EMERGENCY MONEY: LESSONS FROM THE PAYCHECK PROTECTION PROGRAM

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ABSTRACT

The Paycheck Protection Program, or PPP, was huge. Between April 2020 and May 2021, it provided almost $800 billion to more than 11 million businesses—about a third of all U.S. businesses with 500 employees or fewer. The PPP was also flawed. Treasury and the Small Business Administration faced incomplete statutory instructions and a challenging tradeoff between speed and accuracy in distributing PPP funds.

These flaws make the PPP a realistic and valuable case study; the PPP reveals tools that can be applied to similar distributions of emergency funds. One tool is back-end adjustments, meaning that funds are first distributed and then later it is decided whether recipients may keep the money. Another tool is distribution in descending order of necessity, meaning that the first recipients to receive funds are applicants that most clearly meet the criteria of the program. A fund can follow distribution in descending order of necessity to disburse all of its funds. This approach is similar to a descending price auction for the sale of bonds or a stock of goods. Disbursing amounts in descending order of necessity also allows a fund to collect information needed to improve future distribution policy.

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INTRODUCTION

The Paycheck Protection Program, or PPP, distributed almost $800 billion from the federal government to businesses between April 2020 and May 2021. More than 11 million grants were made, as compared to a total of about 32 million U.S. small businesses. This huge, broad emergency money program was the single largest element of U.S. pandemic relief.

The PPP was unprecedented in scale. But its policy tradeoff between speed and accuracy was typical for an emergency fund. When an emergency requires an urgent fiscal response, often there is pressure to distribute money immediately but uncertainty about who should receive how much of it. Legislators typically give incomplete instructions, leaving administrators broad discretion to decide how to allocate funds. Administrators need tools to navigate the tradeoff between speed and accuracy. The PPP offers lessons about tactics that can work.

One useful tool is back-end adjustments. This means that first the government distributes emergency funds, and later it decides whether recipients may keep the money or must return some or all of it. Back-end adjustments may seem preferable if they make it easier for recipients to keep money. This happens if the distributor of funds relaxes initially strict conditions for repayment. For instance, in June 2020, Congress relaxed several forgiveness requirements for PPP loans, most importantly by extending the time allowed for spending PPP grants from eight to twenty-four weeks. Recipients are unlikely to object to such a change, since it generally makes them better-off than they were before the adjustment.

But back-end adjustments can also make it harder for recipients to keep initially granted funds. Money can be taken back not only through explicit rules but also through mechanisms of encouragement. For instance, in April and May 2020, Treasury and the Small Business Administration (SBA) used enforcement safe harbors to encourage public firms and recipients of grants larger than $2 million to give PPP money back.

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9 See Business Loan Program Temporary Changes; Paycheck Protection Program—Requirements—Promissory Notes, Authorizations, Affiliation, and Eligibility, 85 Fed. Reg. 23,450, 23,451–521 (Apr. 28, 2020) (to be codified at 13 C.F.R. pts. 120–21) (providing “limited safe harbor” for public firms that gave back loans); Business Loan Program Temporary Changes; Paycheck
Changes that encourage or require recipients to give funds back may seem problematic, as if the emergency fund administrator has broken a promise. But such changes can be carried out in a way that respects the rule of law and the rights of recipients. If the chance of a back-end adjustment is clear in advance, recipients can plan for it and adjust their reliance accordingly. Here the PPP provides an interesting example. Treasury and the SBA’s responsibility to enforce the PPP’s so-called hardship certification supported the creation of enforcement safe harbors that encouraged the return of money. This was arguably part of the statute’s original framework, although the program’s capacity for back-end adjustments was not advertised as such.10

Another tactic for navigating the speed-accuracy tradeoff is distribution in descending order of necessity. This means that a fund would first make grants to recipients who most obviously meet the criteria or goals of the fund. For example, Treasury and the SBA opened an exclusive two-week PPP application window in February 2021 for employers with fewer than twenty employees.11 This was a way of giving priority to applicants with a stronger claim of necessity.

The approach of distributing in descending order of necessity diverges from the approach initially used in the PPP, which was to distribute in accordance with a first-come, first-served queue.12 The PPP experience showed that the queue approach allowed better-resourced applicants a better chance at a successful application.13 Its first-come, first-served approach did not give priority to applicants who had greater need for the funds and more obviously met the criteria of the statute.

The idea of distributing in descending order of necessity could, in an appropriate case, be used to distribute an entire fund. If smaller grant size is a good proxy for necessity, then the fund could be...
distributed in ascending order of grant size—small grants first, then larger and larger—until fully disbursed. An administrator could also use the descending-necessity idea more narrowly, to gather information about the potential applicant pool. The fund could make early grants based on a best initial estimate of greater necessity, with the intention that the early grants would not only alleviate the emergency but also collect information about the applicant pool. The resulting information could then be used to adjust distribution policy going forward.

Both of these tactics—back-end adjustments and distributing in descending order of necessity—fit a fund that addresses an ongoing medium-term crisis. These tools are useful when there is urgency of distribution but also enough time to allow a learning curve for fund administrators. For instance, these tactics fit the needs of a fund meant to rebuild an economy following a disaster. They also fit the needs of funds established, for instance, by municipalities or nonprofits, to provide rent assistance in the wake of an economic crisis.

This Article uses the PPP as a case study to explore emergency fund administration. Part I of this Article tells the legislative story of the PPP, including bipartisan support for the idea and drafting influenced by the Republican-controlled Senate and by the Treasury. The PPP statute includes some crisply drafted provisions—like those explaining applicant eligibility, loan size, and payroll requirements. It also includes some vague provisions—such as the so-called hardship certification.

Part II describes how the PPP worked in practice. Lack of regulation and a first-come, first-served queue marked its first wave, in the first two weeks of April 2020. Then, after media criticism of prominent, large borrowers and an additional Congressional appropriation, Treasury and the SBA created enforcement safe harbors which discouraged applications from public firms and for grant amounts over $2 million. These safe harbors marked the program’s second wave, from April to August 2020. Another appropriation in December 2020 followed. The resulting third wave featured more targeted sector-specific allocation and continued the trend of directing more grants to smaller businesses.

Part III explains features of the PPP as an emergency fund program. It sets out the statute’s incomplete instructions and the

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15. An example is the Gulf Coast Claims Facility established by the operators of the Deepwater Horizon oil rig that exploded in the Gulf of Mexico in 2010. See KENNETH R. FEINBERG, WHO GETS WHAT: FAIR COMPENSATION AFTER TRAGEDY AND FINANCIAL UPHENAL 130–32 (2012) (describing the $20 billion undertaking to compensate for damages to business or earnings).
resulting enforcement discretion held by the agencies. It explains the different possible interpretations of the hardship certification that applicants were required to make. It suggests reasons why the agencies initially chose the unregulated first-come, first-served allocation mechanism. It delineates the learning curve over the course of the program’s implementation, which supported an evolving approach to administrative guidance.

Part IV uses features of the PPP to explain the idea of back-end guidance. The PPP included both changes that made the program stricter and those that made the program more generous. These provide ideas for how back-end adjustments might be used more generally in emergency fund administration.

Part V explains how an emergency fund administrator might allocate funds according to descending order of necessity. Like back-end guidance, this tool mitigates the tension between speed and accuracy in the delivery of emergency money. One variation anticipates distributing smaller grants first, then larger and larger grants until the “clearing” grant size is determined. The idea is analogous to the “clearing” price sought in a descending-price auction. Another variation focuses on using a descending-order-of-necessity distribution tool to collect applicant pool information early in the process.

I. THE STORY OF THE STATUTE

A. Legislation

On March 27, 2020, as part of the CARES Act, Congress created the Paycheck Protection Program, placed it under the administrative auspices of the Treasury and the Small Business Administration, and funded the PPP with $349 billion. The program emerged from a bipartisan coalition led by Senators Marco Rubio, Ben Cardin, and Susan Collins. At a March 18, 2020 press conference, Collins and Rubio described a $300 billion program to fund “small businesses,” including their payrolls. The program would help employees in


hospitality and other industries who would otherwise be laid off. Also on that date, Treasury released a proposal under the heading “Small Business Interruption Loans,” which followed the lines of the Collins and Rubio description.\(^ \text{19} \)

Key specific PPP loan terms were as follows: Businesses had to apply through a financial intermediary—a bank authorized to process PPP applications.\(^ \text{20} \) PPP loans were nonrecourse\(^ \text{21} \) and required no collateral or guarantee.\(^ \text{22} \) Their interest rate was capped at one percent.\(^ \text{23} \) Loans could be made in amounts up to 2.5 times average monthly payroll, with a cap of $10 million.\(^ \text{24} \) Successful applicants could use PPP funds to pay for employee compensation and benefits as well as other expenses including rent, utilities, and interest.\(^ \text{25} \)

The most generous element of the program involved loan forgiveness. Loans were eligible for forgiveness if funds were used for approved purposes—most prominently payroll—within the “covered period,” originally defined as an eight-week period starting on the date the loan was issued\(^ \text{26} \) and later changed to twenty-four weeks.\(^ \text{27} \) PPP funding is thus often interchangeably referred to either as “loans” or as “grants.”

PPP applicants had to meet eligibility requirements, of which two are particularly important. First, applicants could have no more than


\(^ {20} \) § 636(a)(36)(F)(ii) (delegating authority to lenders otherwise approved to make SBA loans); § 636(a)(36)(F)(iii) (allowing the Treasury and SBA to authorize other lenders to make loans).

\(^ {21} \) § 636(a)(36)(F)(v) (providing for no recourse).

\(^ {22} \) § 636(a)(36)(J) (waiving guarantee requirement).

\(^ {23} \) The statute provided for an interest rate of up to four percent. § 636(a)(36)(L).

\(^ {24} \) § 636(a)(36)(E) (setting maximum loan amount).


\(^ {26} \) CARES Act, Pub. L. No. 116-136 § 1106, 134 Stat. 281, 297 (2020) (outlining forgiveness terms including eight-week “covered period,” availability for payroll and other costs, reduction in forgiveness amount if number of employees were reduced, and documentation requirements); see also Business Loan Program Temporary Changes; Paycheck Protection Program—Loan Forgiveness Requirements and Loan Review Procedures as Amended by Economic Aid Act, 86 Fed. Reg. 8,283, 8,288–90 (Feb. 5, 2021) (to be codified at 13 C.F.R. pt. 120) (describing payroll and other costs eligible for loan forgiveness).

500 employees. Hospitality businesses could have no more than 500 employees per physical location, assuming different physical locations were housed in different entities. These requirements were more generous than the usual SBA size limitations.

Second, PPP applicants had to certify “that the uncertainty of current economic conditions makes necessary the loan request to support the ongoing operations of the eligible recipient.” The statute waived the usual SBA loan prerequisite that an applicant must be unable to obtain “credit elsewhere.” But it included the vaguely worded “hardship certification,” which provided Treasury and the SBA with an important lever for enforcement and guidance.

The PPP presents a tension: the program had a “small business” headline but the statutory eligibility requirement embraced larger businesses than that headline might intuitively suggest. Some

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28. § 636(a)(36)(D) ("During the covered period, in addition to small business concerns, any business concern . . . shall be eligible to receive a covered loan if the business concern . . . employs not more than . . . 500 employees.").

29. For hospitality businesses, the statute waived usually applicable affiliation rules. See § 636(a)(D)(iv). Typically, these affiliation rules combine entities under common control. See 13 C.F.R. § 121.103(a) (2021) (explaining control and affiliation). Since these rules did not apply, a hospitality business or franchise housed in a separate entity could apply for PPP funds if that entity employed 500 employees or fewer, even if the total number of employees of commonly controlled entities exceeded 500. If separate entities were established for different restaurant or hotel locations, this amounted to applying the 500-employee limit on a per-location basis. The rule was applicable to firms with NAICS industry code starting with 72, covering accommodation and food services. See § 636(a)(D)(iv). There are about 900,000 such businesses in the U.S., of which 650,000 are restaurants and 120,000 are hotels and other traveler accommodations. See Six Digit NAICS Codes and Titles, NAICS ASS’N, https://www.naics.com/six-digit-naics/?code=72 [https://perma.cc/VJA5-5M84]; see also Thomas W. Joo & Alex Wheeler, The “Small Business” Myth of the Paycheck Protection Program, 54 U.C. DAVIS L. REV. ONLINE 21, 35 (2020) (noting that the franchise affiliation waiver also applied to car dealerships).

30. The statutory text diverges from previous legal definitions such as the SBA’s table of size standards based on revenue, number of employees, and industry code. See U.S. SMALL BUS. ADMIN., TABLE OF SMALL BUSINESS SIZE STANDARDS MATCHED TO NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEMS CODES (2016), https://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf [https://perma.cc/5R76-6TRD]. Under the usual rules, some businesses qualify for SBA loans only with smaller numbers of employees, such as 100–250 for merchant wholesalers. See id. at 20–23. Others may qualify with larger numbers of employees, such as up to 1,500 for manufacturers. See id. at 6–19.


32. § 636(a)(36)(I). The usually applicable provision reads: “The Administrator has the authority to direct, and conduct oversight for, the methods by which lenders determine whether a borrower is able to obtain credit elsewhere. No financial assistance shall be extended pursuant to this subsection if the applicant can obtain credit elsewhere.” § 636(a)(I)(A)(i). “Credit elsewhere” typically requires an evaluation of private market conditions and the availability of conventional loans on reasonable terms. § 636(h).

33. The legal definition diverged from intuitive understandings of “small business.” See Robert A. Peterson, Gerald Albaum & George Kozmetsky, The Public’s Definition of Small Business, 24 J. SMALL BUS. MGMT. 63, 64–65 (1986) (reporting survey results including responses to a number-of-employees question that produced a median of 10.2 and a mean of 29.2); see also Mirit Eyal-Cohen,
statutory elements support the idea that grants to smaller firms would better serve the PPP’s purpose. But these are less precise than the generous 500-employee eligibility rules.

For instance, one provision offers that “[i]t is the sense of the Senate” that priority should be given to “small business concerns and entities in underserved and rural markets.” 34 In addition, the structure of the CARES Act suggests that smaller businesses were the PPP’s audience, since other parts of the CARES Act offered relief both to individuals and to larger businesses. Individual grants included increased unemployment benefits and individual stimulus payments. 35 The CARES Act also authorized business loans sponsored by the Federal Reserve and Treasury, including but not limited to loans to hard-hit businesses such as airlines. 36 Charging the federal SBA with the administration of the PPP might suggest that small businesses should have been prioritized. 37 And legislator statements also suggested a preference for small business. 38

Nothing in the statute required that preference be given to smaller businesses among those businesses that were eligible to apply. But Treasury and the SBA did have the lever of the so-called hardship certification, which applicants were required to make “in good faith.” Applicants had to certify “that the uncertainty of current economic conditions makes necessary the loan request to support the ongoing operations of the eligible recipient.” 39 With the single regulatory lever of this hardship or necessity certification, and their discretionary ability to enforce it, Treasury and the SBA eventually demonstrated that they could prefer some applicants over others.


34. § 636(a)(P)(iv).
35. See, e.g., 26 U.S.C. § 6428 (a) (providing for cash payments to individuals of $1,200 per adult and $500 per child); 15 U.S.C. § 9023 (providing for additional $600 per week in unemployment benefits through July 31, 2020); see also Hafiz et al., supra note 4, at 46–54 (describing and analyzing the individual stimulus and unemployment provisions of the CARES Act).
37. The language of the primary operative small business lending section suggests that the SBA has discretion in operating the program. See 15 U.S.C. § 636(a) (“The Administration is empowered to the extent and in such amounts as provided in advance in appropriation Acts to make loans . . . to any qualified small business concern . . . for purposes of this chapter.”).
38. For instance, the initial remarks made by Senators Rubio and Collins about the purpose of the program—before public criticism of larger PPP recipients in the first wave—illustrates a statutory purpose of assisting small business. See supra text accompanying note 18 (describing March 18, 2020 press conference).
However, they did not do this right away. In the first wave of spring funding, in late March and early April, guidance simply said that the program was “first come, first served.”\(^{40}\) Private actors—applicants and intermediary banks—determined access to the program.\(^{41}\) Applicants’ technical or formalist approaches to interpreting the so-called hardship certification supported a broad interpretation. The result was that larger and better-resourced firms, rather than smaller or more needy firms, disproportionately claimed PPP grants.\(^{42}\)

The first wave of PPP funding was quickly exhausted. In April 2020, Congress increased the appropriation from $349 billion to $659 billion.\(^{43}\) Treasury and the SBA took a different approach to this second wave of 2020 funding from April through August. Specifically, they used the hardship certification as a regulatory lever. Their guidance did not explicitly bar certain applicants. Rather, administrators both threatened enforcement and promised immunity from enforcement. For instance, Treasury stated both that public firms might be audited with respect to the accuracy of their hardship certifications, and also that private firms that applied for $2 million or less in funding would not be audited.\(^{44}\)

In June 2020, Congress amended the PPP to increase its “flexibility.”\(^{45}\) The key changes were in the forgiveness portions of the statute. Most importantly, the time allowed to spend PPP grants on eligible expenses was extended from eight weeks to twenty-four weeks.\(^{46}\) Also, the withdrawal of forgiveness for workforce reduction was relaxed in the event that workforce reduction was related to “worker or customer safety requirement(s) related to COVID-19,” and only sixty percent of PPP grants (rather than the seventy-five percent earlier stated in administrative guidance) were required to be spent on payroll costs rather than other allowed expenses.\(^{47}\)

In July 2020, Congress extended the appropriation time frame. Under the March and April statutes, applications had to be submitted


\(^{41}\) See infra Section II.A.

\(^{42}\) Id.


\(^{44}\) See infra Section II.C.


\(^{47}\) See id.

In December 2020, Congress funded the PPP for a third time, with $284 billion. It gave more restrictive and precise instructions for “second draw” loans offered to borrowers who had already received PPP loans. Second draw applicants had to employ not more than 300 employees—down from 500. They had to meet a new revenue-reduction requirement, by showing at least a twenty-five percent reduction in gross receipts in one quarter in 2020 compared to the same quarter in 2019. The loan amount continued to be based on 2.5 times the average monthly payroll for most firms, but it was 3.5 times for hospitality firms. Also, the maximum loan size was reduced from $10 million to $2 million. The terms of loan forgiveness were more carefully specified and included permission for additional expenses such as a “covered worker protection expenditure,” which included expenditures for capital improvements such as drive-through windows or ventilation systems. The December 2020 statute also authorized a simple one-page forgiveness process for loans of $150,000 or less.

The December 2020 iteration of the PPP also more exactly stated how Treasury and the SBA should allocate funds. In addition to offering more favorable eligibility rules for restaurants and other hospitality firms, it provided specific allocations for loans through community financial institutions and banks with assets less than $10 billion, and loans to certain small applicants and new applicants. A related

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51. See id. § 311 (codified at 15 U.S.C. § 636(a)(37)).


54. § 636(a)(37)(C)(iv).

55. § 636(a)(37)(C)(i).

56. § 636(a)(37)(J)(iii).

57. Economic Aid to Hard-Hit Small Businesses, Nonprofits, and Venues Act § 307(a)(3) (providing for one-page form that requires information about number of retained employees, estimated amount of loan spent on payroll and total loan value).

58. See id. § 325(d)(i)(A)(iii) (providing appropriations of $15 billion made by community financial institutions, $15 billion by banks with assets less than $10 billion, and $15 billion for
provision provided $15 billion for shuttered performance venues.\(^{59}\) And another provision instructed the SBA to issue guidance “addressing barriers to accessing capital” for certain groups.\(^{60}\)

By December 2020, Congress had provided more specific instructions on how the PPP should be administered. Still, Treasury and the SBA continued to make important administrative decisions. For instance, as the Biden administration announced in February 2021, Treasury and the SBA established a two-week application window exclusively for firms that employed fewer than twenty employees.\(^{61}\) The agencies expanded eligibility for applicants with criminal histories not including fraud.\(^{62}\) They eliminated consideration of whether an applicant had defaulted on federal student loans.\(^{63}\)

The tail of the PPP continued in Congressional appropriations in 2021, as the American Rescue Plan Act enacted in March 2021 provided $7.25 billion in additional funding.\(^{64}\) The same statute also made additional specific allocations for shuttered venue operators\(^{65}\) and restaurants.\(^{66}\) These later enactments in December 2020 and March 2021 became more targeted in their use of the PPP to assist businesses in certain sectors. The increased focus on certain sectors or groups of firms, such as customers of smaller banks, employers of fewer than twenty employees, and shuttered venue operators, was very different from the first-come, first-served approach of March and April 2020 during the first wave of the program. Over twelve months, the program had changed.

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59. Id. § 323(d)(1)(H) (providing $15 billion appropriation); see id. § 324 (explaining eligibility for shuttered performance venues and related businesses).

60. “Not later than 10 days after the date of enactment of this paragraph, the Administrator shall issue guidance addressing barriers to accessing capital for minority, underserved, veteran, and women-owned business concerns for the purpose of ensuring equitable access to covered loans.” 15 U.S.C. § 636(a)(37)(M).

61. Release No. 21-17, supra note 11.


63. Id. at 13,155 (eliminating consideration of delinquency or default with respect to federal student loans).

64. American Rescue Plan Act of 2021, Pub. L. No. 117-2, § 5001(d), 135 Stat. 4 (increasing PPP appropriation by $7.25 billion to $813.7 billion).

65. See id. § 5005(a) (adding $1.25 billion in appropriations for shuttered venue operators).

66. See id. § 5005(b) (establishing a Restaurant Revitalization Fund of $28.6 billion). During the initial twenty-one-day grantmaking period, the statute directed priority for women-owned and veteran-owned businesses and for socially and economically disadvantaged businesses. See id. § 5003(c)(3).
B. Administration

As other scholars have noted, there were flaws in the PPP statute. Its reliance on financial intermediaries probably was necessary to push money out quickly. But this reliance came with certain structural biases, including the tendency to favor existing bank clients and to entrench racial disparities. The PPP has been unfavorably compared to automatic wage subsidies like those used in other countries, on the theory that a more automatic or direct program would have better supported continued employment. Others have argued that the vagueness of the PPP statute was a flaw because, for instance, it left the statute vulnerable to re-interpretation by the media.

One way to react to these flaws is to explain how Congress could fix them, in search of a first-best program. For instance, Congress could avoid the imperfections of market intermediaries by building a system that allowed government to transfer money directly to businesses. Congress could also prevent media coverage from re-interpreting the statute by providing more careful and specific distribution

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68. See infra Section II.A; see, e.g., Amiram & Rabetti, supra note 13, at 1 (finding correlation between banking relationships, especially borrowing relationships, and successful PPP application).

69. See infra Section II.F; see, e.g., Jeffrey Wang & David Hao Zhang, The Cost of Banking Deserts: Racial Disparities in Access to PPP Lenders and Their Equilibrium Implications 10 (Apr. 29, 2021) (unpublished paper), https://davidzhang.scholar.harvard.edu/files/dhz/files/geographyppp.pdf (finding that ZIP codes with 10% higher Black population have a 1.3% lower take-up rate of PPP loans).


instructions. Additionally, Congress could enact automatic stabilizers that would provide immediate ballast in case of an economic crisis.

The effort to describe a first-best system is a worthy enterprise, but it is not this Article's task. Instead, this Article analyzes the world of what has been aptly called the “forty-second best.” In other words, this Article takes the PPP statute as it finds it. The PPP is an interesting emergency fund case study precisely because it is flawed. The goal here is to surface lessons that might improve administration of other similar and imperfect emergency funds.

C. Similar Emergency Funds

An emergency fund comparable to the PPP has minimal or vague instructions and features information and time constraints. Generally, it is medium-term in length, occurring over a period of months. This provides enough time for some learning and rule adjustment, but it does not eliminate the tradeoff between speed and accuracy.

Not all funds that respond to a crisis will be comparable to the PPP in this way. For instance, not all such funds feature minimal or vague instructions. Some funds, such as tort-based compensation funds or insurance funds, feature ex ante distribution rules based on a known body of law. An example of a fund set up to discourage tort claims is the September 11th Victim Compensation Fund. In such a case, the idea is to provide claimants with damages related to the strength of the tort claim they could have brought in lieu of making a claim against the fund. An example of an insurance fund is a Federal Emergency Management Agency (FEMA) allocation to pay for otherwise uninsured property ruined in a federally declared disaster. In the FEMA case, ex ante distribution rules are drawn from conventions of insurance law.

Emergency funds also differ from tools of economic policy that refuse the task of allocating funds. An example is the reduction of a

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73. Joo & Wheeler, supra note 29, at 40 (“Most media outlets uncritically accepted lawmakers' portrayal of the PPP as a small-business rescue program; thus the criticism of corporations provided cover for the confused design of the program.”).
74. See, e.g., Olivier J. Blanchard & Lawrence H. Summers, Automatic Stabilizers in a Low-Rate Environment, 110 AEA PAPERS & PROC. 125, 126 (2020) (proposing “semi-automatic” stabilizers, i.e. tax or spending measures triggered by the crossing of some statistical threshold, be it a low output growth rate, or a high unemployment rate.).
75. Thanks to Professor Daniel Shaviro for this term.
76. See FEINBERG, supra note 15, at 41–44 (explaining that the fund was set up in conjunction with congressional limitation of tort liability).
78. See id. at 303, 312–22 (describing FEMA’s insurance approach).
benchmark interest rate by a central bank. Historically, central banks have allowed the market to decide how to allocate the benefits of such interest rate reductions.79

The PPP example is also characterized by a certain timeframe. It provides an example of an emergency fund that experienced pressure to distribute funds quickly, but also had enough time to revise and adjust allocation instructions. Disbursements occurred over fourteen months, from April 2020 to May 2021. The label “medium-term” seems to fit this time horizon. In some other emergency fund cases, the urgency of distribution may be higher than in the PPP case, and the lessons described here may not fit. For example, the distribution of funds for food and emergency housing immediately following a disaster is not a good candidate for later back-end adjustments.

These caveats still leave a fair number of emergency funds that might benefit from the lessons of the PPP. For instance, the lessons could apply to a fund meant to rebuild an economy following a disaster or crisis, where the fund is not bound by ex ante rules. One example is the Gulf Coast Claims Facility, a fund set up to compensate for economic damage after the 2010 Deepwater Horizon oil rig explosion.80 The lessons could also apply to funds for housing, health care, and rent assistance following an economic downturn, whether they are administered by a nonprofit, by a private fund administrator, or by the government.

II. THREE PPP WAVES

A. First Wave: Deregulation and the First $349 Billion

Initially, the PPP was a free-for-all—a “competition . . . open to all comers and usually with no rules.”81 The story of the PPP’s first wave shows what happens when well-resourced regulated parties are incentivized to take advantage of a law and face relatively few constraints. The constraints they did face came first from the private sector—via the media—not from government guidance.

The PPP statute did not give clear instructions to Treasury and the SBA about how to allocate the limited funds provided for the program.

80. See FEINBERG, supra note 15, at 129–32 (describing the $20 billion undertaking to compensate for damages to individuals and business).
No metric explained how to choose among applicants when the program was oversubscribed.\footnote{See supra Section I.A (explaining results of first wave).} Because the meaning of the hardship certification was unclear,\footnote{See infra Section III.C (noting interpretive range of hardship certification).} the statutory text could be read to throw the door open to any eligible applicant on a first-come, first-served basis.\footnote{See supra Section I.A (explaining details of statute).} As explained above, the main factor limiting applications was a 500-employee maximum, and this was relaxed for hospitality businesses.\footnote{For the first wave of funding in March and early April 2020, Treasury and the SBA did little to administer the PPP. Instead, the PPP story was driven by applicants, not shaped by government. Key pieces of early guidance demonstrated deregulation, rather than regulation. For instance, in early April, Treasury and the SBA offered the following question and answer in posted guidance: “Is the PPP ‘first come, first served?’ Yes.”\footnote{Business Loan Program Temporary Changes: Paycheck Protection Program, 85 Fed. Reg. 20,811, 20,813 (Apr. 15, 2020) (to be codified at 13 C.F.R. pt. 120) (promulgating the PPP’s first interim final rule based on previously posted guidance).} Other guidance indicated that banks would face no liability for misrepresentations made by applicants.\footnote{U.S. SMALL BUS. ADMIN., PAYCHECK PROTECTION PROGRAM LOANS: FREQUENTLY ASKED QUESTIONS (Aug. 11, 2020), https://www.sba.gov/sites/default/files/2020-08/Final%20PPP%20FAQs%20%28August%202020%29.pdf [https://perma.cc/G6BJ-MHCH] [hereinafter PPP: FREQUENTLY ASKED QUESTIONS] (“[L]enders may rely on borrower representations . . . .”).}

The initial CARES Act allocation of $349 billion was exhausted within two weeks.\footnote{See Robert J. Dilger & Sean Lowry, Cong. Rsch. Serv., R46397, SBA PAYCHECK PROTECTION PROGRAM (PPP) LOAN FORGIVENESS: IN BRIEF 1 (2020) (reporting that lending began on April 3, 2020 and ended on April 16, 2020).} Its distribution favored well-resourced and well-connected applicants. Larger loans made to banks’ pre-existing customers predominated in this first wave of the program. The growing literature that empirically studies the PPP consistently finds that banking relationships predict whether a business applied for and received a PPP grant in the first wave.

One study considers public firms that received PPP grants and finds that firms that disclose banking relationships in their filings received larger grants and received them more quickly.\footnote{See Amiram & Rabetti, supra note 13, at 10–12, 27 tbl.3 (finding coefficients of 0.2 to 0.3 for the existence of a relationship and coefficients of 0.6 to 0.7 for workforce size).} A lending relationship in particular correlates with faster receipt of funds, which suggests that banks were concerned about default risk, which a PPP grant could alleviate.\footnote{Id. at 12–14, 29 tbl.5 (finding stronger correlation for lending relationships than for deposit relationships).} Another study finds, based on a survey of both public and privately held recipients of PPP funds, that larger firms were more likely to be funded in the early stages of the PPP, and that the effect is more pronounced for larger banks, which suggests that a
“concierge” incentive prompted larger banks to take care of their larger customers first.\textsuperscript{90} Other work corroborates the idea that pre-existing loans with an intermediary bank predicted application success, perhaps because the receipt of PPP funds would make it more likely that borrowers would pay back the money they owed to the bank.\textsuperscript{91} Another study organized observations geographically and found that a higher density of SBA bank member offices correlated both with lower unemployment and with more PPP loans.\textsuperscript{92}

Available data also suggest that smaller firms tended to have a more acute need for funds. There is variation in firms’ cash needs.\textsuperscript{93} For instance, one study shows that for firms with 1–49 employees, 15% were shut down as of mid-April, compared to 5% for firms with 50–499 employees.\textsuperscript{94} Nevertheless, smaller firms were less likely to successfully apply for PPP funding in the first wave of the program. One study based on daily surveys of businesspeople from March 28–May 16, 2020 explains:

The smallest businesses were slower to become aware of government programs.... [T]he smallest firms were less likely to apply for the PPP and, conditional on applying, they applied


\textsuperscript{91} Bartik et al., \textit{supra} note 5, at 21, 64 tbl.2 (associating pre-existing loan with 4.4 percentage point increase in probability of approval and pre-existing relationship with loan officer with 6 percentage point increase); see also Gabriel Chodorow-Reich, Olivier Darmouni, Stephan Luck & Matthew Plosser, \textit{Bank Liquidity Provision Across the Firm Size Distribution} 5 (Fed. Rsrv. Bank of N.Y., Staff Report No. 942, 2020) (“The SMEs [small and medium enterprises] in our data that received PPP funds reduced their non-PPP bank borrowing in 2020Q2 by between 53 and 125 percent of the amount of their PPP funds.”).

\textsuperscript{92} Santiago Barraza, Martin A. Rossi & Timothy J. Yeager, \textit{The Short-Term Effect of the Paycheck Protection Program on Unemployment} 14 tbl.3 (Aug. 2020) (unpublished paper), https://ssrn.com/abstract=3667431. The paper also found that higher density of SBA bank member offices correlated with lower unemployment, by about one and four tenths percentage points, in April 2020. Id.

\textsuperscript{93} See Joseph Parilla, Sifan Liu & Brad Whitehead, \textit{How Local Leaders Can Stave off a Small Business Collapse from COVID-19}, BROOKINGS INST. (Apr. 3, 2020), https://www.brookings.edu/research/how-local-leaders-can-stave-off-a-small-business-collapse-from-covid-19/ ([I]e know that the smallest firms are the least liquid.); see also Alexander W. Bartik, Marianne Bertrand, Zoe Cullen, Edward L. Glaser, Michael Lucey, & Christopher Stanton, \textit{The Impact of COVID-19 on Small Business Outcomes and Expectations}, 117 PROC. NAT’L ACADEMY SCIENCES 17656, 17662 (2020) (finding that 50% of businesses with 500 employees or fewer surveyed between March 27 and April 4, 2020, had only enough cash to cover between 1 and 2 months of expenses, and 25% had only enough cash to cover 15 days or less of expenses).

later, waited longer for their application to be approved, and were less likely to get approval.95

The first wave also revealed racial disparities in the experience of small businesses following the onset of the pandemic. Businesses owned by people of color experienced more acute cash shortages96 and lower rates of banking relationships.97 They closed at a higher rate—almost double—compared to businesses owned by white persons.98

There were also wide racial disparities in early PPP funding—more so than in later waves.99 Studies agree that white-owned businesses were more likely to receive PPP funds, and to receive larger grants, in the first wave of the program. For instance: firms in majority-white congressional districts constitute seventy-seven percent of small businesses, but received eighty-three percent of PPP loans as of mid-April 2020.100 Also, between April 3 and April 16, 2020, there were about 0.27 PPP loans per employer establishment in counties with no minority-owned businesses and about 0.15 loans per employer establishment in counties with more than 45% minority-owned businesses.101 Also, white borrowers received loans that were substantially larger than those received by borrowers of color.102

95. John Eric Humphries, Christopher A. Neilson & Gabriel Ulyssea, Information Frictions and Access to the Paycheck Protection Program 3 (Cowles Found., Discussion Paper No. 2247, 2020), https://ssrn.com/abstract=3667636 (reporting that firms with zero to four and five tenths FTE were twenty-three percentage points less likely to apply for PPP loans and that when they did apply, they applied two days later and were twenty-seven percentage points less likely to have received approval).


98. Id. at 1 (finding that Black firms have been “almost twice as likely” to close, as compared to small firms overall); Misera, supra note 96, at 2–3 (noting that Black-owned, Hispanic-owned, and Asian-owned businesses closed at a higher rate than white-owned businesses).

99. See infra Section II.F.


Perhaps the results of the free-for-all were predictable. It makes sense that smaller businesses might have fewer resources to pursue PPP funding quickly. Historic and continuing discrimination explains why businesses owned by people of color have less access to banking relationships, which in turn were key to unlocking access to the PPP. More generally, it is unsurprising that the best-resourced tend to win at unregulated games.

But there is more to say about the specifics of the way in which the winners won. At least two mechanisms explain the outcome observed in the first wave of the PPP. One mechanism involved technical compliance. The second mechanism involved gatekeepers.

Technical compliance helps explain how the best-resourced and best-connected regulated parties initially “won” the PPP game. These applicants followed all the specific requirements of the statute. They applied the employee limits, including the details of the hospitality-industry dis-affiliation rule. They submitted the data required by the statute, including payroll data needed to show the maximum loan amount, allowed up to 2.5 times monthly payroll. Well-resourced firms checked all the boxes.

In the hardship certification part of the application, many well-resourced applicants took aggressive positions “that the uncertainty of current economic conditions makes necessary the loan request to support the ongoing operations of the eligible recipient.” They may not have falsified the existence of employees or payroll. But they may have made the hardship certification based on a worst-case scenario, rather than assuming the most likely outcome.

These well-resourced businesses might also have rested their hardship certification on the truth of a logical syllogism like this one: “If we obtain a PPP loan, we will keep more employees on payroll. If we do not obtain a PPP loan, we will dismiss these employees.” Under this framework, a PPP loan is a logical prerequisite to ongoing operations of the business. This kind of technical compliance involves interpreting vague language in the applicant’s favor to support claiming the

/abstract=3774992 (showing pre-May 1, 2020, coefficients that show that white owners received loan amounts, measured by the natural log of the loan amount, that were about twenty-nine percent larger than baseline, while Black business owners received loan amounts that were about ten percent smaller than baseline).


hardship certification. The ambiguous text allowed well-resourced applicants to choose an interpretation that favored those applicants.106

When restaurant companies like Shake Shack and Potbelly and large hospitality firms like the Ashford Hospitality Trust applied for PPP grants, they presumably developed a position that placed them within the lines drawn by the law. They could take advantage of the leeway provided by the statute, rather than focusing on the placement of the law under the auspices of the SBA or on the sense of the Senate provision that encouraged preference for smaller applicants. Contrary to the strand of public opinion that resisted the eligibility of larger firms for PPP grants, one paper estimates that under the technical terms of the statute, about half of public firms were eligible to apply for PPP funding.107

Gatekeeper theory further explains how well-resourced firms “won” in the first wave of the PPP. Applying to the PPP required a bank, since financial institutions were designated as the entities who would receive, process, and submit applications to the SBA.108 This kind of market intermediary is a gatekeeper and can be enlisted to restrict or police the granting of benefits.109

But if the gatekeeper is not so enlisted, the gatekeeper’s incentives are to further its own interests and the interests of its clients. And the administration of the PPP did not enlist gatekeepers to help enforce the program or implement the components of the program intended to mitigate hardship and necessity. Instead, SBA guidance released on April 3, 2020, provided that intermediary “lenders may rely on borrower representations” except for “minimal review of calculations based on a payroll report by a recognized third-party payroll processor.”110 Under this guidance, financial institutions were not responsible if their clients falsely or aggressively made a hardship representation.

106. See Alex Raskolnikov, Probabilistic Compliance, 34 YALE J. REG. 491, 497 (2017) (noting the “one-way ratchet” of uncertain or probabilistic standards that encourage well-advised clients to take aggressive positions).


110. PPP: FREQUENTLY ASKED QUESTIONS, supra note 86, at 1 (“Providing an accurate calculation of payroll costs is the responsibility of the borrower…. (L)enders may rely on borrower representations, including with respect to amounts required to be excluded from payroll costs.”).
There were no instructions from Treasury and the SBA that a bank should prioritize applications made by needier borrowers. Indeed, some banks have alleged (though Treasury and SBA officials have denied) that government officials instructed banks to “go to their existing customer base” in the first wave of the program.\footnote{111} Meanwhile, banks’ systems were not up to the task of processing the sheer number of applications.\footnote{112} Finite bank capacity was a critical limited resource. Not surprisingly, “whether a firm made the cut [of receiving aid under the first PPP wave] often came down to how and where it banked.”\footnote{113} Firms with closer banking relationships, whether with large commercial banks or smaller community banks, had a better chance of persuading a banker to process an application.

Some customers alleged that banks breached common law or state law when they implemented the PPP. Complaints charged that banks chose only some applications to process and picked larger or established customers over smaller clients.\footnote{114} The underlying theory of the case recognized that not all applications could be processed. Instead, the emergency fund setup presented the task of prioritizing and allocating grants. In the first two weeks of the program, when the first $349 billion was disbursed, the government did not set priorities—so private parties did.\footnote{115}

\footnotesize{111. See \textit{Staff of Select Subcomm. on the Coronavirus Crisis, 116th Cong., Underserved and Unprotected: How the Trump Administration Neglected the Neediest Small Businesses in the PPP} 5 (2020) (comparing banks’ statements that the government instructed them to “go to their existing customer base” to Treasury and SBA denial of this report).


114. Plaintiff’s Original Petition at 7–8, DNM Contracting, Inc. v. Wells Fargo Bank, N.A., No. 20-cv-01790 (S.D. Tex. filed Apr. 24, 2020). The petition alleged that a defendant bank made misrepresentations to many small business owners that they would assist them with their PPP loan applications and submit them for approval. ‘Defendant . . . intentionally fail[ed] to process Plaintiff’s and Class Members’ . . . applications. Defendant chose favorites and ‘bigger businesses’ to receive funding and actually process their applications—to the detriment of Plaintiff and Class Members.” Id. This case was submitted to arbitration in December 2020. See Katie Buehler, \textit{Wells Fargo Gets Contractor’s PPP Claims Sent to Arbitration}, \textsc{Law360} (Dec. 18, 2020), https://www.law360.com/articles/1339550/wells-fargo-gets-contractor-s-ppp-claims-sent-to-arbitration [https://perma.cc/8XXX-LRXV]; see also, e.g., Class Action Complaint at 5–6, BSJA, Inc. v. Wells Fargo & Co., No. 20-cv-03588 (N.D. Cal. Apr. 19, 2020) (alleging that Wells Fargo favored larger clients in violation of a first-come, first-served queue principle).

115. Private actors, sometimes called the fifth branch of government, have less strict constitutional constraints compared to the government, including the government’s fourth-branch administrators. See Harold I. Abramson, \textit{A Fifth Branch of Government: The Private Regulators and Their Constitutionality}, 16 \textsc{Hastings Const. L.Q.} 165, 183–85 (1989). Abramson included “formally deputized private regulators,” organizations with some governmental connections, as fifth-branch}
B. Shake Shacked: April 2020

What happened next is less theorized in the academic literature. It involved another development outside the government—this time, from the media. The press discovered that the PPP had “allowed big chains like Shake Shack, Potbelly and Ruth’s Chris Steak House to get tens of millions of dollars while many smaller restaurants walked away with nothing.” Politicians with connections to beneficiaries like auto dealerships faced adverse publicity. Shake Shack gave back its $10 million loan. Gatekeeper advisors began to warn firms to take the program’s “hardship” certification more seriously and consider the possible adverse publicity consequences of being “Shake Shacked.” Some eligible firms presumably didn’t apply for or accept PPP forgivable loans because of these concerns. Thus another private-actor factor—media attention—affected patterns of compliance with the law.

Often, the familiar pattern of well-resourced groups taking advantage of regulatory guidance goes unnoticed. In contrast, people noticed what happened with the PPP’s first, $349 billion wave. They noticed that it was exhausted within a few weeks. And they noticed that forgivable loans went disproportionately and in larger amounts to businesses with resources like established banking relationships. This “Shake Shacked” phase is an unusual feature of the PPP story. Ordinarily, few notice aggressive interpretations of many technical categories and “purely private actors . . . having no formal connection with government.” The article emphasized the weak constitutional constraints applied to such actors. Some scholars have examined the interaction of media coverage and law in certain circumstances. See, e.g., Rory Van Loo, Regulatory Monitors: Policing Firms in the Compliance Era, 119 COLUM. L. REV. 369, 422–23 (2019) (arguing that the “external accountability” mechanism of “public disclosures” can help limit the actions of front-line regulatory monitors, including through public attention and media coverage).

116. Some scholars have examined the interaction of media coverage and law in certain circumstances. See, e.g., Rory Van Loo, Regulatory Monitors: Policing Firms in the Compliance Era, 119 COLUM. L. REV. 369, 422–23 (2019) (arguing that the “external accountability” mechanism of “public disclosures” can help limit the actions of front-line regulatory monitors, including through public attention and media coverage).


121. Cororaton & Rosen, supra note 107, at 3 (observing that the stock market apparently interpreted public firm PPP borrowing in the second wave of the program as a negative signal and suggesting that this discouraged firms from borrowing since public firm participation was significantly lower in the second round).
provisions of law. Interest group theory acknowledges that it is possible for concentrated interest groups to claim benefits when the costs imposed on others are not only diffuse, but also go unnoticed. Aggressive positions are often established quietly, without the public taking any notice.

But in this case, in contrast, interest group standard operating procedure was exposed to public view. Lists of companies who successfully applied were widely available. It was clear that the better-resourced applicants had won. The media attention meant that some successful applicants had to accept public criticism along with their PPP loan money.

On one hand, the criticism heaped onto companies like Shake Shack, Potbelly, and others was understandable. The PPP’s public relations headline was about helping small business, and larger chains had crowded out smaller businesses in the initial free-for-all race. On the other hand, most of the larger businesses who successfully applied for PPP funds probably technically complied with the text of the statute. The “Shake Shacked” media attention introduced a new consideration into the decision factors of potential PPP applicants. This was the possibility of adverse publicity. This changed the prior approach of interpreting a statute in a formal and technical fashion to serve the interests of a business. An applicant who adopted a more aggressive position when making a hardship certification might be more exposed to adverse publicity. A company more prominent or more protective of its reputation would be more interested in avoiding adverse publicity.

Media attention, in other words, introduced a clientele effect that operated alongside the tendency of the PPP to favor well-resourced

122. See Wendy Wagner, Incoprehensible! 6–7 (2019) (explaining that regulation implementation is often incomprehensible to its target audience, giving the example of excessively complicated disclosure, and arguing that this allows powerful interests subject to regulation to exploit the regulatory process).


125. See supra text accompanying notes 88–92 (summarizing empirical studies showing larger-business and bank-client bias in PPP first wave).

126. The idea of a clientele effect is that certain kinds of investors are drawn to certain kinds of securities because of investor characteristics rather than because of the price or value of the securities. For instance, some investors may prefer dividend-paying securities because they want a stream of dividend checks as income. As used here, “clientele effect” means that certain kinds of PPP applicants would be more likely to apply for PPP funding because of applicant-specific
applicants. An applicant less concerned about its reputation and/or more willing to argue with the government about PPP eligibility would be more likely to apply for a PPP grant. An applicant more averse to the risks of audit and adverse publicity would be less likely to apply.

Available data tend to confirm the existence of a clientele effect. One study finds not only that more financially secure firms were more likely to return PPP grants but also that, controlling for other variables, health industry firms were more likely to return such grants. The authors suggest that this is in part because health industry firms care more about their reputation, particularly with respect to the government, since they must frequently interact with government agencies on regulatory questions such as drug approval. They also find that returning funds often had a positive effect on a firm’s stock price, which indicates that reputational risk such as a possible government investigation is indeed costly for some firms.

C. The Second Wave: Regulation, April – August 2020

The first wave of PPP funding revealed the core problem of allocation. Assuming a limited emergency fund, some mechanism will triage or order applicants. The government or other fund administrator might determine the order of priority, or the market might determine this order. In the first wave, private actors—applicants and banks—solved the allocation problem while they scrambled for funds as their resources would permit, held back by little other than broad eligibility requirements and an unevenly experienced concern about adverse publicity.

The second wave started when Congress added $310 billion of funding, for a total of $659 billion. Then, the story began to shift as bureaucrats took action. Administrative “sure shipwreck” and “safe harbor” guidance modified the first wave free-for-all. As additional funding gave Treasury and the SBA some room to work with, they began to regulate and take more control over allocating the program’s limited resources.


127. Balyuk et al., supra note 90, at 22–23, 66 tbl.VII.
128. See id.
One early piece of guidance aimed to discourage public company PPP applications. It was the following FAQ, posted April 23, 2020, and published April 28, 2020, in the Federal Register:

Question: Do businesses owned by large companies with adequate sources of liquidity to support the business’s ongoing operations qualify for a PPP loan?

Answer: . . . Although the CARES Act suspends the ordinary requirement that borrowers must be unable to obtain credit elsewhere . . . borrowers must still certify in good faith that their PPP loan request is necessary . . . . For example, it is unlikely that a public company with substantial market value and access to capital markets will be able to make the required certification in good faith, and such a company should be prepared to demonstrate to the SBA, upon request, the basis for its certification . . . . Any borrower that applied for a PPP loan prior to the issuance of this guidance and repays the loan in full . . . will be deemed by the SBA to have made the required certification in good faith. 130

According to the SBA, this provision acted as a safe harbor for public firms that received PPP loans but then returned them. 131 A safe harbor typically is a legal provision providing that particular facts comply with the law and will result in no penalty, while leaving the compliance status of other facts to be judged by a standard. 132 Returning the money would provide protection against enforcement, a typical safe harbor result.

A contrasting element was the audit threat, italicized in the FAQ language above, that a public company should be prepared to explain itself and its certification to the SBA. This language suggests that administrators intended this provision to act not only as a safe harbor, but also prospectively as a sure shipwreck. 133 That is, the audit threat

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133. See id. (defining sure shipwrecks).
suggested that certain conduct—applying for the PPP while having public-company status—might violate the law. The provision aimed not only to encourage previous public company applicants to give funds back, but also to discourage future public company applicants from asking for any PPP funds in the first place.

The effort to cut public firms out of the PPP worked to some extent. First, it encouraged firms to return funds. A study of public firm PPP loans reports that of the 812 public firms that received PPP loans, 110, including Shake Shack, returned them.134 Public companies received $2.2 billion in grants between April and August 2020 and returned $600 million, making the net grant total $1.6 billion.135

Additionally, the guidance discouraged new applications from public firms. One analysis suggests that out of a group of 1,741 public firms that were eligible for PPP loans, about 700 received grants.136 The majority received grants in the first two weeks of the program.137 Another study suggests that only thirty percent of the loans made to public companies were made in the second round of the program, starting in late April 2020.138 Further, one list reports that just twenty-two public company loans were made on or after May 18, 2020.139 This suggests that the “sure shipwreck” audit threat guidance had a chilling effect with respect to PPP public company loans.

The second key piece of guidance released in April 2020 related to the size of PPP loans rather than the type of PPP borrower. It also used

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134. Cororaton & Rosen, supra note 107, at 10 (reporting that 812 public firms received loans and 110 returned them).
135. Cororaton & Rosen, supra note 107, at 10, 11 tbl.1 (finding that 13.5% of public company borrowers returned funds and that the total loan amount to public firms was $2.2 billion gross and $1.6 billion net of returns).
136. Id. at 21 tbl.3 (finding that out of 1741 firms in subsample, 701 received PPP loans).
137. Id. at 28 tbl.5 (finding that out of 618 public PPP borrowers analyzed, 353 had borrowed by April 16).
138. One study used 147 loan observations, of which 245 were first-round, totaling about $885 million and 102 second-round loans, totaling $240 billion. See Ran Duchin, Xiumin Martin, Roni Michaely & Ivy Wang, Concierge Treatment from Banks: Evidence from the Paycheck Protection Program 33 (Mar. 10, 2021) (unpublished paper), https://ssrn.com/abstract=3775276 (“Within a set of comparable firms, relationship lending in the syndicated loan market increases the likelihood of obtaining a PPP loan by a striking 57%”). This analysis reveals relative numbers of first-wave and second-wave loans, although the total number of public-company loans was larger. See Cororaton & Rosen, supra note 107, at 11 (showing 812 public borrowers and 13.5%, or 110 borrowers, returning).
139. SEC Filings: Public Companies Receiving SBA PPP Loans Under the CARES Act, FACTSQUARED, https://factba.se/sba-loans [https://perma.cc/7978-NLXP] (showing that two out of these twenty-two loans were later returned). This list appears to undercount the total number of loans, as it reports less than 400 public companies’ loans (net of returns) compared to about 800 reported elsewhere. See Cororaton & Rosen, supra note 107, at 11 tbl.1 (showing 812 public borrowers). But even if there were twice the FactsSquared figure of twenty public company loans after May 18, 2020, it still represents a steep decline in public company applications following the sure shipwreck guidance. See id.
an enforcement tactic, this time to discourage loans in excess of $2 million. Initially the guidance promised audits for larger loans. It explained that “the SBA has decided . . . that it will review all loans in excess of $2 million . . . .” 140 Later guidance promised no audit for smaller loans. It reads: “Any borrower that, together with its affiliates, received PPP loans with an original principal amount of less than $2 million will be deemed to have made the required certification concerning the necessity of the loan request in good faith.” 141

This safe harbor guidance technically did not prohibit anyone from applying for a larger grant. It simply specified how the SBA and Treasury allocated enforcement resources away from loans of $2 million or less. But the guidance nevertheless—and predictably—had a big impact.

PPP reports show that loan size decreased over the course of the program. After May, there were no increases in the number of loans greater than $2 million. 142 More granular data also show a reduction in the number of loans larger than $150,000 following closely after the release of the April 29, 2020, guidance. 143 This is a remarkable change in the population of PPP beneficiaries, accomplished quickly after the release of the safe harbor guidance. The mere absence of a safe harbor no-audit guarantee for larger loans was enough to transform the composition of the program.

D. The Third Wave: Smaller Still and Sector-Specific

Grants under the program were transformed further still by the December 2020 statute, which endorsed the agencies’ size-related

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140. PPP: FREQUENTLY ASKED QUESTIONS, supra note 86, at 13.
141. Id. at 16 (published May 13, 2020) (footnote omitted). This safe harbor (but not the earlier promise of audit for larger loans) was incorporated into the SBA’s interim final rule compendium some months later. See Business Loan Program Temporary Changes; Paycheck Protection Program as Amended by Economic Aid Act, 86 Fed. Reg. 3692, 3706 & n.87 (Jan. 14, 2021) (to be codified at 13 C.F.R. pts. 113, 120–21).
restrictions on grants by adding a $2 million limit to the statute for second-draw loans.\textsuperscript{144} Congress also reduced the employee limit to 300 for these loans,\textsuperscript{145} endorsing the idea that funds should be directed to smaller firms.

The December 2020 and January 2021 statutes also added other provisions about eligible firms not directly correlated with size. One was sector-specific. For instance, amounts were allocated in related provisions for closed performance venues and restaurants.\textsuperscript{146} Another provision may have sought to identify intermediate firms who would survive if allowed a PPP grant. This was the December 2020 provision that required second-draw PPP applicants to show at least a twenty-five percent reduction in gross receipts when comparing similar quarters in 2019 and 2020.\textsuperscript{147}

The statutory modifications through December 2020 appear to have resulted from developments in the program more than from a change in partisan views. Elected officials in the White House and each house of Congress remained through 2020, but the PPP evolved nevertheless.

After the Biden administration was in place in 2021, it made further modifications to the program. These included a dedicated two-week application window for businesses with fewer than twenty employees in February and March 2021.\textsuperscript{148} Biden administration guidance also expanded eligibility for applicants with criminal histories, excluding fraud, and eliminated consideration of whether an applicant had defaulted on federal student loans from a decision on an application.\textsuperscript{149}

Another key question for the statute and for administrative guidance involved the terms of forgiveness. The terms of forgiveness also became clearer by the third wave.

Administrative guidance on forgiveness sometimes leaned toward leniency. For instance, a rule allowed a borrower to avoid recording a reduction in force (which can limit borrowers’ ability to obtain

\textsuperscript{146} \textit{See supra} notes 59, 65–66 (citing allocations to shuttered performance venues and restaurants in December 2020 and January 2021 statutes).
\textsuperscript{147} § 636(a)(37)(A)(iv)(I)(bb) (also providing rules applicable to entities not in business for all of 2019).
\textsuperscript{148} Release No. 21-17, \textit{supra} note 11.
\textsuperscript{149} Business Loan Program Temporary Changes; Paycheck Protection Program—Revisions to Loan Amount Calculation and Eligibility, 86 Fed. Reg. 15,149, 15,154–55 (Mar. 8, 2021) (to be codified at 13 C.F.R. pt. 120) (removing one-year lookback restriction for “non-financial fraud felonies” and eliminating consideration of delinquency or default with respect to federal student loans).
forgiveness) if a laid-off employee refused a rehiring offer.¹⁵⁰ In other cases, it was stricter. For example, a rule required seventy-five percent of a grant amount to be used for payroll even though the statute did not require this allocation.¹⁵¹ In many other cases, it has been carefully technical, such as transposing a rule that an employee’s compensation may not exceed $100,000 annually to situations involving seasonal employment.¹⁵²

Statutory changes have generally loosened restrictions. This was particularly true of the PPP Flexibility Act enacted in June. This statute reduced the regulatory requirement that a portion of grants must be used for payroll costs, from seventy-five percent to sixty percent.¹⁵³ It also increased the timeframe for using loan proceeds, from eight weeks to twenty-four weeks.¹⁵⁴ Later, the December 2020 statute further relaxed some requirements, including by adding further allowed expenses, such as worker protection expenses like drive-through windows.¹⁵⁵ The December 2020 statute also authorized a simple one-page forgiveness process for loans of $150,000 or less.¹⁵⁶

E. Government Data Show Smaller Loans over Time

Government data about loan size show the evolution of the PPP over time. It confirms that loan size under the PPP was noticeably larger for loan approvals made during the first two weeks of the program. Then the loans got smaller, initially under the second wave from April to August 2020, and then smaller still with the third wave of disbursements made in 2021.

¹⁵⁰. Business Loan Program Temporary Changes; Paycheck Protection Program—Requirements—Loan Forgiveness, 85 Fed. Reg. 33,004, 33,007 (June 1, 2020) (to be codified at 13 C.F.R. pt. 120) (explaining why the rule disregarding refusals of reemployment offers was de minimis).
¹⁵¹. Id. at 33,007 (“[T]he Administrator notes that the 25 percent cap on nonpayroll costs will avoid excessive inclusion of nonpayroll costs.”).
¹⁵². See id.
¹⁵⁶. See id. § 307 (providing for one-page form that requires information about number of retained employees, estimated amount of loan spent on payroll, and total loan value).
Of the $247.5 billion in PPP grants reported by the SBA through April 13, 2020, $37.2 billion, or about 15% of the total, was distributed in amounts of $150,000 or less.\textsuperscript{157} In contrast, by April 13, 2020, $115.3 billion, or about 47% of the total, was comprised of loans in excess of $1 million.\textsuperscript{158} The average loan size was about $239,000.\textsuperscript{159}

In the second wave of the program, PPP loans trended smaller. Data released August 8, 2020, provide an idea of the composition of loans made during the program’s second wave. Of the $277.5 billion increase in the net dollars disbursed between April 13, 2020, and August 8, 2020,\textsuperscript{160} $110.3 billion, or about 40% of the increase, was allocated to loans of $150,000 or less, while $63.9 billion, or about 23% of the increase, was allocated to loans in excess of $1 million. Not all of the changes in net dollar amounts relate to new grants, since, for instance, some large loans were returned, which also affected the calculation of net dollars disbursed. Nevertheless, the data show that loan size decreased in the second wave as compared to the first. After the second wave disbursements, the average loan size, considering both first and second wave loans, was $101,000.\textsuperscript{163}

In the third wave of the program, PPP loans continued the trend toward smaller amounts. In 2021, about 50% of the $277.7 billion of net dollars disbursed came from loans of $150,000 or under, while about

\begin{footnotes}
\item[\textsuperscript{158}] Id. at 2, 4.
\item[\textsuperscript{159}] See id. at 4.
\item[\textsuperscript{160}] See PPP Report: Approvals Through August 2020, supra note 142, at 2 (reporting approximately $525 billion approved); PPP Report: Approvals Through 4/13/20, supra note 2, at 2 (reporting $247.5 billion approved). The difference between the two figures for total net dollars approved is $277.5 billion.
\item[\textsuperscript{161}] See PPP Report: Approvals Through August 2020, supra note 142, at 6 (reporting $62.7 billion approved for loans of $50,000 and under, $48.7 billion approved for loans of $50,000 to $100,000, and $36.1 billion approved for loans of $100,000 – $150,000, for a total of $147.5 billion); PPP Report: Approvals Through 4/13/20, supra note 157, at 4 (reporting $37.2 billion approved for loans of $150,000 and under). The difference between the two figures for loans of $150,000 or less, $147.5 billion minus $37.2 billion, is $110.3 billion.
\item[\textsuperscript{162}] See PPP Report: Approvals Through August 2020, supra note 142, at 6 (reporting $73.9 billion approved for loans of $1 million to $2 million, $72.2 billion approved for loans of $2 million to $5 million, and $33.1 billion approved for loans over $5 million, for a total of $179.2 billion); PPP Report: Approvals Through 4/13/20, supra note 157, at 6 (reporting $43.3 billion approved for loans of $1 million to $2 million, $49.3 billion approved for loans of $2 million to $5 million, and $22.8 billion approved for loans over $5 million, for a total of about $115.3 billion). The difference between the two figures, $179.2 billion and $115.3 billion, for loans in excess of $1 million is $63.9 billion.
\item[\textsuperscript{163}] PPP Report: Approvals Through August 2020, supra note 142, at 6 (reporting overall average loan size of $101,000).
\end{footnotes}
16% came from loans in excess of $1 million. The average loan size was $42,000.

In other words, at first PPP loans went out in larger amounts, and then in smaller and smaller amounts. At the start, almost half of the PPP loans were in amounts in excess of $1 million, and about 15% in amounts of $150,000 or less. By the end, these data points had flipped. About half the loan amounts in 2021 were in amounts of $150,000 or less, and 16% in amounts in excess of $1 million. Similarly, in the first wave, the average loan size was $239,000. By contrast, the average loan in the third wave was $42,000.

F. Changes in Racial Disparities over Time

The progress of the PPP over time also showed changes in the structural bias of the program, including with respect to racial disparities in the distribution of PPP funds. In the first wave of the program, businesses owned by white people were more likely to receive PPP funds. This has been attributed to a difference in existing banking relationships.

The first wave PPP racial disparities were striking. For instance, counties with all white-owned businesses received about 0.27 loans per employer, compared to about 0.15 loans per employer in counties with less than 55% white businesses. Data comparing PPP grants in majority-white versus majority-Black congressional districts also reveal first wave disparities. Also, concurrently with the first PPP funding wave, businesses owned by people of color closed at a greater rate than white-owned businesses. On the metric of racial disparities, the PPP had a poor start.

164. PPP REPORT: APPROVALS THROUGH MAY 2021, supra note 2, at 6 (reporting overall average loan size of $42,000).
165. Id. at 2, 6 (reporting 2021 net dollars approved of $277.7 billion, $139.9 billion loaned in increments of $150,000 or less, $43.6 billion loaned in increments of more than $1 million).
166. See supra note 158 and accompanying text.
167. See supra note 164 and accompanying text.
168. See supra note 159 and accompanying text.
169. See supra note 165 and accompanying text.
170. Whether the government encouraged applications based on existing relationships is a matter of dispute. See STAFF OF SELECT SUBCOMM. ON THE CORONAVIRUS CRISIS, 116th Cong., supra note 111, at 5 (comparing banks’ statements that the government instructed them to “go to their existing customer base” to Treasury and SBA denial of this report).
171. See Fairlie & Fossen, supra note 121, at 13 (showing relationship weighted by population in Figure 7).
172. Grotto et al., supra note 100.
173. See, e.g., Miser, supra note 96, at 2–3 (noting that Black-owned, Hispanic-owned, and Asian-owned businesses closed at a higher rate than white-owned businesses).
In the second wave of the program, these disparities were reduced. By June, congressional districts with non-Hispanic white majorities, which contain 77% of the total small business owners, had received 78% of loans (down from 83% in early April).\(^\text{174}\) One study shows that in July, there were about 0.26 loans per employer establishment in counties with no minority-owned businesses and about 0.46 loans per employer establishment in counties with more than 45% minority-owned businesses.\(^\text{175}\) This reverses the order of the data from the first half of April.\(^\text{176}\)

The data show lasting racial disparity for the PPP as a whole.\(^\text{177}\) One study, based on ZIP code level-data and holding constant PPP eligibility levels, concludes that a 10% increase in Black population correlates with a 1.3% decrease in uptake of PPP loans.\(^\text{178}\) Another study notes that, overall (and controlling for number of employees though not size of payroll) Black business owners secured PPP loans that were 14–16% smaller than the benchmark of borrowers who did not disclose their race.\(^\text{179}\) It would not be right to claim that the PPP shed its structural bias. But data do suggest that the racial disparities decreased over time. There are several candidates for the mechanism for this change.

One possibility is that the passage of time alone helped to alleviate the initial bias, because it took time for businesspeople of color to learn about the program.\(^\text{180}\) Another possibility is that regulatory program

\(^{174}\) Id.
\(^{175}\) Fairlie & Fossen, supra note 101, at 13.
\(^{176}\) Id. at 12 (showing relationship weighted by population in Figure 6).
\(^{177}\) Other smaller studies are also revealing. In one, sixty-three matched pairs of borrowers visited bank branches to apply for PPP loans from April 27 – May 29, 2020. ANNELEISE LEDERER & SARA OROS, NAT’L CMTY. REINVESTMENT COAL., LENDING DISCRIMINATION WITHIN THE PAYCHECK PROTECTION PROGRAM 4 (2020), https://www.ncrc.org/lending-discrimination-within-the-paycheck-protection-program/ [https://perma.cc/5VSX-NXS4]. The study reports that in forty-three percent of cases, white testers received more favorable treatment. See id. at 14 (showing differences in PPP information provided by banks based on race and gender of applicants).
\(^{178}\) Wang & Zhang, supra note 69, at 10 (finding that ZIP codes with a 10% higher proportion of Black population have a 1.3% lower take-up rate of PPP loans).
\(^{179}\) See Atkins et al., supra note 102, at 15, 20 (using dependent variable of natural log of loan amount and controlling for variables including number of employees, though not for amount of payroll).
\(^{180}\) Businesspeople of color are more likely to own smaller businesses. See Sifan Liu & Joseph Parilla, Businesses Owned by Women and Minorities Have Grown. Will COVID-19 Undo That?, BROOKINGS INST. (Apr. 14, 2020), https://www.brookings.edu/research/businesses-owned-by-women-and-minorities-have-grown-will-covid-19-undo-that/ [https://perma.cc/2PD5-LXXK] (providing data about number of employees and revenues). Small businesses in turn were more likely to take more time to learn about the PPP. See Humphries et al., supra note 95, at 3 (reporting
changes helped to alleviate racial disparities. For instance, about a month into the program, community financial institutions and online fintech lenders were authorized as lenders. Online fintech lenders extended loans disproportionately to businesses owned by people of color. Although it is hard to say whether expanding lenders to include fintech was prompted by information about racial disparities or caused the reduction in racial disparities as the PPP progressed, it is clear that fintech lender involvement increased and racial disparities decreased in the later stages of the program. Both trends are consistent with the idea of a program with a learning curve.

III. THE PPP AS AN EMERGENCY FUND PARADIGM

A. Incomplete Instructions

When the PPP arrived at the doorstep of Treasury and the SBA, it came with the problem of how to allocate limited funds. So long as the applications from eligible applicants exceeded $349 billion—which they quickly did—the program required priorities. Congress did not include clear instructions on how to solve this allocation problem. At the same time, the program anticipated that funding would begin immediately. This meant initially proceeding in the absence of information about who would apply for the program and in what amounts.

As others have observed, legislatures are likely to produce underspecified emergency fund statutes that allow administrators to work out the details of allocation. This suggests that emergency fund

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183. See Posner & Vermeule, supra note 6, at 1614. The authors studied U.S. crisis governance in context of the 9/11 attacks and in context of the 2008 global financial crisis and found that “[i]n the modern administrative state, it is practically inevitable that legislators, judges and the public will entrust the executive branch with sweeping power to manage serious crises of this sort.” Id. Administrators exercise power both by implementing salient statutes like the PPP law and by more
law will often be left to agencies or to private actors to produce the law in its practical, on-the-ground translation. The PPP experience emphasizes that private actors determine the allocation of funds if administrators do not do so.

This Article assumes that fund administrators have an important role to play in distributing emergency funds. Parts IV and V outline back-end-adjustment and descending-order-of-necessity distribution tactics suggested by the experience of the PPP. These are offered as tools that might help fund administrators advance the policy goals of the emergency fund.

When fund administrators are administrative agencies, their administrative tools are most useful if administrators are charged with pursuing an earnest, although underspecified, legislative policy goal. In other words, the tools assume a statute's vague emergency fund instructions mean to pursue the goal of alleviating the emergency, even though legislators are reluctant to provide detailed distribution instructions for the fund. This Section III.A gives some reasons why this assumption of earnest policymaking is likely to be correct, even though the statute's instructions are incomplete.

One reason for incomplete instructions is that legislators may agree that an emergency needs to be addressed, but they have not reached a consensus about the right approach to distribution. Perhaps specific policy preferences are contingent upon future developments unknown at the moment of enactment. Or perhaps a vague statute papers over disagreements with the intention that agencies will resolve them. Even if legislators are somewhat more self-interested, rather than simply uncertain, they still may intend for the agency to make a good-faith attempt to sensibly distribute funds. For instance, legislators may wish to avoid direct responsibility for the inevitably unpopular decisions about distribution. They may want a careful distribution process, but prefer to avoid blame for those who object to it. Legislators pass the buck to the agency, so that the agency draws any criticism.

184. See Posner & Vermeule, supra note 6, at 1644 (“[E]x ante legal rules cannot regulate crises in advance, because unanticipated events will invariably arise”).

185. See William Eskridge, Vetoes and American Public Law, 31 I.L. ECON. & ORG. 756, 767–68 (2012) (explaining how the U.S. pluralist legislative process and features such as committee and floor procedures provide opportunities to smooth over differences with vague language and leave “agencies, not legislators, [to] make controversial decisions”).

186. See, e.g., DAVID EPSTEIN & SHARYN O’HALLORAN, DELEGATING POWERS 9 (1999) (“Legislators will prefer to make policy themselves as long as the political benefits they derive from doing so outweigh the political costs; otherwise, they will delegate to the executive.”).

187. Morris P. Fiorina, Congressional Control of the Bureaucracy: A Mismatch of Incentives and Capabilities, in CONGRESS RECONSIDERED 332, 343 (Lawrence Dodd & Bruce Oppenheimer eds., 2d
Or, legislators may hope that the agency’s opaque and expert decision-making will be accepted in the same way that the public often accepts the opaque decisions reached by a jury. Both of these ideas are consistent with the idea that an agency should do its best to distribute emergency funds consistent with a good-faith effort to discern the objective of the statute.

So long as the agency is expected to pursue a good-faith distribution policy consistent with the apparent intent of a statute, the arguments of this Article have clear relevance. But perhaps legislatures expect agencies to deviate from the stated public policy objectives of a statute. Perhaps the legislature intentionally sets up an administrative process that favors certain actors to ensure administrative results that will favor those actors. The legislature need not specify the desired result, because the favored interests will assume the responsibility of ensuring that the administrative result advances their cause. Also, legislators may publicly support some other public policy not in line with favored interests’ preferences.

Under this theory, legislation can have a dual purpose. One purpose allows legislators to claim the satisfaction of goals with popular appeal. The other purpose anticipates that administrators will interpret the legislation in a way that favors the special interests that legislators also wish to please.

This dual-purpose idea suggests that legislators may publicly support the general public interest, but privately, through the mechanism of administrative procedure, favor private interests. The dual-purpose idea can apply when administrative process blocks the implementation of a long, complicated, and self-contradictory statute. That is, even if a statute’s headline appears to pursue one goal, its underlying provisions may be so convoluted that administrative agencies will be slow to implement them—thus producing a lack of

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188. See GUIDO CALABRESI & PHILIP BOBBITT, TRAGIC CHOICES 19, 57–67 (1978) (distinguishing between first-order decisions about how much resource to provide and second-order decisions about how to allocate the resource and explaining the tactic of delegating allocation to agencies or experts as analogous to the acceptance of jury decisions in American law).

189. See Mathew D. McCubbins, Roger G. Noll & Barry R. Weingast, Administrative Procedures as Instruments of Political Control, 3 J.L. ECON. & ORG. 243, 254 (1987) (articulating theory that legislatures can determine the control of administrative results by setting administrative process).

190. See id. at 244 (“[P]rocedural controls . . . enable political leaders to assure compliance without specifying, or even necessarily knowing, what substantive outcome is most in their interest.”).
regulation that satisfies a different, even opposite, goal as compared to the stated aim of the legislation.191

This dual-purpose idea could also be relevant in the emergency fund PPP case, when the statute is brief and vague. For example, perhaps Congress anticipated that Treasury and the SBA would choose a path that benefited private interests, such as the interests of the intermediary banks and the banks’ preferred clients. Maybe Congress meant for agencies to follow the interests of the banks, avoid regulation, and use a first-come, first-served approach. The government’s initial refusal to make the hardship certification a meaningful prerequisite allowed banks to act to benefit their favored clients, without the interference of government priorities.192 Perhaps Congress intended both to appear to support the smallest businesses and actually to accomplish, through the inaction of Treasury and the SBA, the different goal of directing funds to banks and their preferred clients.

The dual-purpose theory may have purchase generally as an explanation of some relationships between Congress and administrative agencies, although some work indicates that agencies can and do resist political control.193 But even if Congress sometimes successfully pursues dual purposes, this approach is less relevant in emergencies. The reason is that legislators achieve their goals under the dual-purpose theory through deception. For the dual-purpose scheme to work, not only must agency actions accomplish something different than what the statute is said to stand for, but also the public must not notice that the administrative result diverges from the stated purpose of the statute. If the public notices that the statute says one thing and does another, then the scheme will backfire.

Emergencies are salient to the public. This makes a difference for the dual-purpose scheme, because the public is likely to be aware of how the agency implements the statute. If the public knows what the administrative answer is, then it can tell that the administrative answer differs from the statutory promise. This foils the deception at the heart of the dual-purpose idea. The PPP illustrates this through the “Shake

191. See Wagner, supra note 122, at 231–32 (“[A] clever [legislative leader] can take this public choice strategy further by tossing in a handful of favorable substantive provisions to appease the thinly financed opposition. As long as the law is replete with contradictions and unresolved complexities, it will likely face a long and tortured path during implementation, and the bones thrown to the opposition will not materialize in practice.”).

192. See supra notes 88–92 and accompanying text.

193. See David B. Spence, Managing Delegation Ex Ante: Using Law to Steer Administrative Agencies, 28 J. LEG. STUD. 413, 445 (1999). The article presents an empirical study of decisions at the Federal Energy Regulatory Commission and concludes that procedural political control “leave[s] substantive discretion unaffected, and . . . agencies have a multitude of ways to evade procedures or to interpret them in ways that minimize their substantive impact.” Id.
Shacked” phase of the PPP’s story, covered in Section II.B of this Article, in which media articles sharply criticized large and/or public firms that received PPP funds. Data points from other emergencies tend to confirm that the public pays attention to agency distribution decisions in emergency fund settings, even if not in other circumstances.

Even if statutory vagueness might sometimes facilitate an intended divergence between stated statutory purpose and administrative effect, this dual-purpose deception is unlikely to succeed in an emergency fund setting. It is also possible that both legislators and administrators have a good-faith purpose and intend to pursue earnest, although underspecified, legislative policy goals. In that case, the lessons in this Article are an especially good fit, since they are designed to help administrators focused on solving the policy problem of the tradeoff between accuracy and speed in emergency fund distribution.

B. Enforcement Discretion

There is an active scholarly debate about whether administrative agencies, like Treasury and the SBA, should be allowed to specify the law when the legislature writes an underspecified statute, including in an emergency. One example offered is that of the 2008 Troubled Asset Relief Program (TARP). Its statutory language allowed the Secretary “to purchase . . . troubled assets from any financial institution.” In the legislative process, the Treasury presented the program as one that would purchase troubled assets, such as loans from banks. But after the passage of the statute, Treasury instead followed


195. Compare, e.g., Abbe R. Gluck, Anne Joseph O’Connell & Rosa Po, Unorthodox Lawmaking, Unorthodox Rulemaking, 115 COLUM. L. REV. 1789, 1842 (2015) (“[U]nortodox policymaking may indeed advance . . . the legitimacy of government getting its work done.”), and Posner & Vermeule, supra note 6, at 1640–41 (arguing, based on the work of Carl Schmitt, that legislatures act too slowly to respond directly to a crisis, and that delegation of frontline emergency decisions to administrators is inevitable), with Josh Blackman, Gridlock, 130 HARV. L. REV. 241, 270 (2016) (arguing that Congressional silence with respect to details of contraceptive mandate under the Affordable Care Act evidences a divided legislature and “demonstrates that Congress did not intend for the agencies to exercise the ‘awesome power’ of ‘burden[ing] free exercise’”), and Michael S. Greve & Ashley C. Parrish, Administrative Law Without Congress, 22 GEORGE MASON L. REV. 501, 504 (2015) (“Beyond ad-hoc judicial interventions, no serious doctrine exists that is commensurate to the potential for effectively unchecked executive government.”).


197. See Davidoff & Zaring, supra note 194, at 526 (describing legislative approval of purchase of illiquid troubled assets from banks).
emerging global best practices for intervention and purchased equity in troubled financial firms.\textsuperscript{198}

Another example offered is that of the Affordable Care Act. Its statutory language allowed tax credits when taxpayers enrolled “through an Exchange established by the State.”\textsuperscript{199} Other statutory provisions explained that if a state did not create an exchange, a federally established exchange would serve in its stead.\textsuperscript{200} Many states did not create exchanges, and many taxpayers enrolled through an exchange established instead by the federal government.\textsuperscript{201} Treasury wrote guidance that allowed tax credits anyway.\textsuperscript{202} The Supreme Court declined to defer to Treasury’s administrative interpretation but arrived at the same answer through an independent analysis of the statute based on a “major question” exception to \textit{Chevron}.\textsuperscript{203}

One lesson of the TARP and the Affordable Care Act is that the authorizing statutory language shapes an agency’s discretion. Different contexts or statutory language would offer different scopes of discretion. Here, the terms of discretion under the PPP illustrate the kind of leeway that an emergency fund administrator might have.

The PPP was clear on some things. Borrowers (grantees) would apply for funds. They would have to meet the employee-threshold requirements. They would have to provide calculations, for example, based on their monthly payroll figures, to apply for a grant. They would have to apply through a financial intermediary.

But the PPP was unclear on other points. Most importantly, it required applicants to make the hardship certification “that the uncertainty of current economic conditions makes necessary the loan request to support the ongoing operations of the eligible recipient.”\textsuperscript{204} But the statute did not define terms like “current economic conditions,” “necessary,” and “ongoing operations.” The lack of clarity about the

\begin{itemize}
\item \textsuperscript{198} See id. at 525–29 (explaining shift to equity purchases); Posner & Vermeule, supra note 6, at 1632–33 (“Critics . . . argue that . . . Treasury’s . . . decisions—to use TARP funds to buy equity rather than toxic mortgage-related assets, and to use TARP funds to bail out automakers—show that the [statute] wrote the executive a blank check. What those decisions really show, however, is just that Treasury’s authority is broad . . . .”).
\item \textsuperscript{199} I.R.C. § 36B(b)(2)(A).
\item \textsuperscript{200} 42 U.S.C. § 18041(c)(1).
\item \textsuperscript{201} King v. Burwell, 576 U.S. 473, 483 (2015).
\item \textsuperscript{202} 26 C.F.R. § 1.36B-2 (2020); 45 C.F.R. § 155.20 (2019) (including Exchanges “regardless of whether the Exchange is established and operated by a State . . . or by HHS.”).
\item \textsuperscript{203} See King v. Burwell, 576 U.S. at 485–86, 492–98 (2015) (holding that the Court would independently interpret the statute, that the statutory language was ambiguous, and that the statutory scheme directed that federal-established exchanges should be included within it); see also Gillian Metzger, Agencies, Polarization and the State, 115 COLUM. L. REV. 1739, 1779 (2015) (“\textit{King} may signal that the Court is positioning itself as a check against agency efforts to transform statutory schemes in contexts where partisan legislative dysfunction prevents congressional response.”).
\item \textsuperscript{204} 15 U.S.C. § 636(a)(G)(i)(I).
\end{itemize}
meaning of these terms was the main source of Treasury and SBA discretion.

Dictionary definitions help illustrate the ambiguity of the hardship certification. Consider for instance the word “necessary.” One definition is, “absolutely needed,” while another is, “logically unavoidable.” A firm might argue that layoffs were “logically unavoidable” without PPP funding because the firm would in fact choose layoffs absent PPP funding. The government might respond that “necessary” for purposes of the hardship certification does not mean “logically unavoidable,” but rather means “absolutely needed.” Under the “absolutely needed” definition, a PPP loan would not be necessary if the firm had access to other funds elsewhere—even if the specifics of the no credit elsewhere prerequisite usually applicable to SBA loans did not apply.

One structural reason why the hardship certification gave discretion to Treasury and the SBA stems from enforcement. Consider the contrary, no-enforcement-discretion argument. This interpretation is premised on the claim that the PPP statute mandated Treasury and the SBA to make grants to anyone who submitted a hardship certification.

This no-enforcement-discretion argument fails because Treasury and the SBA bear the responsibility of rejecting incorrect hardship certifications. The statute gives administrators this responsibility. Under the PPP statute, loan forgiveness is contingent on providing “true and correct” documentation, and the SBA is directed to issue implementing “guidance and regulations.” The statute further states that the usual SBA “terms, conditions and processes” generally apply. These make clear that the agencies may terminate loan guarantees for noncompliance with the program. Regulations specific to the PPP statute also state that the “SBA may review any PPP loan” and outline the procedure for such a review. All of these elements show that Treasury and the SBA have enforcement discretion.

206. See supra note 32 (describing the no-credit-elsewhere provision).
207. 15 U.S.C. § 636m(e) (requiring “true and correct” documentation); § 636m(f) (prohibiting forgiveness without documentation); § 636m(k) (providing for SBA “guidance and regulations implementing this section” within 30 days of enactment).
208. § 636(a)(36)(B).
209. See, e.g., 13 C.F.R. § 120.524 (“SBA is released from liability on a loan guarantee (in whole or in part, within SBA’s exclusive discretion), if . . . .: [t]he Lender has failed to comply materially with any Loan Program Requirement . . . .”).
The limits of Treasury and the SBA’s discretion are illustrated by the agencies’ initial decision to bring traditional SBA eligibility restrictions over to PPP regulation. Although these regulations were exercises of rulemaking or guidance discretion rather than enforcement discretion, they illustrate the outside limits of the agencies’ capacity to interpret the statute. Ineligible applicants under these regulations included firms “engaged in any illegal activity,” businesses “of a prurient sexual nature,” firms disqualified because of their owners’ criminal histories, firms that have previously defaulted on a federal loan, gambling businesses, and lobbying firms. The PPP’s statutory language did not exclude such businesses. But Treasury and the SBA issued guidance that did. Initially, the SBA prohibited these businesses from accessing the PPP, simply by importing the rules usually used for granting ordinary-course SBA loans.

Adversely affected businesses challenged these prohibitions as applied to the PPP, often on administrative law grounds. In some cases, plaintiffs persuaded courts that Treasury and the SBA’s interpretation exceeded the administrators’ authority, because the PPP statute extended benefits to “any business concern” without similar limitations. Several courts held that categorical prohibitions were

212. 13 C.F.R. § 120.110 (listing businesses ineligible for SBA business loans).
For bankrupt firms, at least two courts have held that the statute allows an interpretation that denies eligibility. Diocese of Rochester v. U.S. Small Bus. Admin., 466 F. Supp. 3d 363, 378 (W.D.N.Y. 2020) (citing Chevron, 467 U.S. 837) (explaining that it considered whether the SBA’s regulation was arbitrary and capricious under step two of the analysis determining deference to regulations); Tradeways, Ltd. v. U.S Dep’t of Treasury, No. ELH-20-1324, 2020 WL 3447767, at *15 (D. Md. June 24, 2020) (concluding that the statute allowed the exclusion of bankrupt firms). At least one court has concluded that such an interpretation is arbitrary and capricious. Alaska Urological Inst., P.C. v. U.S Small Bus. Admin., 619 B.R. 689, 707–08 (D. Alaska 2020) (holding on summary judgment that bankruptcy exclusion was arbitrary and capricious).
arbitrary and capricious interpretations of the PPP statute and thus invalid. But the results were mixed; other courts interpreted the agencies’ discretion more broadly and denied plaintiffs’ requests for injunctive relief.

Yet although Treasury and the SBA might be barred from categorically denying PPP funding to certain kinds of businesses, the agencies were at the same time expected to block PPP funding in the case of false applications. In between these two extremes lies considerable discretion, supported largely by the hardship certification. One way in which Treasury and the SBA exercised this discretion was their decision to discourage application by public firms and for loans over $2 million. This reflected an interpretation that loans of larger amounts or for public firms were less necessary or, in other words, more likely to involve an incorrect hardship certification.

Treasury and the SBA had latitude to design their guidance to provide their decisions with maximum protection against the risk of challenge under administrative law. Imagine that Treasury and the SBA wanted to discourage applications from residential real estate brokers, on the grounds that this sector was thriving in the pandemic economy. The agency might consider two possible design strategies. One strategy is an outright prohibition on applications from residential real estate brokers. The other strategy is a statement that Treasury and the SBA will audit the hardship exemptions of residential real estate brokers. The other strategy is a statement that Treasury and the SBA will audit the hardship exemptions of residential real estate brokers.

The first strategy, an outright prohibition, would be more vulnerable to administrative challenge. The broker—like the adult entertainment businesses and firms in bankruptcy that objected to rules prohibiting their applications—could claim that the outright prohibition was an arbitrary and capricious exercise of agency discretion. Perhaps the agencies could provide a good explanation of their exclusion of real estate brokers from the program, and its guidance might survive arbitrary and capricious review. The point, though, is that it is straightforward to bring the challenge in the first place.

In the gambling sector, a challenge to the exclusion of Native American tribes’ casinos from the benefits of the PPP relied on an administrative law and statutory interpretation argument. Verified Complaint for Declaratory and Injunctive Relief, Flandreau Santee Sioux Tribe v. Carranza, No. 20-cv-04070 (D. S.D. Apr. 23, 2020). Soon after the complaint was filed, SBA guidance was changed to allow such businesses to apply. See Business Loan Temporary Changes; Paycheck Protection Program—Requirements—Promissory Notes, Authorizations, Affiliation and Eligibility, 85 Fed. Reg. 23,450, 23,451 (Apr. 28, 2020) (to be codified at 13 C.F.R. pts. 120–21).

214. 5 U.S.C. § 706(2)(A); see, e.g., State Farm, 463 U.S. at 57 (holding that the revision of a regulation was invalid because of the absence of sufficient reasoned explanation).


The second strategy, an enforcement-discretion statement that Treasury and the SBA would audit real estate broker hardship exemptions, would be harder for a real estate broker to challenge. Agency actions falling under the heading of enforcement discretion receive additional deference. If the audit policy discouraged a real estate broker from applying for the PPP, there would be no adverse application result to litigate. If the broker applied for the PPP and was denied, the terms of the litigation would likely focus on the facts of the particular case rather than consider the overall validity of the enforcement policy.

This real estate broker example shows the advantage for the agency of using an enforcement policy rather than an outright prohibition to prioritize the distribution of PPP emergency funds. When Treasury and the SBA decided to prioritize loans of $2 million or less to privately held companies, the agencies did not expressly prohibit larger or public grants. Instead, they used enforcement “safe harbors” and “sure shipwreck” threats of enforcement to discourage larger grants and grants to publicly traded firms. These provisions were not explicit prohibitions, but they advanced the intended goal nevertheless. As the data show, they produced sharp drop-offs in PPP applications from larger and public firms. These safe harbors and sure shipwrecks grounded in enforcement discretion further illustrate the agencies’ capacity to exercise their enforcement discretion to express an interpretation of the hardship certification.

217. See Heckler v. Chaney, 470 U.S. 821, 837 (1985) (stating presumption of unreviewability for “agency decisions not to institute proceedings”). The Chaney decision noted that the case did not involve an express agency policy “that is so extreme as to amount to an abdication of its responsibilities.” Id. at 833 n.4. Courts generally apply Chaney to deny review of nonenforcement decisions. See KRISTIN E. HICKMAN & RICHARD J. PIERCE, JR., ADMINISTRATIVE LAW TREATISE § 19:7 (6th ed. 2020). But see Casa De Md. v. U.S. Dep’t of Homeland Sec., 924 F.3d 684, 698–701 (4th Cir. 2019) (reviewing decision to rescind DACA) (“[A]n agency’s expression of a broad or general enforcement policy based on the agency’s legal interpretation is subject to review.”), cert. denied sub nom., Dep’t of Homeland Sec. v. Casa de Md., 141 S. Ct. 156 (2020).

218. See, e.g., Nat’l Wrestling Coaches Ass’n v. Dep’t of Educ., 366 F.3d 910, 918 (D.C. Cir. 2004) (refusing standing on grounds that Title IX proportionality safe harbor did not require colleges to change the gender balance of their athletes, for instance by cutting men’s teams); Renal Physicians Ass’n v. U.S. Dept of Health & Hum. Servs., 489 F.3d 1267, 1276–77 (D.C. Cir. 2007) (denying standing because of missing causal connection between regulatory safe harbor under Stark Act and dialysis center compensation reduction). But see U.S. Army Corps of Eng’rs v. Hawkes Co., 578 U.S. 590, 599–601 (2016) (concluding that the EPA took a final, reviewable action when it refused to grant a negative jurisdictional determination that would have resulted in a five-year safe harbor from civil enforcement proceedings).

219. See supra Section II.C (explaining data showing effect of safe harbor).
C. Interpretive Range for the Hardship Certification

In exercising their enforcement discretion, Treasury and the SBA might have considered various meanings of the text of the hardship certification “that the uncertainty of current economic conditions makes necessary the loan request to support the ongoing operations of the eligible recipient.”\textsuperscript{220} Language such as “uncertainty of current economic conditions,” “necessary . . . to support,” and “ongoing operations” might support different interpretations.\textsuperscript{221} These different meanings in turn suggest different views of what an optimal allocation of PPP funds would have been. “Necessary” might mean most likely to help specific economic sectors, most likely to be the deciding factor in a firm’s survival, most likely to preserve jobs, or smallest application size.

The first view is sector-specific. It might emphasize “the uncertainty of current economic conditions” as a prerequisite. This could suggest that particularly hard-hit sectors, such as the restaurant and performance businesses, should have priority.\textsuperscript{222}

A second view is that necessary should have been interpreted to mean, in effect, “necessary and sufficient.” This idea is that targeted firms had an intermediate character. The ideal PPP recipient was strong enough to survive with PPP funds, but weak enough that the firm would fail without PPP help.\textsuperscript{223} This could suggest that firms that demonstrated greater revenue loss at the moment of the pandemic should be more eligible to receive funds.


\textsuperscript{221} Dictionary definitions do not help much in resolving ambiguity in the hardship certification. Consider the dictionary definition of the word “necessary.” One option is, “absolutely needed.” Another is, “logically unavoidable.” \textit{MERRIAM-WEBSTER}, supra note 205. A firm might find layoffs “logically unavoidable” without PPP funding (i.e., because the firm would in fact choose layoffs absent PPP funding) without concluding that PPP funding was “absolutely needed” to avoid them (i.e., because it would be possible, if the firm so chose, to raise funds elsewhere).


\textsuperscript{223} Cf. Gustavo Joaquim & Felipe Netto, Bank Incentives and the Impact of the Paycheck Protection Program 3 (Oct. 2, 2020) (unpublished paper), \url{https://ssrn.com/abstract=3704518} (presenting a model developed to identify the optimal allocation of PPP funds, assuming that the goal is to save the most jobs and showing that, if the emergency fund is limited, funds should go to those “intermediately affected by the pandemic”).
A third view focuses on job preservation. It might emphasize the language “to support the ongoing operations of the eligible recipient.” If interpreted with the purpose of preserving jobs in mind, the words “ongoing operations” might be understood to mean that PPP funds should be directed to support a firm’s “continued employment at pre-pandemic levels.”

A fourth view relates to loan size. This idea is that smaller loans were more necessary because they helped smaller businesses. The statute did not link greater necessity to smaller business size explicitly, but it could follow from the empirical observation that smaller businesses are less likely to have cash on hand and access to private financing. Larger businesses may have more diverse collateral to offer to secure loans, and banks earn larger fees on larger loans without a proportionately greater increase in banker time and other resources. In 2020, smaller businesses also had less access to other forms of emergency government financing, such as Federal Reserve programs that anticipated buying issued corporate bonds.

D. First-Come, First-Served

Treasury and the SBA’s initial response to the PPP statute was, as their posted guidance stated, “first-come, first-served.” As explained supra, the statute did not require this approach—Treasury’s enforcement discretion, which allowed it to reject incorrect hardship applications, gave it the ability to prioritize applications based on some concept of necessity or hardship, rather than adopting a first-come, first-served policy. It was an administrative choice to leave the allocation of funds to private actors. Why did Treasury make that choice?

224. There is mixed evidence on the question of whether the PPP saved jobs. See, e.g., Bartik et al., supra note 5, at 23–24 (finding an average effect of increased jobs for PPP recipients); Chetty et al., supra note 222, at 4–5 (arguing that PPP loans had “modest marginal impacts on employment” because funds “went to inframarginal firms”). Meanwhile, there is some evidence that one key PPP result was replacement of funds rather than provision of funds that could not be found elsewhere. Chodorow-Reich et al., supra note 91, at 2 (finding that PPP loans reduced non-PPP borrowing by between 53% and 125%).

225. The statutory text, which features a 500-employee limit, diverges from both intuitive understandings of “small business” and previous legal definitions such as the SBA’s table of size standards based on revenue, number of employees, and industry code. See supra notes 28–30 (discussing employee size limit).

226. See Parilla et al., supra note 93 (“[W]e know that the smallest firms are the least liquid.”).

227. See Menand, supra note 36, at 315–21 (describing ad hoc credit facilities).

One reason is that a first-come, first-served approach was fast—it would get cash out quickly, no matter to whom. The CARES Act came at a moment of abruptly soaring unemployment, stock market volatility, and other indications of economic instability.229 It was one of a number of measures with a policy goal of liquidity. When pushing cash into the economy is the overriding goal, larger loans have an advantage.230

A second reason is that a first-come, first-served approach follows an established and familiar allocation approach. First-come, first-served is similar to allocating resources via queue. Queueing seems egalitarian in that its place-in-line criterion does not explicitly follow from characteristics like wealth or connections. Rather, queueing gives resources to those who arrive first, in a manner similar to the classic property rules of occupancy and capture.231

First-come, first-served may suggest an inherently fair result, because the agency does not directly pick winners and losers. Instead, benefits are allocated according to a line of applications established by forces located outside the agency.232 The idea is that any applicant who could make a colorable hardship certification met a criterion of “absolute worthiness,”233 and by staying out of the exercise of favoring one candidate over another, the agency remained neutral and fair.

The problem, of course, is that in the case of the PPP, the ordering of the line was not random. As the empirical evidence shows, the best-resourced applicants got the best places in line. Connections, after all,


231. Young, supra note 12, at 75; see also Ronen Perry & Tal Z. Zarsky, Queues in Law, 99 IOWA L. REV. 1595, 1603–07, 1621 (2014) (noting that queues are generally thought of as fair and questioning their efficiency).

232. See CALABRESI & BOBBITT, supra note 188, at 43 (analyzing the “first-come, first-served method”).

233. See id. at 63.
did matter. The data is especially stark when it comes to racial disparities in the first wave of the program.

If, as initially expected, the PPP fund had been limited to the first-wave allocation of $349 billion (the amount initially authorized in the CARES Act), the story might have ended with these biased data points. Instead, Congress increased the allocation, resulting in almost $800 billion in grants. As it turned out, the PPP was not a finite emergency fund, and its first-order constraint dissipated. Still, its administrative experiments provide lessons that could be used by other emergency funds, including those with a true first-order limit.

E. A Learning Curve

When more money was appropriated for PPP loans, the program’s second wave did not keep the doors open to every applicant who arguably qualified under the statute. Instead, the government iterated its approach to the PPP through three waves of the program. The first wave involved little regulation. The second wave featured regulations that sorted applications, at least roughly, by size, as some applicants—such as public firms and those who asked for more than $2 million—were disfavored in the second wave of the program. The third wave continued the size regulations of the second wave and added revenue-loss requirements, and priorities for certain business sectors as well as for applicants with fewer than twenty employees. The PPP story shows that learning or information gathering in one stage can influence the distribution choices made at later stages.

This demonstrates that at least some emergency fund projects can include an administrative learning curve. Information gathered early in the program can be used to make changes later in the program. The administrator can anticipate making changes later in the program, perhaps to correct initial fund distribution mistakes. Another design approach is to gather information early in the program and to use this information to update program distribution rules going forward.

The PPP imparts two interesting regulatory design lessons for emergency fund administration. Both are aimed at gathering information and making adjustments. In other words, both anticipate a

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234. See supra Section II.A (explaining importance of connections in first wave of PPP).
235. See supra Section II.F (explaining racial disparity data).
236. See sources cited, supra note 16 (detailing initial enactment of CARES Act).
237. See PPP REPORT: APPROVALS THROUGH MAY 2021, supra note 2 (reporting total grants under the PPP).
238. See supra Section II.A (explaining the first wave of the PPP).
239. See supra Section II.C (explaining the second wave of the PPP).
240. See supra Section II.D (explaining the third wave of the PPP).
learning curve. One design possibility involves back-end guidance. This is discussed in Part IV. The other design possibility involves first prioritizing bids that more clearly meet the program’s requirements, and later moving on to lower priority applications that do not as clearly advance the program’s goals. This idea—distributing in descending order of necessity—is discussed in Part V.

IV. BACK-END GUIDANCE

A. The PPP’s Back-End Adjustments

Back-end adjustments provide one method for managing the emergency-fund tradeoff between accuracy and speed. A back-end adjustment is a later modification to the original terms of a program.241 Typical examples include deadline extensions, exceptions, and variances.242 In an emergency fund program like the PPP, a back-end adjustment means that first funds are distributed, and later it is decided whether a recipient must return funds.

The forgivable-loan structure of the PPP offered at least two points at which decisions could be made about the structure of the loan. The first point related to the terms of borrowing and the later point related to the terms of forgiveness. Both were amended in back-end adjustment fashion.

The terms of borrowing were changed most prominently by the PPP guidance that discouraged applications of more than $2 million or by publicly traded companies.243 In particular, the audit threat announced in April 2020 for public companies was a back-end adjustment with a retroactive effect.244 It caused 110 public firms to return about $600 million.245 This was a change that tightened PPP guidance and made terms stricter after the start of the program.

A more typical back-end adjustment loosens requirements, making terms more lenient after the start of the program. Variances and deadline extensions fall into this category; that is, they relax requirements.246 The idea is that a law may choose, for example, strict

241. Glicksman & Shapiro, supra note 7, at 1179.
242. See id. at 1187.
243. See PPP: FREQUENTLY ASKED QUESTIONS, supra note 86; supra text accompanying note 130 (setting forth April 2020 guidance regarding public companies).
244. See supra notes 134–35 and accompanying text (explaining “sure shipwreck” effect of April 2020 guidance).
245. See Cororaton & Rosen, supra note 107, at 10, 11 tbl.1 (finding that 15.5% of public company borrowers returned funds and that the total loan amount to public firms was $2.2 billion gross and $1.6 billion net of returns).
246. See Glicksman & Shapiro, supra note 7, at 1187.
time limits and other requirements, but also include a process through which the agency can adjust these on a case-by-case basis.

The PPP also featured back-end adjustments that relaxed its terms. For example, the Flexibility Act enacted in June 2020 increased the timeframe for using loan proceeds from eight weeks to twenty-four weeks.\(^{247}\) This Act allowed employers to disregard reductions in employment if the reductions were due to compliance with public health regulations.\(^{248}\) It also decreased the proportion of funds that had to be spent on payroll from seventy-five percent to sixty percent.\(^{249}\) Later, the December 2020 statute added allowed expenses, such as worker protection expenses, and provided a simpler process for forgiving loans of $150,000 or less.\(^{250}\) Each of these adjustments loosened the forgiveness terms of the PPP.

There is a theory that explains several desirable components of back-end regulatory adjustments. First, back-end adjustments are appropriate when front-end regulation is likely to produce imperfect policy because of uncertainty or lack of information.\(^{251}\) Second, an initially stricter policy best supports later back-end adjustments.\(^{252}\) In other words, relaxing a policy is easier than increasing its strictness. Third, a transparent process should be used to provide back-end adjustments, to guard against the risk of capture.\(^{253}\)

One lesson from the PPP is that if an emergency fund program starts with initially stricter terms, it can anticipate back-end adjustments that might relax those terms. But another, contrasting lesson is that it is also possible to tighten, rather than loosen, terms over the course of a program. Recipients are more likely to object to changes that make a policy stricter, but some such changes can be made in a way that respects the rule of law and the rights of recipients.


\(^{249}\) Paycheck Protection Program Flexibility Act § 3 (requiring usage of sixty percent of loan amount for payroll costs).

\(^{250}\) Economic Aid to Hard-Hit Small Businesses, Nonprofits and Venues Act § 307 (providing for one-page form that requires information about number of retained employees, estimated amount of loan spent on payroll, and total loan value).

\(^{251}\) See Glicksman & Shapiro, supra note 7, at 1183–84 (citing limitations on ex ante cost-benefit analysis). See generally Sidney A. Shapiro & Robert L. Glicksman, Risk Regulation at Risk: Restoring a Pragmatic Approach 72–120 (2003) (criticizing the false precision and incomplete welfare analysis of front-end regulatory requirements such as cost-benefit analysis).

\(^{252}\) See Glicksman & Shapiro, supra note 7, at 1187 (noting “deadline extensions and waivers, variances, and exceptions” as examples of back-end adjustments).

\(^{253}\) See id. at 1247 (recommending transparent adjustment procedures to allow public monitoring of agency decisions).
Congress could anticipate back-end adjustments in an emergency fund statute. For instance, Congress could have authorized a loan program that was funded with a net figure. Instead of allocating $349 billion in grants to the program, the statute’s first round might have authorized a larger loan facility, but provided that no more than $349 billion in loans could be forgiven or go uncollected. This statutory authorization would have anticipated a payment schedule contingent on future events.

If a payment schedule were contingent on future events, perhaps concerns would arise that back-end guidance that made borrowing terms stricter might disadvantage or surprise borrowers. Explicit congressional authorization for certain kinds of back-end adjustments might reduce these concerns. But in the case of the PPP, Congress did not explicitly anticipate or place limits on back-end adjustments. Instead, Treasury and the SBA used enforcement discretion to tighten the program’s terms. Nevertheless, the PPP’s back-end adjustments were arguably within the limits of the statute.

B. The Normalcy of Back-End Adjustments

The idea of back-end adjustments for emergency funds may appear like the government is inappropriately changing the deal or moving the goalposts. It may sound like an unusual and extraordinary move. But, to the contrary, back-end adjustments have precedent in many areas of law.

Consider the example of a private debt contract, which the parties can agree to amend. When a lender and a borrower enter into a debt contract, the contract may have various terms allowing the lender to force the borrower to repay. For instance, the lender may charge late fees if the borrower fails to pay on time. Or the breach of a covenant might allow the lender to foreclose on collateral pledged by the borrower. Although these terms are agreed to in advance, they can also later be changed unilaterally, so long as the party changing the terms does so against its own interest. A lender can unilaterally waive late fees. A lender can also choose to ignore the breach of a covenant rather than pursuing collateral.

Consider also the example of a security written such that the government’s support will vary, under the terms of the security, depending on future events. The government’s support could increase if future events involved poor economic performance and decrease if future events involved good economic performance. This variation in the level of government support follows the outlines of the economic
terms of owning equity in an entity, since an equity holder has a residual claim on firm profits.

The approach of equity investment was specifically used in the Troubled Asset Relief Program (TARP). There, the government bought equity in troubled companies. The equity purchased by the government through TARP could have amounted to an outright transfer to the troubled companies if the firms had gone bankrupt, since the government’s holdings, as equity, were junior to the claims of firm creditors. Instead, when troubled companies recovered, the companies repurchased the equity held by the government. In the end, the government’s support was mostly temporary.

Another example of back-end adjustment involves tax law. The income tax system provides a built-in opportunity to tighten the effect of a government spending program in the future. That is, the government can later decide to “tax it back,” or modify the effect of the grant through the income tax.

The government’s ability to “tax it back” preserves flexibility to modify the effect of a government program that transfers cash to taxpayers. Some cash transfers—such as individual stimulus payments made in 2020—are not taxed. But other cash government transfers are taxed.

Social Security payments, for instance, have been subject to various income tax inclusion rules. Until 1983, Social Security payments were untaxed. Later, the rules changed and became stricter. For instance, in 1983, a new Code provision taxed some Social Security benefits.

254 See Davidoff & Zaring, supra note 194, at 528 (describing government capital injections in exchange for preferred stock and warrants to repurchase common stock).
255 See id. (describing government holdings of preferred stock as “pari passu to existing preferred shares in the capital structure of the banks”).
256 See CONG. BUDGET OFF., REPORT ON THE TROUBLED ASSET RELIEF PROGRAM 2–3 (2021) (reporting that Treasury transferred $205 billion to financial institutions in the form of preferred stock purchases, that only $12 million remained outstanding, and that “almost all” of $2.2 billion of government loans used to fund repurchases had also been repaid).
257 See I.R.C. § 6428(f) (providing that individuals would be treated as having made a tax payment in an amount equal to the amount of the advance refund); see also Carlton Smith, So, How Will the “Recovery Rebate” Refunds Work This Time Part I, PROCEDURALLY TAXING (Mar. 27, 2020), https:// procedurallytaxing.com/so-how-will-the-recovery-rebate-refunds-work-this-time-part-i/ [https://perma.cc/2XX3-5MET]; cf. Sarmiento v. United States, 678 F.3d 147 (2d Cir. 2012) (holding that status of 2008 payment as an “advance refund” meant that IRS would retain refund for particular taxpayers because of the terms of earlier Offer-in-Compromise settlements).
259 Id. at 795 (outlining pre-1983 exemption of Social Security benefits from income tax).
A person who retired in 1982 might have expected to receive Social Security benefits free of tax. But for many retirees, this is not what happened. Instead, the tax law changed, and they were required to return some of their Social Security benefits to the government, simply because the amount of income tax that they owed the federal government increased as payment of income taxes as a result of this change.

Another example is unemployment income. This was relevant under 2020 federal emergency legislation, which expanded unemployment benefits. Typically, unemployment benefits are included in gross income for tax purposes. Consider a grocery store worker who continued to work and receive wage income, compared to a restaurant worker who had been laid off and received unemployment benefits. Under the usual rule, the grocery worker must include their wage income and the restaurant worker must include their unemployment benefits in income.

The CARES Act, which substantially increased unemployment benefits, was silent on the question of whether those benefits would be excluded from income. That suggested that the usual rule—that the benefits would be included in gross income—would continue to apply.

For unemployment benefits, Congress started with the stricter rule. Congress said that unemployment benefits were included in income for tax purposes—this action preserved a classic back-end adjustment opportunity to relax the rule. If Congress, after observing the effect of the unemployment policy and other policies, concluded that some or all of the unemployment income should be excluded despite the usual rule of taxation, it could pass a law excluding the income. Indeed, that is exactly what happened.

In 2021, Congress made a back-end adjustment to the gross income inclusion rules for 2020 unemployment benefits. It excluded unemployment benefits of $10,200 for a worker making up to $150,000. This represents a temporal solution to the problem that Congress faced in March 2020. At the outset, Congress could choose to

261. See sources cited supra note 35 (describing unemployment benefits under the CARES Act).
262. I.R.C. § 85 ("[G]ross income includes unemployment compensation.").
263. See Brian Galle & Elizabeth Pancotti, The Case for Forgiving Taxes on Pandemic Unemployment Aid, CENTURY FOUND. (Feb. 8, 2021), https://tcf.org/content/report/the-case-for-forgiving-taxes-on-pandemic-unemployment-aid/?agreed=1 [https://perma.cc/2KUG-MJVJ] (noting that unemployment benefits are usually subject to tax and also noting that withholding obligations were often not met with respect to unemployment benefits supported by the CARES Act).
264. American Rescue Plan Act of 2021, Pub. L. No. 117-2, § 9042, 135 Stat. 4 (to be codified at I.R.C. § 85(c)); see also Galle & Pancotti, supra note 263 (arguing that existing law supported the exemption of pandemic-related unemployment benefits from income tax, including because a typically applicable ten percent withholding rule was not universally applied).
265. See I.R.C. § 85(c) (exempting, for 2020, unemployment benefits up to $10,200 if taxpayer’s adjusted gross income is less than $250,000).
increase unemployment benefits without deciding what the tax treatment should be. It could wait to decide about that tax treatment. Later, Congress could, and did, decide to exclude some unemployment benefits from income.

C. Limits on Back-End Adjustments

If an administrative agency implements back-end adjustments that make it more difficult for recipients to keep emergency funds, some might object that the adjustments improperly depart from the terms of the statute that authorized funding. Recall the premise that when Congress makes an emergency fund statute, the law typically will feature incomplete instructions and leave enforcement discretion in the hands of an administrative agency. 266 This may mean that an emergency fund statute will not provide explicitly for any back-end adjustment, consistent with the premise that emergency fund statutes in general tend to be underspecified. This is the situation presented by the case study of the PPP. It was silent on the question of back-end adjustments. Nevertheless, the implementation of the PPP revealed a pathway for an administrative agency to create back-end adjustments using the tool of enforcement discretion.

In contrast to the silence of the PPP statute, some back-end adjustments occur pursuant to legislation or pursuant to an ex ante contract. For example, a zoning ordinance may establish a procedure for obtaining an exception, or variance. 267 Or, a security purchased by the government may by its terms require that the recipient return the funds if certain conditions were met. This was the effect of the equity purchased by the government under TARP. 268 Because the TARP-aided firms did well, they bought back the government’s equity. If the TARP-aided firms had performed poorly, the government purchase of equity might have become a permanent investment or grant.

In contrast, the PPP’s back-end adjustments were not anticipated by any statute or ex ante contract. Instead they rested simply on the agencies’ enforcement authority. For example, the sure shipwreck threat of audit for public firm applicants, which prompted a number of public firms to return money, rested on the agencies’ enforcement discretion. This enforcement discretion was built into the statute, but it was not emphasized in the explanation of the statute. Enforcement

266. See supra Section III.A (explaining the likelihood of “incomplete instructions” for emergency fund statutes).

267. See Glicksman & Shapiro, supra note 7, at 1187 (studying “deadline extensions and waivers, variances, and exceptions” as examples of back-end adjustments).

268. See supra note 256 and accompanying text (explaining how purchasing an equity security had an effect similar to that of a back-end adjustment in the TARP program).
discretion as a basis of authority for a back-end adjustment is less explicit than, say, a provision in a zoning regulation that specifies a procedure for requesting a variance.

In the PPP case, the agencies’ statements that they might audit public firms and that they would not audit applications for less than $2 million had a rational connection to the hardship exception. But not all exercises of enforcement discretion would be appropriate back-end adjustments. There are limits. For instance, limitation time periods, process requirements, and the content of the statute constrain agencies’ authority to enforce the law in question.

V. DESCENDING-ORDER-OF-NECESSITY DISTRIBUTION

A. Distribute First to Those Most Eligible

Distribution in descending order of necessity is another way to manage the tradeoff between speed and accuracy. In the PPP context, this would mean distributing funds first to applicants who definitely meet the “necessary” definition and other program requirements, and then later to applicants whose eligibility is less clear. Under this approach, the administrator makes easier decisions about eligibility first and saves the harder decisions for later.

The problem, though, is that emergency funds are often underspecified; the legislature does not always spell out the eligibility requirements. The PPP illustrates this problem. Four different plausible metrics for the definition of “necessary” for purposes of the PPP were suggested above. As that discussion explained, “most necessary” could mean most likely to help specific economic sectors, most likely to be the deciding factor in a firm’s survival, most likely to preserve jobs, or smallest application size.

Measures actually taken by Treasury and the SBA show that they partly implemented the idea that larger applications were less necessary. Starting in the second wave, loans of more than $2 million were discouraged. Under a December 2020 statutory change, loans of $150,000 or less benefited from a simplified forgiveness process. Under a third-wave administrative practice in place during February

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269. See supra Section II.C (explaining guidance for loans to public companies and loans of more than $2 million in the second wave of the PPP).
270. See supra Section III.C (explaining interpretive range for hardship exception).
271. See supra Section II.C (explaining safe harbors in second wave of PPP).
272. See supra Section I.A (explaining December 2020 law).
and March 2021, application priority was given to firms with fewer than 20 employees.  

B. An Auction Model and a “Clearing” Grant Size

The goal of disbursing emergency money while giving priority to smaller grants is similar to the problem faced by a person who wishes to sell a stock of something at the highest price the market will bear. In the case of the seller of a fixed stock of goods, the problem is that the seller wishes to sell at the highest price possible but lacks information about the price that buyers will pay. Information about the prices that different buyers are willing to pay is needed to arrive at the “clearing” price at which all of the goods will sell.

In the case of the emergency fund, administrators lack information about the amount of funds that applicants will request. If the emergency fund administrator had this information, it could deduce the “clearing” grant level at which all of the funds would be disbursed, assuming, in this illustration, that smaller loans or grants should have priority.

For example, if a $350 billion emergency fund is authorized, and there are 500,000 requests of $250,000 each (totaling $125 billion), 250,000 requests of $500,000 (totaling $125 billion), and 100,000 requests of $1 million (totaling $100 billion), then these subtotals added together equal the full $350 billion allocation. Under these assumptions, the clearing grant amount is $1 million. The administrator can grant the entire fund in allotments of $1 million or less and should not make any grants in excess of $1 million. $1 million is the grant amount at which the emergency fund clears. The information that $1 million is the clearing grant amount shows an administrator how to disburse funds in descending order of necessity, or equivalently ascending size of grant, again assuming that smaller loans or grants are more necessary, or in other words more clearly support program eligibility.

This idea of a clearing grant amount has an analogue in auction theory. In the case of a person selling goods, a mechanism to determine the clearing price is a descending-price auction. Under this variation, the seller starts with a high asking price. Then the seller reduces the price until enough bids have been submitted to successfully sell all the goods.  

An emergency fund administrator could solve its analogous information problem with an approach inspired by a descending-price auction.

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273. See supra Section II.D (describing third wave guidance under Biden administration).
auction. Instead of starting at a high price and proceeding to a low price, an emergency fund administrator could start with a low grant amount and then proceed to a higher grant amount, increasing the amount in order to distribute all of the allocated funds. This would reveal a clearing grant amount through the mechanism of distribution in descending order of necessity.

For the PPP, the SBA and Treasury might have started with loans of no more than $250,000, based on monthly payroll of no more than $100,000. Then after testing demand for these and making loans at that level, they could have increased the maximum loan size and payroll level in increments. The agencies could have continued this process until the statutory allotment was fully claimed.

If an emergency fund takes this approach, it has a choice about whether to consider larger loan applications in the first instance. In the simplest version of a descending-price auction, it would not consider larger applications initially. Instead, it would take an all-or-nothing approach to reviewing grant applications. This means the fund would either accept or reject any single application in full. Initially, it would only accept smaller applications. An application for $250,000 or less would initially be allowed, while applications for larger amounts would not be accepted initially and would have to wait until a later time, when they would either be accepted or rejected in full.

This kind of all-or-nothing approach corresponds to a multiple-price or pay-what-you bid auction format. In a multiple-price auction, each bidder pays the price that bidder stated. If translated to the emergency fund context, the multiple-price approach would produce the result that applicants would not be eligible for any grant unless and until the grant amount allowed by the government had increased to the level of their request. Only after the threshold amount increased sufficiently would a larger grant applicant receive a grant.

This all-or-nothing approach would be a good fit for an emergency fund if there is a high level of confidence that applications should be prioritized according to loan size. It commits to distributing smaller requests without collecting information on the specific details of larger applications. Note, though, that the all-or-nothing approach has an important disadvantage. If a larger applicant cannot claim any benefits from applying at an earlier stage, the larger applicant has little reason to share information about a forthcoming application with the

\[275\] Loan size is based on 2.5 times monthly payroll. See supra Section I.A.

\[276\] For instance, in the 1990s, the U.S. Treasury conducted a study in which it used a single-price approach to auction 2-year and 5-year notes and a multiple-price approach to auction 3-year and 10-year notes. One reason for using the single-price approach was to expand access to bidding. Malvey & Archibald, supra note 14 ("[E]xpected revenue under the uniform-price technique is at least as great and probably greater than under the multiple-price technique").
emergency fund administrator. The discussion in Section V.D below returns to this problem.

C. An Example: Aid to Shuttered Performance Venues

A portion of the federal statute passed by Congress in December 2020277 took a descending-order-of-necessity approach to distribution, though one based on the metric of revenue loss rather than size of grant request. This approach is found in the section of the statute that explained how up to $15 billion in aid278 would be provided in forgivable loans to shuttered live performance venues and related businesses. The statute provided that for the first fourteen days of grantmaking, only businesses with ninety percent or greater revenue loss could apply.279 For the next fourteen days, only businesses with seventy percent or greater revenue loss could apply.280

As long as the administrator is committed to distributing in order of a metric such as percentage of revenue lost, the lack of information about requests involving smaller revenue losses does not much matter. It is similar to the situation with a seller of a fixed stock of goods in a multiple-price auction. Such a seller does not need information about the lower bids in order to sell goods to higher bidders. Similarly, an emergency fund administrator does not need information about firms with less severe revenue losses in order to distribute funds to firms with more severe revenue losses first.

The December 2020 shuttered performance venue statute stated a commitment to distribute up to four-fifths of its appropriation to businesses that saw at least a seventy percent revenue decline.281 Under this approach, the SBA did not need to collect information about businesses that experienced a less severe revenue decline in order to accomplish the task of distributing up to eighty percent of the appropriation. Instead, for the first fourteen days of grantmaking under that provision, the SBA only needed to collect information about businesses who experienced at least a ninety percent decline in

279. See id. § 324(b)(2)(B)(i) (providing for grants to businesses with revenue not more than ten percent of previous period revenue for first fourteen days of grant awards).
280. See id. § 324(b)(2)(B)(ii) (providing for grants to businesses with revenue not more than thirty percent of previous period revenue for second fourteen days of grant awards).
281. See id. § 324(b)(2)(B)(iv) (limiting funds awarded during first twenty-eight days of grants to eighty percent of appropriation).
revenue, and would only distribute to those businesses. Then, for the
next fourteen days of grantmaking, the SBA only needed to consider
businesses who experienced at least a seventy percent decline in
revenue. Other live performance venues or related businesses (i.e.,
those whose revenue loss experience was not as severe) had to wait
until the initial tranches of grantmaking had finished.

D. An Information-Collection Model of
Descending-Order-of-Necessity Distribution

The PPP story suggests that sometimes the emergency fund
administrator will be unwilling to commit at the beginning to a method
for distributing the emergency fund. Instead, the administrator may
anticipate a learning curve that will cause it to change methods of
distribution over the life of the program. In this case, an all-or-nothing
descending-order-of-necessity approach that first only accepts small
applications would not be the best approach. Instead, the approach
should be tailored to the goal of gathering information.

If the ascending-grant-size, descending-order-of-necessity distribution
idea is used for information collection, it should not be a commitment
to a method for distributing the whole fund. It should instead be a tool
to buy information at an affordable price. The idea is that if small initial
grants are plausibly most necessary and thus most consistent with the
statutory language and the goals of the program, then small initial
grants are an affordable and appropriate way to buy information about
the applicant pool. In contrast, what actually happened under the PPP
was that the government paid very high prices, in the form of large
forgivable loans, to gather information about the applicant pool.

282. See id. § 324(b)(2)(B) (explaining “initial priorities for awarding grants” during the first
twenty-eight days of the program).
283. See id. § 324(b)(2)(C). The statute also provided a special set-aside of $2 billion for
applicants with no more than fifty employees. See id. § 324(b)(2)(E) (providing set-aside for first
sixty days during which grants were awarded).
284. The three waves of the PPP represented an evolving approach to distribution. Data on
distribution results also varied over the course of the program. One example is the decreasing size
of grants. See supra Section II.E (explaining reduction in loan amount over time). Another is the
decrease in the racial disparities among PPP grant recipients. See supra Sections II.A, II.F
(describing and considering mechanisms for racial disparities in PPP).
285. The rationale of extracting information from applicants is analogous to the goal of
structuring auctions to influence bidder behavior in a way that produces a better result for the
seller. See DAVID EASLEY & JON KLEINBERG, NETWORKS, CROWDS, AND MARKETS: REASONING ABOUT A
HIGHLY CONNECTED WORLD 252–54 (1st ed. 2010) (explaining choice among auction formats as
choice about influencing bidder behavior).
286. See supra Section II.A (explaining results of the PPP’s first wave); supra Section II.B
(describing public and media reactions to results of PPP’s first wave).
Section V.B supra explains that the idea of using an ascending-grant-size, descending-necessity approach for distributing an entire fund could follow a multiple-price, pay-what-you-bid descending-price auction model, in which each applicant either received the amount applied for, or nothing at all. To see why this all-or-nothing approach would not successfully maximize information-gathering, consider a hypothetical in which the PPP initially considered only applications for grants of $250,000 or less, i.e., based on monthly payroll of $100,000 or less. Under this system, an applicant with $200,000 of monthly payroll would not have an incentive to reveal all of its information early. It might apply early for a lower amount of $250,000. In the alternative, it might apply later for a higher amount of $500,000. But neither approach maximizes the information collected by the fund. If the applicant with $200,000 of monthly payroll only applies for $250,000, the fund administrator does not know that additional extra payroll is also eligible for fund support. If the same applicant waits to apply later for $500,000, the fund administrator must also wait for this information and delay incorporating it into the fund’s developing rules of distribution.

Instead of an all-or-nothing rule, an information-maximizing approach could pursue a “top-up” rule. The business with $200,000 of monthly payroll could apply initially for a grant of $500,000. Although initially during the $250,000 grant window it would only be eligible to receive $250,000, it would also remain eligible to receive an additional top-up of $250,000 later if the maximum grant amount were increased to at least $500,000. If the applicant with $200,000 of payroll could receive a $250,000 grant initially, and perhaps an additional top-up grant of $250,000 later, then the applicant would have an incentive to reveal more of its information early to the fund administrator.

The top-up approach corresponds to a uniform-price rather than a multiple-price auction format. In a uniform-price auction, even bidders who earlier indicated that they would be willing to pay a higher price for a good will nevertheless pay the lower clearing price. In the emergency fund context, the top-up approach translates to allowing applicants who applied for larger loan amounts to at least claim the smaller loan amount for which the emergency fund allows distribution.

As applied to the PPP, a top-up approach, consistent with the uniform-price auction approach, would allow an applicant for $2 million, $5 million, or even $10 million to apply for a PPP grant from the beginning of the program. However, a larger applicant could only claim the smaller amount that the government had approved as a grant size.

287. See Krishna, supra note 274, at 189–91 (distinguishing between multiple-price, or discriminatory, auctions and uniform-price actions when multiple similar items are sold).
For instance, the larger applicant could claim $250,000 (if that was the loan amount initially allowed) in the first tranche of the program, with the understanding that the loan might increase later to larger amounts.

The advantage of the top-up approach is that it uses small initial grants to buy information not only from small grant applicants, but also from larger grant applicants. A disadvantage of the top-up approach is that allowing larger applicants to apply early may crowd out smaller applicants. This is especially true assuming that only a limited number of applications can be processed. The PPP illustrates this crowding-out disadvantage. The limited loan capacity at intermediary banks meant that many applications simply could not be processed in the early first-wave weeks of the program.\footnote{See supra Section II.A (explaining importance of banks in determining access in the first wave of the PPP).} But still, the idea of distributing smaller grants first to buy information would be better than what actually happened with the PPP. In the PPP, important information, including information about the existence of bottlenecks in the application process, was discovered only at very high prices.

The advantage of a top-up approach—that it encourages all applicants to apply early and provide information early—is of greater importance when the administrator is not sure that distributing according to grant size is the right way to prioritize the allocation of emergency funds. If it is not clear what the organizing principle for distribution should be, more information is more valuable because it can suggest possible modifications to distribution priorities for later grants from the fund. Again, the story of the PPP is illustrative. The PPP story demonstrates that fund administrators can experience learning curves. This story also shows that a medium-term fund can implement changes to distribution rules over the course of time.

As one important example of the PPP learning curve, consider the fact that larger and white-owned businesses disproportionately received grants in the first wave of the PPP.\footnote{See supra Section II.F (describing studies of racial bias in the PPP).} On one hand, an ex ante emergency fund design should anticipate structural bias issues. In the case of the PPP, it was clear that funds would be distributed through the banking system. Existing data also made clear that disparities exist in access to the banking system.\footnote{CLAIRE KRAMER MILLS & JESSICA BATTISTO, FED. RESRVR. BANK OF NEW YORK, DOUBLE JEOPARDY: COVID-19’S CONCENTRATED HEALTH AND WEALTH EFFECTS IN BLACK COMMUNITIES 1, 6 (2020), https://www.newyorkfed.org/medialibrary/media/smallbusiness/Doublejeopardy_COVID19andBlackOwnedBusinesses [perma.cc/4Y5S-QBE6] (finding that “Black firms have been almost twice as likely” to close, and that despite at least equal rates of application for financing, Black firms are less likely to have a recent borrowing relationship with a bank); LUCAS MISERA, FED. RESRVR. BANK OF CLEVELAND, AN UPHILL BATTLE: COVID-19’S OUTSIZED TOLL ON MINORITY-OWNED FIRMS 1, 2–3 (2020), https://www.clevelandfed.org/region/article?ID=DDA321FE-ADc5-4DA7-941C-
On the other hand, the information gathered in the earlier stages of the PPP probably gave Treasury and the SBA more information about the disparities in the PPP. For instance, the idea that fintech lenders would provide better access for businesses owned by people of color became clearer from PPP data as the program continued.\textsuperscript{291} The PPP data also support the idea that smaller business owners needed time to learn about and respond to the program.\textsuperscript{292} This corresponds to changes in the program. For instance, the decision to discourage larger loans helped make funds more available to small businesses. In the second wave of applications, from April to August 2020, the program was undersubscribed.\textsuperscript{293}

The PPP should have started with a plan for addressing predictable disparities in access to lenders. At the same time, it seems likely that other emergency funds might also arise with similar ex ante flaws. When that is the case, a distribution approach that plans for early information collection and later distribution rule adjustment can help. Even if early plans fail to address problems with the program, later changes can try to address these problems.

More generally, when emergency fund instructions are underspecified, collecting information about the applicant pool might help later efforts to identify flaws in the initial plan for distribution and choose among different principles to use in prioritizing fund distribution. The information could be directly useful to the emergency fund administrator. It could also be helpful for congressional or Presidential oversight, or for evaluating the response of public opinion to the program.

To be sure, the PPP did not fix all of its problems. Even if the second wave was distributed more equitably, this did not help businesses that closed immediately in March and April 2020 for lack of liquidity—and these closed businesses were disproportionately owned by people of color.\textsuperscript{294} The intent here is not to claim that all problems were solved, but to observe the development of a learning curve for administrators over the course of the program.

In the case of the PPP, the problems with the first-wave allocation methods were addressed in part with the help of increased

\begin{footnotesize}
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\item \textsuperscript{291} See Erel & Liebersohn, supra note 182 (showing negative correlations between white percentage of population and portion of PPP lending extended through online or fintech lenders).
\item \textsuperscript{292} See Humphries et al., supra note 95 (reporting on delay in PPP knowledge among small businesses based on survey evidence from April and May 2020).
\item \textsuperscript{293} See supra Section II.C (describing the second wave of the program from April to August of 2020).
\item \textsuperscript{294} See supra Section II.F (describing racial disparities in the application of the PPP).
\end{itemize}
\end{footnotesize}
appropriations from Congress. The initial appropriation of $349 billion was later increased to more than $800 billion. Additional congressional appropriations allowed a continuation of the program under modified distribution rules in the second wave, and then in the third.

The importance of gathering information before all the funds are spent is even more important if the emergency fund really is finite. That is, a finite emergency fund, rather than the expanding PPP, provides an even stronger case for using early grants to gather information about applicants. Especially in a finite emergency fund situation, funds distributed early might be best spent in a dual-purpose fashion. The first dollars out the door should be allocated in a way that both sends funds to those more eligible to receive them and also gathers information about the applicant pool.

E. Speed

A question of time is presented by a descending-order-of-necessity or increasing-grant-size approach to emergency fund disbursement. Other examples of descending-price auctions, like those conducted by the Treasury to sell bonds, proceed very quickly. But the emergency fund allocation approach described here requires the dedication of periods of time to successive application categories. Using the PPP as an example, we can observe that initially time would have had to be dedicated to the earlier tranches offering smaller grants. Because it is easier to distribute a large sum with $10 million grants than with $250,000 grants, the increasing-grant-size allocation approach would have slowed the PPP’s infusion of cash into the economy.

In other words, the descending-order-of-necessity approach does not eliminate the tradeoff between accuracy and speed. It only mitigates the tradeoff. The descending-order-of-necessity approach allows cash to begin to flow immediately, but requires that it flow more slowly.

An administrator can design a faster fund flow by increasing the beginning tranche of the distribution. Using the PPP as an example, the initial loan amount could have been set at $500,000, or $1 million, rather than $250,000. This still would have gathered information more efficiently than the actual result—a free-for-all in the first wave of the

295. PPP REPORT: APPROVALS THROUGH MAY 2021, supra note 2, at 2 (reporting $799.8 billion approved); American Rescue Plan Act of 2021, Pub. L. No. 117-2, § 5001(d), 135 Stat. 4 (increasing PPP allocation to $818.7 billion).

296. See, e.g., supra Section V.C (describing fourteen-day application periods for two stages of shuttered live venue funding based on percentage of revenue lost).
PPP. In fact, the PPP spent amounts up to $10 million to collect information about the applicant pool in the first wave.297 It could have collected similar information for a much lower price.

In addition, if the fund were administered with a top-up approach, so that an initial grant could later be increased, then initial funds in at least some amount could have been distributed to a large number of borrowers while collecting information about all applicants. Borrowers would have received some benefit early in the program, and, at the same time, larger borrowers would still have had the possible future benefit of an additional grant under the program. If larger borrowers were better able to bear and manage risk and uncertainty compared to smaller borrowers, larger borrowers would have been better able to estimate and update estimates of the likelihood of a grant. They might have estimated the likelihood of a grant by examining data about disbursements under the fund and borrowed against the anticipation of a future grant.

The PPP is an example of an emergency fund with information and time constraints and a medium-term timeline continuing over a period of months.298 This kind of fund presents a tradeoff between additional information and reduced speed of disbursement. But this tradeoff is not absolute. For example, it is not necessary to first collect all available information and then begin distributing. The distribution-in-descending-order-of-necessity idea allows a fund administrator to simultaneously begin funding and collecting information.

The first-wave distributions of the PPP successfully gathered information about the applicant pool. The first wave revealed the enormous demand for the program. It revealed that bank clients, especially well-connected bank borrowers, were more likely to receive a PPP loan.299 It also revealed structural racial bias in the distribution of PPP proceeds.300

This first-wave information supported adjustments to the PPP going forward.301 But the government overpaid for this information. When similar opportunities arise in the future, emergency fund administrators could collect the information they need for program design more cheaply. A fund could still achieve some speed of

297. See SEC FILINGS: PUBLIC COMPANIES RECEIVING SBA PPP LOANS UNDER THE CARES ACT, supra note 139 (listing ten unreturned $10 million loans made in April 2020).
298. See supra Section I.C (describing similar emergency funds).
299. See supra Section II.A (describing advantage of certain bank clients in first few weeks of PPP).
300. See supra Section II.F (describing structural bias of PPP and comparing first and second waves).
301. See supra Section II.C (describing second wave from April to August 2020); Section II.D (describing third wave from January to May 2021).
distribution, because it could begin disbursement of some funds—even if not in the largest possible amounts—right away.

CONCLUSION

The ambiguity and uncertainty about what, exactly, the Paycheck Protection Program was supposed to do need not block the opportunity to learn from it as an example of emergency fund administration. Future emergency funds will likely involve underspecified instructions, just like the PPP. As emergency fund administrators choose whether to leave fund allocation to private actors or whether, and how, to exert more control over allocation, they will face information and time constraints, as in the PPP. How can they fulfill their responsibility of distributing money now, while also gathering information that could improve allocation decisions?

There is a tradeoff between speed and accuracy. But the design of an emergency fund can accommodate a learning curve. Immediate distribution can be coupled with back-end adjustments, so that the disbursement of funds can happen early and anticipate adjustments to repayment terms later. The tradeoff between speed and accuracy can also be mitigated by distributing according to descending necessity. This allows an administrator to both begin disbursing funds immediately and also collect information on which to base improvements in future distribution policy.