mentioned the agents, the coulissiers argued that forward operations were only prohibited for them because of their specific legal status. On the contrary, the agents promoted the largest possible definition of their monopoly, including all securities, whether traded on spot or through forward operations.

Each stockbroker was legally bound to engage his unlimited liability for the transactions carried out under their jurisdiction (‘faits de charge’). It constituted the other side of the monopoly. Failure to fulfill their obligations exposed brokers to fraudulent bankruptcy (punishable by forced labor). To extend the guarantees to forward operations and expand their business, the agents organized partnerships with wealthy associates. Only an individual could be holder of an office. Therefore, the legality of the partnerships and the nature of the associates’ liability were also matters of legal debate. In 1862, after a long and disputed process of legal drafting, the agents obtained from the government the introduction into the French Commercial Code of a specific corporate form exclusively for their partnerships, based on the société en commandite: each agent became the only unlimited liable general partner while the other associates in the firm would act as limited partners.

3.3. The dynamics of the jurisprudence

The discrepancy between the legal framework and business practices endowed judges with a role of pivotal importance. The CAC adapted trading practices to the judges’ expectations. Lobbying and litigations influenced the latter. Regime changes also catalyzed the jurisprudence of forward operations. By demonstrating its legitimism to each new ruler who badly needed to tap into the domestic capital market, the CAC gained recognition of the business its members performed. Moreover, individual savings gradually became more dependent on financial markets. Therefore, financial turmoil could affect the support of the bourgeois for the rulers, giving them good reason to consider financial regulation as a matter of ‘public order’.

Until 1805, the courts of justice refused to uphold forward operations, but the financial turmoil of that year provoked a first reversal in the jurisprudence. To make the business community pay for the disorder its speculation had provoked, and drawing on the 1786 decree, the judges upheld forward contracts, even those without the actual delivery of the securities, provided their duration was no longer than two months and provided the agents had operated in a suitable manner (including a discount clause in the contract). This jurisprudence, which was quite favorable to the agents, lasted less than two decades: massive speculation on the Spanish debt triggered a complete jurisprudential reversal in the wake of the political hardening of the Restauration.
In 1823, five agents went bankrupt. In an official extraordinary hearing chaired by the Minister of Justice, the Court of Appeal of Paris fixed the new jurisprudence: the agent Perdonnet lost against Forbin-Janson, his aristocratic and rich debtor. Although the court explicitly recognized the felony of the latter, it refused to uphold the forward contracts. The highest French Court (Cour de Cassation) confirmed the decision, despite the petition signed by prominent Parisian bankers.

Under the July Monarchy, the jurisprudence softened. The judges maintained the prohibition of forward operations without delivery, but they were more willing to uphold those settled by the actual delivery of the securities. The courts then introduced a further distinction, drawing on article 422 of the Penal Code, between forward sales, prohibited without prior deposit of securities even if settled by their delivery, and forward purchases without the prior deposit of cash. The latter were deemed legal, as long as the stockbrokers could prove the ‘seriousness of the transaction’. They should demonstrate their bona fide in the appreciation of their clients’ ‘morality’ and solvency, based on their social status, lifestyle and other proxies for wealth such as real-estate property. This incremental change was abruptly stopped by the default of four agents, which in 1842 resulted in the stockbroker Bagieu’s criminal conviction for betting on public bonds.

After the 1848 Revolution, the courts decided that the Ancien Régime ban was no longer applicable and developed less stringent interpretations of the current laws. For instance, payments and deliveries related to trading were exempt from the prohibition on stockbrokers from granting credit to their clients. Forward operations were upholding if deemed ‘serious’, independently from the actual delivery of securities. Evidence accepted by the judges still included the status of the client relative to the value of the transactions, and the agents’ due diligence with respect to Bourse rules. This change was also eased by the replacement of judge Séguier, who was notoriously opposed to financial practices he considered speculative, by judge Troplong as President of the Paris Court. According to Troplong, financial activities should be promoted, given their contribution to the development of new industries, especially railways. From 1857, the Cour de Cassation endorsed this jurisprudence.

In the early days of the Third Republic, most judges abandoned the valuation of the client’s status to focus on the compliance with the rules of the Bourse. Nonetheless, when public bonds were at stake or if the case turned into a scandal, some judges still equated forward selling with gambling.

4. Making forward trading legitimate

To cope with the ‘sword of Damocles’ represented by the institutional threats on forward operations, the agents developed three strategies. They gained a dominant position among the Parisian business elites, developed their market organization and advocated the legitimacy of serious business practices run by serious men.

4.1. The rise of the agents’ notability

The debates about speculation, and especially forward operations, gave competing dominant factions of French society the opportunity to defend their interests and legitimize their positions. The Bourse made it possible to contemplate a faster rhythm of capital accumulation, compared to the intergenerational rise in notability. This does not imply that notables
did not trade financial instruments, or that financiers discarded property ownership. On the contrary, deals of all kinds intermingling old families and new money soon became commonplace.\textsuperscript{43} But, notables could still exploit the hostile legal framework, punctually repudiate their losses at the Bourse and, more generally, scorn the \textit{homines novi} of the finance world. Reciprocally, financiers invested in real estate to diversify their wealth and secure their social status. The French Revolution did not put money at the heart of the new social hierarchy, but private property instead.\textsuperscript{44}

The stockbrokers’ status varied dramatically. In 1801, when Bonaparte decided to restore official intermediation, a quarter of the newly appointed \textit{agents} had been in charge before the Revolution. Nicolas Mollien, Bonaparte’s main financial advisor, deliberately favored experience, while he also compensated bankers’ straw men and newcomers with political connections.\textsuperscript{45} Among the first 115 \textit{agents}, 4 committed suicide, 12 were officially dismissed, 30 were forced to resign, and eight left for other occupations. In 1816, the government granted the \textit{agents} the right to designate their successors. They would be endorsed by the \textit{Chambre}, approved by the CAC general assembly, and eventually appointed by the Ministry of finance. The process gave the \textit{Chambre} the upper hand in the selection process, it promoted peer-monitoring and it also set the conditions for the lengthening of the \textit{agents}’ temporal horizon. They could build family-based strategies for the transmission of their business, rather than go bust trying to get rich too quickly.

Yet, stockbroking long remained poorly regarded, compared to the status of \textit{propriétaire} or other lucrative occupations with higher standing.\textsuperscript{46} In 1824, in the midst of the \textit{Perdonnet v. Forbin-Janson} case, the CAC added personal wealth and family credentials as recruitment criteria. Therefore, candidates were expected to bring money, connections and prestige (especially among legal professions\textsuperscript{47}) to the guild. The CAC set the conditions for a more integrated and integrative group, composed of self-elected individuals sharing a common ethos. This was made up of dispositions (obedience and reliability) and aspirations (upward social mobility) reflecting the \textit{agents}’ singular position, between the \textit{raison d’Etat} and market dynamics. Between 1818 and 1859, about 25 \% of the \textit{agents} did not last more than five years. Over the rest of the century, turnover decreased while the family transmission of business increased.\textsuperscript{48}

After its considerable rise under the Second Empire and its contribution to the financing of the war indemnity to Germany, a new aristocracy of financial wealth took over the Third Republic. Most \textit{agents} were not part of this aristocracy dominated by bankers, industrialists and crony politicians, but stockbrokers had become legitimate, well-established members of the ‘robe bourgeoisie.’ By the end of the century more than 40\% of the \textit{agents} belonged to it.\textsuperscript{49}

\textbf{4.2. The building-up of an organization}

The government of the \textit{Restauration}, in need of a huge issue of public bonds, granted the \textit{Chambre} large regulatory, arbitration and disciplinary powers over the stockbrokers in 1816. The \textit{Chambre} developed a reliable organization to cope with the threats inherent to stockbroking and to demonstrate the seriousness of the \textit{agents}’ business. Despite these powers, it had difficulty in monitoring the \textit{agents}. They were willing neither to give up profit opportunities nor to hand the control of their business over to the group.
In the aftermath of the 1823 crisis, six brokers defaulted. The Ministry of Finance revoked the Chambre, and designated the stockbrokers to form the new governing body. The new jurisprudence of the Perdonnet v. Forbin Janson case was the punishment for the brokers’ defaults and the Chambre’s lack of due diligence in monitoring them. In making such an example, the Ministry signaled that market stability was the only way for the agents to preserve their monopoly. This triggered a rationalization of trading, clearing and settlement on the one hand, and close monitoring of the brokers by the Chambre on the other.

For each security, the first forward price of the day was established by comparing all the orders received since the close of the previous session. Then, the agents performed a continuous auction. They standardized the types of orders, the clauses attached and the back-office procedures. In 1844, building on the growing support of the bankers and the ministry of finance, who had considered the criminal conviction of the stockbroker Bagieu to be detrimental to the business community, the agents obtained the informal authorization to publish the forward prices on the official list.

Clearing and settlement were crucial to demonstrate the agents’ professionalism and the seriousness of their operations. From 1808 onward, clients could opt for the actual delivery of securities. Monthly bilateral and decentralized clearing (liquidation générale) was reformed in 1808, after the Banque de France threatened to close the agents’ accounts because of messy transfers and lack of controls. The CAC then implemented central clearing: each agent should clear his clients’ accounts and then at a fixed date, all agents netted their residual balances, on a bilateral basis. The procedure was reliable enough in 1836, for the Banque de France to combine its monthly operations with the central clearing and settlement of the CAC. Starting in 1843, it performed multilateral clearing: each agent only established his netted position vis-à-vis the others. After 1848, the clearing and settlement of the Bourse helped to convince the judges that forward operations were not gambling.

The common fund became the organizational centerpiece to implement the collective guarantee, demonstrate the reliability of the Bourse and cement group cohesion. Created in 1818, as a sinking fund to reimburse debts collectively contracted in the event of a crash, the fund was perpetuated four years later. Individual contributions proportionate to each agent’s turnover provided the CAC with discretionary resources to help distressed agents and to cover subsequent losses.

The fund was first used as a liquidity and bail-out facility, during the 1830 Revolution. It was a powerful instrument to obtain governmental support in times of financial and political crisis. Again in 1848, the revolution provoked a deep financial crash; thanks to the common fund, the heavy losses brokers suffered were settled without losses for their clients; by absorbing huge losses, the agents could gain and maintain the support of the new regime and benefit from the judges’ benevolence. The wealth of the agents and their families as well as their borrowing capacity could be mobilized through the fund.

In the 1830s, the Chambre Syndicale started the regular biannual control of brokers’ standardized accounting. It also carried out one-off controls when the forward positions of a broker observed around the pit were deemed dangerous. As an arbitrator, the Chambre systematically gave satisfaction to the clients against brokers when the disputed operations did not follow the rules of the Bourse. This was a way to avoid lawsuits that could be lost in the courts. As a disciplinary body, the Chambre took care of the orderly functioning of the market by punishing stockbrokers who did not abide by the trading rules.
4.3. The making of the jurisprudence

The CAC tried to align the jurisprudence, its internal rules and the agents’ actual business practices, incrementally adjusting each one to fit the others. ‘Sirs, it is of the utmost importance for the Compagnie’, argued the Syndic in 1833, ‘to see a wise and enlightened jurisprudence being formed on all the topics related to our profession, in order to replace, as far as possible, the rules promised to us by Article 90 of the Commercial Code’.53

To this end, the Chambre centralized the litigation opposing the agents and their clients, by imposing its formal authorization for any legal action taken by an agent against his clients. Starting in 1820, the measure was opposed by most agents, since it could be detrimental to their individual interests. As they learned through the Forbin-Janson scandal, such selection could protect the group from bad publicity and harsh reversals. Most importantly, it only brought before the courts those cases that were favorable to and winnable for the agents. After 1823, ‘the Chambre always took the greatest care that judges only had to rule on indisputably clear-cut cases in favor of the official stockbrokers’.54 Because of its constant exchanges with legal scholars, lawyers, judges and policy-makers, the governing body of the guild was in a better position than its members to appreciate their chances of winning cases. If not, agents were ‘invited’ to settle their disputes either bilaterally or with the Chambre as arbitrator. By these means, the Chambre also put pressure on recalcitrant agents to select their clients and give them credit according to their status and wealth.

In exchange, the agents could count on being advised and defended by leading lawyers, paid by the common fund as long their cases were of common interest for the group. Moreover, the Chambre archived all the documents related to financial law and jurisprudence, as well as the notes and files exchanged with lawyers, judges and politicians. This cumulative knowledge and experience helped to support cases, whether brought to court or privately settled.

The Chambre also tried to keep the legal disputes within the jurisdiction of the capital. Provincial courts and judges were generally less favorable to brokers. In Paris, judges were more familiar with stock-exchange transactions and more easily lobbied. Agents and judges rubbed shoulders professionally and socially. After the Revolution of July 1830, former legal counsels of the Compagnie were appointed to the ‘most prestigious positions in the courts of the capital’.55 As the agents’ status rose due to its recruitment policy, the Chambre could count on the brokers’ individual (family) connections and their ascending collective prestige.

The effectiveness of these mutually reinforcing strategies can be appreciated by comparing the decisions obtained by the agents with those obtained by the coulissiers when suing clients refusing to pay for their failed forward operations. The analysis of 150 decisions indexed by legal scholar Edouard Badon-Pascal between 1857 and 1877 confirms the judges’ bias in favor of the agents.56 The 1866 crisis also illustrates the power gained by the guild to prevent legal actions. Seven agents were in distress, five agents had been forced to sell their businesses, mainly because of defaulting clients.57 The imperial prosecutor hampered the cases brought to the courts against insolvent agents, and judges of the Paris courts showed kindness and zeal in rejecting demands for declarations of bankruptcy, which could have made people question their impartiality.58 Obtaining a four-month moratorium, the Chambre privately settled most of the disputes with insolvent agents’ creditors and debtors.
5. The legalization of forward operations

5.1. The parliamentary attempts to legislate on forward operations

Legislators debated on forward trading throughout the century, without passing any law until 1885. Most of the debates occurred after a financial crisis, a change of regime or in response to petitions. In the wake of the *Perdonnet v. Forbin-Janson* show-trial (1823–1824), Minister de Villèle defended the legislative status quo: maintain the existing regulation to tame the excess of speculation, but preserve forward activities in order to provide the market with liquidity.59 Two years later, member of the parliament and banker Casimir-Périer urged the government to embrace ‘the immediate interests of the most active fraction of the society’ and to legalize the forward operations.60

Under The Monarchy of July, finance ministers supported the favorable inflexion of the jurisprudence and insisted on the contribution of the CAC to the stability of financial markets. In 1834, Member of Parliament Harlé drafted a text to ban naked forward operations. To counter the proposal, its colleague and former agent Baillot praised the reliability of the clearing and settlement procedures put in place by the CAC.61

In the autumn of 1848, Member of Parliament Mauguin promoted the legalization of forward operations, in order to substitute a tax on these transactions for the tax on salt and beverages. In 1856, the government instituted another extra-parliamentary commission to assess financial regulation. It drafted a report promoting the legalization of forward trading. It did not trigger any legislative proposal, but in 1857 the *Cour de Cassation* tilted the jurisprudence in favor of the business practices of the agents de change. In 1864, the Senate received a petition to legalize all forward transactions ‘on behalf of the modern economic science, the true *scienza nuova*.62 Ministry of Interior and Senate vice-President Delangle dismissed the request on the basis that laws, *even dormant ones*, had a moral virtue.

During the 1866 crisis, Minister for Finance and banker Achille Fould protected the CAC from regulatory backlash by setting up a commission, chaired by the governor of the Banque de France. This commission emphasized the liquidity provided by forward operations and the stabilization of the Bourse that would result from their legal recognition. The *Syndic* declared that ‘the report matches our views and desires so well that it could not have been better for us if the most enlightened of our legal advisors had drafted it’.63

In the early 1870s, several agents faltered because too many of their clients refused to settle forward operations. Member of Parliament Andrieux drafted a proposal to repeal article 421 and 422 of the Penal code and to give recognition only to the forward transactions performed by the agents. The draft would have alienated couilliers and the bankers who promoted the legalization of forward operations performed by all intermediaries. The CAC stood by their mighty clients. Andrieux drafted a second version, which included all forward operations.64 The legislature ended before the parliament’s first reading of his proposal and Andrieux was appointed Paris prefect in spring 1879.

5.2. The legalization of forward operations

In January 1882, after large frauds and market manipulations, the Union Générale went bankrupt, triggering the most severe crash ever in Paris.65 Investors were unable or unwilling to pay; 14 out of 60 agents became insolvent. The losses amounted 140 million francs (0.6% of French GDP in 1881). The common fund could not absorb such a sum but the agents raised
60 million francs among their partners and relatives, reimbursed by November 1882, while the CAC contracted an emergency 80 million franc loan from the Banque de France. Six agents reimbursed their debts by the beginning of February; of the eight others, five were insolvent mainly because of Union Générale-related debts. Nonetheless, the CAC overcame the liquidity crisis, met their obligations and no clients suffered any losses due to defaulting agents. In 1882, the Chambre authorized the agents to sue 151 clients to demonstrate the latter’s bad faith. But judges, particularly in regional courts, often ruled against the prevailing tolerant jurisprudence in an uncoordinated fashion. Judges made null and void forward contracts for 117 million francs, i.e., 84% of the agents’ total losses.66

The crash of 1882 and its aftermath offered the opportunity to decisively push for the legal recognition of forward operations. It was no longer possible to leave the liabilities of forward contracts exclusively on the agents’ shoulders. On the one hand, forward trading was crucial for liquidity and thus for the development of the market; on the other hand, the legal status of forward operations was for many investors an incentive to trade without risk, since the jurisprudence was not a sufficient threat for faithless clients.

A few days after the crash, Member of Parliament Alfred Naquet proposed the full legalization of forward contracts.67 The Chamber of Commerce immediately endorsed Naquet’s proposal.68 The Minister of Justice, Gustave Humbert, set up an extra-parliamentary commission to examine the modifications to be introduced into the legislation relating the trading of securities. Among its 17 members, the CAC was represented by Syndic Moreau, his colleague Lecomte, and a former agent, Girod, who ran the Comptoir d’Escompte, a prominent French bank. The lawyer and senator Bozerian chaired the commission and the CAC immediately appointed him as counsel.69 It also paid money to a syndicate of newspapers, including Le Voltaire, which published Naquet’s op-eds, to influence public opinion.70

In June, the government transmitted the extra-parliamentary commission’s report to Parliament, with an explanatory memorandum by law professor Lyon-Caen, the commission’s rapporteur.71 It recommended the legalization of all forward contracts and suggested only restricting the ‘exception de jeu’ to transactions in which the counterparties had formally agreed in advance not to deliver the underlying securities or commodities, The agents de change hardly carried out such transactions that coulissiers often performed.

Parliament supported the irrebuttable presumption of legality for all forward transactions. The, more conservative Senate endorsed the suggestion made by the commission: if counterparties had formally agreed in advance not to deliver the underlying securities or commodities then forward contracts could still be deemed unlawful by judges. The topic then lost momentum and Naquet resigned from Parliament to become a senator and fight for his signature piece of legislation: the 1884 reintroduction of divorce. Nonetheless, the law was adopted without further discussion in its Senate version and eventually published in the Official Journal on 8 April 1885.

5.3. The consequences of the legalization

Drawing from the spirit of the law, the Cour de Cassation clarified the respective jurisdictions of the CAC and the Coulisse. The 1885 law reallocated the risk inherent to forward operations, shifting it from the stockbrokers to their clients. Nonetheless, it left unsettled the ‘exception de coulisse’. Judges could declare null and void transactions performed by the coulissiers because of their infringement of the agents’ official monopoly, which covered listed and
unlisted securities according to the constant jurisprudence of the civil courts. Taking stock of the development of unlisted securities, the Cour de Cassation decided in 1885 to confer their trading legal certainty: the monopoly of the CAC would be limited to listed securities, while the coulisse would gain the right to trade the others.72

The 1885 law paved the way for a new stream of financial regulation: securities law (‘droit boursier’).73 In 1890, the government passed the decree on securities trading announced in the 1807 Commercial Code. It adopted the CAC main business practices. Consequently, the CAC detailed its rulebooks and, in 1892, the government formally approved them. The government modelled the securities law on the professionals’ practices and the CAC private arrangements were given legal force.

The legalization of forward operations and the subsequent 1890 decree made it possible to introduce a new tax on spot and forward transactions in 1893. This tax had two rationales: the government wanted to increase its revenues and get better information on market transactions. Despite the 1885 decision by the Cour de Cassation, most of the coulissiers’ trading focused on listed securities. Therefore, the tax base triggered a fierce conflict between the CAC and the Coulisse. Their respective representatives had vainly opposed the very principle of taxation. They soon turned the tax into a competitive edge against the rival market.

The coulissiers favored the equal taxation of all operations, on listed and unlisted securities, whatever the intermediaries involved in the trades. The coulissiers would see their operations on listed securities legalized. Such a tax base would de facto dismantle the exception de Coulisse and the monopoly of the agents de change. The latter would also be subject to the same regulatory obligations, without any monopolistic advantage. On the other hand, the agents had promoted themselves as the sole intermediaries entitled to collect the tax on the trading of listed securities. Such a mechanism would equate the operations on listed securities by coulissiers to tax evasion. After strong lobbying from both sides, the government favored the coulissiers’ position that provided a broader tax base.

In 1895, a crash hit the Coulisse and the government soon restored the monopoly of the agents de change. In 1898, the financial transaction tax was reformed. Only the agents would be entitled to collect the tax on the trading of listed securities. The fiscal administration committed to sue coulissiers who traded listed securities. By doing so, the government enforced the 1885 decision by the Cour de Cassation and pushed for a broader reform of the Paris financial center.

In return for the fiscal enforcement of the monopoly in 1898, the government halved the agents’ maximum commissions and wrote into the law their collective guarantee. To ease the handling of more transactions, the government raised the numerus clausus (from 60 to 70 agents) and CAC raised the number of designated trading clerks. It also expanded the stock exchange building to create new trading facilities. The Coulisse organized the transactions on its market. It conferred more transparency to the price discovery system and started publishing a daily list, similar to the official list published by the CAC. Moreover, the Coulisse established membership and listing criteria.

That very same year, the Cour de Cassation ruled in favor of the irrefutable presumption of legality for all forward operations. The letter of the 1885 law still made it possible for some judges to nullify forward contracts because parties had a priori agreed not to deliver anything. The Cour de Cassation eventually comforted the opinion of legal scholars and professionals
who had strongly criticized these decisions on behalf of the spirit of the 1885 law. These reforms shaped the institutional setting for the heyday of the Paris financial center.

6. Conclusion

Contrary to the expectations of the ‘law and finance’ literature the Paris Bourse was a liquid market at the turn of the twentieth century. Overall traded volumes amounted to four times the French GDP, a ratio similar to the Paris Stock Exchange at the turn of the twenty-first century. These volumes were mainly due to forward trading, which was three times as large as French GDP. Taken together, the Paris Bourse and the Coulisse traded more than six times the GDP.

Throughout the nineteenth century, the Bourse had been primarily a forward market, despite a ban on these operations until their legalization in 1885. Through private contracting and collective actions, the CAC played a key role in legitimizing and eventually legalizing these operations. The illegality of forward operations clashed with the agents’ official status and the voluntary extension of their guarantees. That is why the CAC sought to organize the fair ordering of trading through social control, institutional innovations, and legal strategies.

Jurisprudence had been adaptive enough to support the development of the market. Nonetheless, the 1882 crisis showed the limits of market regulation centered exclusively on supervising the behavior of brokers. Without legalizing forward transactions, the only way to stabilize the market would have been to sacrifice liquidity.

The 1885 act paved the way for the 1890 securities law. It opened a new field of law and allowed for further regulatory changes that culminated in the 1898 reform of the Paris financial center. This development of securities law and its consequences on the actual functioning of the market made the Belle Époque of the Paris Bourse possible.

Notes

1. La Porta, Lopes-de-Silanes, and Shleifer, ‘The Economic Consequences of Legal Origins’; Demirgüç-Kunt and Maksimovic, ‘Institutions, Financial Markets’; Demirgüç-Kunt and Maksimovic, ‘Law, Finance and Firm Growth’; and Beck and Levine ‘Stock Markets, Banks, and Growth’.
2. Levine, ‘The Legal Environment, Banks’; and Levine, ‘Law, Finance, and Economic Growth’.
3. Beck, Demirgüç-Kunt and Levine, ‘Law and Finance: Why Does Legal Origin Matter?’.
4. Stanziani, Rules of Exchange, 38–44; Lamoreaux and Rosenthal ‘Legal Regime and Contractual Flexibility’.
5. Musacchio and Turner, ‘Does the Law and Finance Hypothesis Pass the Test of History?’ S36.
6. Levine and Zervos, ‘Stock Markets, Banks, and Economic Growth’; Beck and Levine, ‘Stock Markets, Banks, and Growth’; and Levine, ‘Finance and Growth: Theory and Evidence’.
7. Navin and Sears, ‘The Rise of a Market’; Rousseau, ‘Historical Perspectives on Financial Development and Economic Growth’; Rousseau and Sylla, ‘Financial Systems, Economic Growth’; and Neal and Davis, ‘The Evolution of the Structure and Performance’.
8. Kindleberger, Manias, Panics, and Crashes.
9. See for instance Rajan and Zingales, ‘The Great Reversals’.
10. Lagneau-Ymonet, Riva and Rezaee, ‘Nouvelles des archives. Aux sources de l’histoire sociale’; and Lagneau-Ymonet and Riva, ‘Nouvelles des archives. Aux sources de l’histoire boursière’.
11. We present estimates of traded volumes counted on both sides to ease the comparison with Anglo-Saxon price-driven markets. On these markets, the exchange of securities between two parties gives rise to two operations: the broker of the selling client A transacts with a market-
maker/specialist, as does the broker of the buying client B. In contrast, the exchange of securities between two investors gives rise to a single operation on order-driven markets like the Paris Bourse, since the broker of the selling client A transacts directly with the broker of the buying client B (Jacquillat and Gresse, ‘The Diversion of Order Flow’).

12. For theoretical and empirical literature that consider mutual exchanges as firm-like organizations, see among others Pirrong, ‘A Theory of Financial Exchange Organization’; Riva, ‘Les bourses italiennes à l’époque giolittienne’; and White ‘Competition among the Exchanges before the SEC’.

13. Pistor, ‘Rethinking the Law and Finance Paradigm’.

14. Lagogue-Ymonet and Riva, Histoire de la Bourse; Hautcœur and Riva, ‘The Paris Financial Market’; Riva and White, ‘Danger on the Exchange’; Hautcœur, Rezaee and Riva, ‘How to Regulate a Financial Market’; and Bozio, ‘La capitalisation boursière en France’.

15. Neymarck, De l’Organisation des marchés financiers; Weber, La Bourse; De Goede, Virtue, Fortune and Faith; Davis, Neal and White ‘Deflation, the Financial Crises of the 1890s’; Riva, ‘Les bourses italiennes à l’époque giolittienne’; Riva, ‘Microstructures et risque de contrepartie’; Michie, The London Stock Exchange: A History; Hissung-Convert La spéculation boursière face au droit; and Stanziani, Rules of Exchange.

16. E.g. Biais, Glosten, and Spatt. ‘Market Microstructure: A Survey of Microfoundations’; Madhavan, ‘Market Microstructure: A Survey’.

17. White, ‘Competition among the Exchanges before the SEC’; Hautcœur and Riva, ‘The Paris Financial Market in the Nineteenth Century’.

18. Courtois Fils, A. Traité des opérations de bourse. During the nineteenth century, speculative activity concentrated on large international issues of public bonds cross-listed on the main European exchanges, not on stocks. Speculators dealt on this kind of securities because (i) the issues were very large; (ii) the probability of default was limited relatively to other securities; (iii) coupons insured stable and foreseeable revenues; (iv) prices’ variations were not correlated to either local or seasonal factors.

19. Broadly speaking, transactions costs consist in direct (commissions) and indirect transaction costs (proxied by spreads). The comparison of commissions across exchanges is difficult. For instance, in London, brokers’ commissions were negotiated. At the Bourse, maximum commissions were fixed by decree, while minimum commissions were fixed by the Compagnie. Archives reveal that until the 1890s, brokers often traded for less. According to an estimate by the Crédit Lyonnais, a major worldwide bank, at the beginning of the twentieth century the commissions to buy 100.000 francs worth of foreign securities amounted to 129.20 francs in London, 120 francs in New York, and 100 francs in Berlin and Paris (FAE, box B.64.877). Concerning spreads, existing estimates are not directly comparable because of different calculation methods, data frequencies, and type of prices, even for the same market (for Berlin, see Gehrig and Fohlin, ‘Trading Costs in Early Securities Markets’ and Gelman and Burhop ‘Taxation, Regulation and the Information Efficiency’). According to Stoll, ‘Principles of Trading Market Structure’; the ‘payments risk’ corresponds to the probability and subsequent costs for an investor to recover losses incurred by incomplete transactions. This is the non-systemic dimension of counterparty risk. Data for systematic comparison are not available. For Paris, Riva and White, ‘Danger on the Exchange’, provide the number of insolvent agents over the nineteenth century but could not provide any estimate of clients’ losses. Neal and Davis, ‘The Evolution of the Structure and Performance’ provide the number of failures at the London Stock Exchange between 1879 and 1899, but only estimate the amount of commissions perceived by the Official Assignees’ Office, the body in charge of the management of stockbrokers’ failures.

20. Data on capitalization from Lutfalla, ‘Etude du marché financier’; data on French GDP from Lévy-Leboyer and Bourguignon, L’économie française au XIXe siècle.

21. Hautcœur and Riva, ‘The Paris Financial Market in the Nineteenth Century: An Efficient Multipolar Organization?’ Newspapers only reported transactions for the most liquid securities. Therefore, this approximation constitutes a minimum.

22. DFIH Database, Paris School of Economics, version February 2017. Hautcœur and Riva, ‘The Data for Financial History’
23. Musacchio and Turner, ‘Does the Law and Finance Hypothesis Pass the Test of History’; Rajan and Zingales, ‘The Great Reversals’; and Bozio, ‘La capitalisation boursière en France’. According to Lutfalla, ‘Etude du marché financier’ data, in 1913, the par value of domestic equity and private bonds only accounted for 6% of the par value of all the securities listed at the Bourse. This percentage raises to 22% if railways are included.

24. See Data Appendix.
25. Banner, *Anglo-American Securities Regulation*, 106.
26. Vincens, *Exposition raisonnée de la législation commerciale*, 614.
27. See Data Appendix for details.
28. Authors’ calculations on data from the Euronext-Paris Factbook, 2006.
29. Locré, *La législation civile, commerciale et criminelle*; Fenet, *Recueil complet des travaux préparatoires*; Boboeuf, *Marchés à terme. Pétition adressée*; Badon-Pascal, 1877, *Des marchés à terme. Études légale*; Badon-Pascal *La crise de la bourse*; Courtois, *Défense de l’agiotage*; Déloison, *Traité des valeurs mobilières*; Buchère, *Traité théorique et pratique des opérations*; and Lagneau-Ymonet and Riva, ‘Les opérations à terme à la Bourse de Paris’.
30. Le Bris, ‘Les grands travaux du Plan Freycinet’.
31. Bouvier, *Le Krach de l’Union générale, 1878–1885*; Riva and White, ‘Danger on the Exchange’; and White, ‘The Crash of 1882’.
32. CAC, MAG, 15/12/1852.
33. Locré, *La législation civile, commerciale et criminelle*, 165–208.
34. Regnaud de Saint-Jean d’Angély, *Code de commerce*.
35. AN, box F12 973.
36. Fenet, *Recueil complet des travaux*, 539–540.
37. Kaplan and Minard, *La France malade du corporatisme*; and Levasseur, *Histoire des classes ouvrières*.
38. Bien, ‘Property in Office under the Old Regime’.
39. Hautcœur, Rezaee, and Riva, ‘How to regulate a financial market’.
40. The ‘clause d’escompte’ allows the buyer to transform the forward operation into a cash operation.
41. Hissung-Convert, *La spéculation boursière face au droit*, 271 and 353.
42. Charle, *Les élites de la République*.
43. Lagneau-Ymonet, ‘Ferragus, une “sociologie-fiction” de la confiance’; and Reffait, *La Bourse dans le roman*.
44. Bergeron, *Les capitalistes en France*.
45. AN, box F12 973.
46. Daumard, *La bourgeoisie parisienne*.
47. The proportion of sons of legal professionals rose from 4.5% in 1810–1829 period to 17% in the 1890–1914 period.
48. Hautcœur and Riva, ‘The Paris Financial Market’; Verley, ‘Les opérateurs du marché financier’; Verley, ‘Les sociétés d’agents de change’; 128; and Lagneau-Ymonet, ‘Entre le marché et l’État, les agents de change’.
49. Verley, ‘Les opérateurs du marché financier’.
50. Among others, fast transmission of security transfer notifications to clients, asking the clients to sign up the settlement accounts, asking the clients for written confirmation of the orders, following the rules of the Bourse on the formal notices to clients about their default in delivery cash or securities and on the buy-in procedures.
51. Chambre Syndicale des Agents de Change de Paris, *Mémoire de la Chambre Syndicale*.
52. Often, the *syndic* demanded a backdated letter of resignations that allowed the *Chambre* to take full control of the broker’s firm.
53. CAC, AG, 16/12/1833.
54. CAC, AG, 22/4/1834.
55. CAC, AG, 22/4/1834.
56. Badon-Pascal, *Des marchés à terme*, 191. The archives do not mention that Badon-Pascal ever worked for the *Chambre Syndicale*. His publications and affiliation to the free-trade and anti-monopolist *Société d’Economie Politique* convinced us that his selection of cases was not a priori biased in favor of the *agents*. Of the 150 decisions listed, 65 relate to official stockbrokers. They won against their debtor customers in 30 cases. On the other hand, of the 85 cases involving *coulissiers*, the judges refused to uphold forward contracts 66 times because of the ‘exception de jeu’. In other words, of the 101 decisions admitting the ‘exception de jeu’, one third relate to official stockbrokers, who thus lose half as often as the other intermediaries. In the same way, the *agents* profited from 30 of the 49 decisions rejecting the ‘exception de jeu’.

57. CAC, AG, 26/12/1866.
58. CAC, AG, 26/12/1866.
59. *Le Moniteur*, 30 avril 1824; AP, Mavidal et Laurent, *Débats parlementaires*, 2ème série, volume 46, 27.
60. AP, Mavidal et Laurent, *Débats parlementaires*, 2ème série, volume 46, 27 février 1826.
61. Déclaration à la chambre des députés du ministre des finances Humann, le 18 décembre 1832, contre la proposition du député du Pas-de-Calais, Harlé fils, tendant à ne rendre possible que les marchés à terme couverts (Badon-Pascal, *Des marchés à terme*, 5ème partie). Voir aussi AEP, « Proposition de M. Harlé fils à la Chambre des députés, relative aux marchés à terme », in *Mémoire de la chambre syndicale des agents de change présenté à M. le Ministre secrétaire d’Etat des Finances et tendant d’obtenir un règlement sur la négociation des effets publics*, Paris, imprimerie de J.-B. Gros, 1843, chapitre VII.
62. Bobœuf, *Marchés à terme*.
63. CAC, AG, 26/12/1866.
64. AP, 20 November 1876; 21 February 1878.
65. Le Bris, ‘Les krachs boursiers en France’; White, ‘The Crash of 1882’; and Bouvier, *Le krach de l’Union générale*.
66. CAC, AG 29/3/1882 and 18/12/1882.
67. AP, year 1882.
68. ACCP, III – 4.11 [12].
69. CAC, CS, 13/05/1882.
70. CAC, CS, 15/6/1882 and 12/2/1883.
71. ACD, parliamentary documents, Annex 911, June 5, 1882.
72. Ruben de Couder, *Pandectes chronologiques*.
73. Hissung-Convert, *La spéculation boursière face*.
74. Arrêt de 22 June 1898. The *Cassation* decision did not rule out the possibility for judges to investigate the legality of ‘new unknown, up-to-now unlabeled’ contracts. Hissung-Convert, *La spéculation boursière face au droit*, 518.
75. Lagneau-Ymonet, and Riva, *Histoire de la Bourse*; Hautcœur and Riva, ‘The Paris financial market’; and Hautcœur, Rezaee and Riva, ‘How to Regulate a Financial Market’.
76 Hautcœur and Riva, “The Data for Financial History”.
77 CAEF, box B.64.877.
78 Verley, “Les opérateurs du marché financier”.

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**Data appendix**

Data plotted on Figure 1 and Figure 2 come from the DFIH (Data for Financial History) database, located at the Paris School of Economics (for these series, credits: Angelo Riva). Data plotted on Figure 1 and Figure 2 come from the DFIH (Data for Financial History) database, located at the Paris School of Economics (for these series, credits: Angelo Riva).76

Figure 1 data are obtained from the interpolation of detailed archival data for 1906 with data on the financial transaction tax (FTT), first introduced in 1893. 1906 archival data are the base of the estimates and come from a survey by the Ministry of Finance to assess the impacts of the FTT. The Ministry of Finance examined the accounting books of 12 stockbrokers at the beginning of 1907. The accounting books of each broker were analyzed for a month in 1906 (the accounting book of broker A was analyzed for January, of broker B for February and so forth). The Ministry then summed up the
registered transactions and multiplied them by 70 (the total number of stockbrokers at that time) to obtain the total volumes traded in 1906, split into the different types of operations. Traded volumes are then counted on both sides. Moreover, the 1906 data are sensitive to the choice of the 12 brokers. Trading activity was not equally distributed among agents. Because of the close relationships between the Ministry of Finance and the Chambre Syndicale, whose members regularly checked the agents’ accounts, we assume that the Ministry selected 12 representative brokers.

From 1893 to 1907, the government published, in the Bulletin de Statistique et Législation Comparées, the amounts paid by the CAC and the Coulisse. It is hard to use the tax revenues to estimate traded volumes because tax rates varied according to the types of operations (repo vs. others) and securities (French public bonds vs. others). Nevertheless, the 1906 data allow for an interpolation with the FTT data over a period where the rates of the tax were kept constant. Thanks to this interpolation we can obtain the estimates of the total volumes traded on both markets. By keeping constant the proportion between forward and spot transactions registered in 1906, we estimate the forward traded volumes over the period 1899–1906. Despite the potential bias of the 1906 data and our assumptions, these estimates sketch the magnitude of the traded volumes.

Figure 2 data come from the annual reports of the Chambre, presented to the annual CAC General Assembly. They measure transactions counted on one side.