



Breaking the Model: Analysis of the NYC Restaurant Delivery Economy, Including Government-Proposed Fee Caps and Wage Hikes

Response to the NYC Dept of Consumer and Worker Protection's request for feedback on delivery fee caps

Data Catalyst Institute

May 2023

Executive Summary

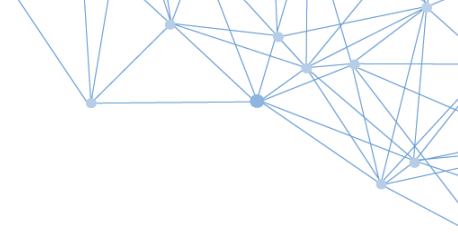
- NYC has imposed fee caps (price controls) on third-party restaurant delivery apps. Separately but interrelatedly, NYC has also proposed guaranteed minimum pay for restaurant food deliverers.
- While well-intentioned, the combination of industry-specific maximum prices and industry-specific minimum pay is unprecedented in regulatory history. It will potentially break delivery companies' financial model and will certainly cause extremely negative economic effects on restaurants, deliverers, and diners.
- Resilient and dynamic market-based solutions are the most efficient way to create and sustain the most value for the most people in the long term. Individual government interventions like price controls and minimum wages can solve short-term problems, but they almost always reduce long-term value for stakeholders and are very problematic in combination.

Analysis and Discussion

Restaurant delivery apps, such as DoorDash, Uber Eats, and Grubhub, are what economists call “multi-sided marketplaces.” They connect several stakeholders – diners, restaurants, and deliverers – and handle various tasks, including marketing, order-taking, collecting payments, coordinating deliveries, balancing real-time supply and demand, managing customer service, and collecting reviews.

Balancing these diverse stakeholders and tasks is incredibly complex because the ecosystem is interdependent, and changing one input or activity will affect many others. Thus, when NYC imposed a permanent cap on fees that restaurant delivery apps can collect for both delivery and marketing services, the impacts rippled through the system and affected all stakeholders.

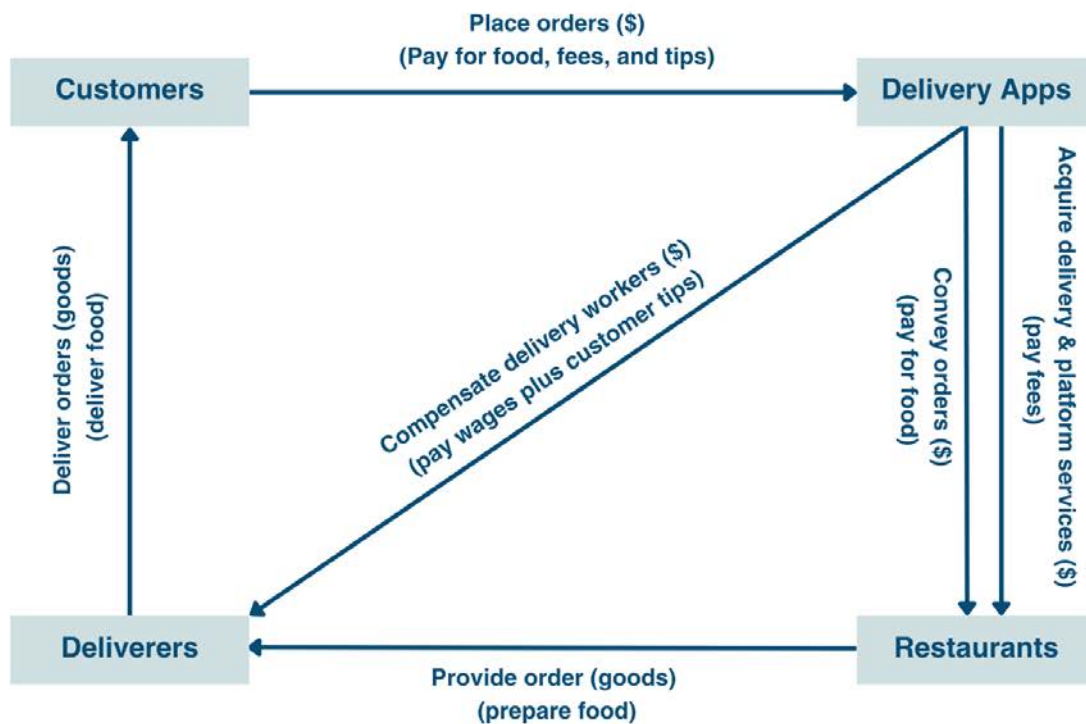
In this paper, we briefly describe how the NYC Restaurant Delivery Economy works and then show how targeted changes such as fee caps and wage increases harm all stakeholders, potentially break the restaurant delivery business model, and undermine the entire Restaurant Delivery Economy.



Understanding the Restaurant Delivery Economy

The graphic below demonstrates how Restaurant Delivery Economy stakeholders – diners, apps, restaurants, and deliverers – are connected through the transfer of money and goods. Restaurants pay fees to be listed in the app and for delivery and marketing services. Diners discover restaurants, place orders on the app, pay restaurants, tip deliverers, pay delivery and order fees to the app, and pay government-imposed fees and taxes. The apps remit funds to the restaurants, pay deliverers, and pass through tips. And deliverers transport food from restaurants to customers.

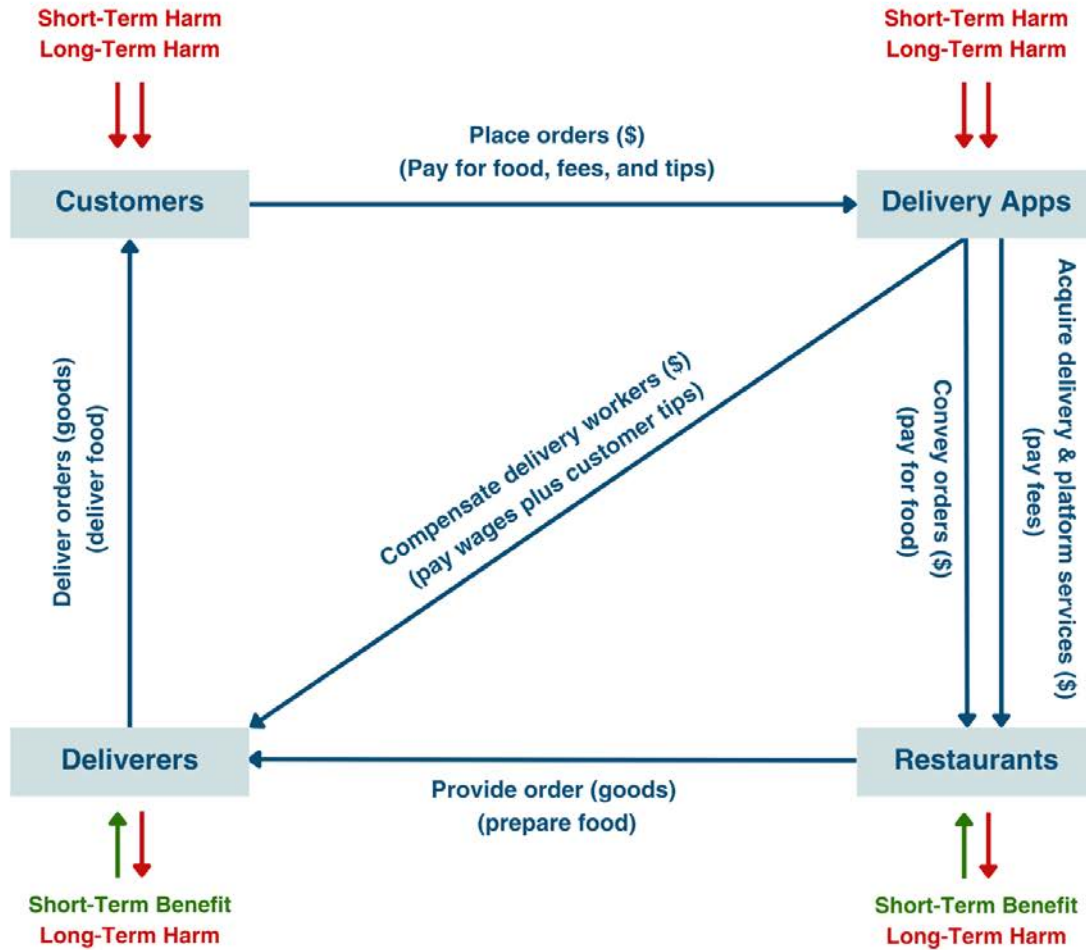
Figure 1. How the Restaurant Delivery Economy Works



The economics of this system reaches an equilibrium when customers are satisfied with the food and delivery service they receive for the amount of money they pay, deliverers are satisfied with their compensation for the services they perform, restaurants are satisfied with their sales for the amount they pay to apps, and the apps generate sufficient revenues to offset their costs and earn reasonable returns for investors. The next graphic shows the downstream economic effects of government-mandated fee caps and wage increases on the Restaurant Delivery Economy. It's clear that while some stakeholders enjoy the short-term benefits of these government actions, the overwhelming impact of negative short and long-term consequences creates an unsustainable future for all stakeholders.



Figure 2. How the Restaurant Delivery Economy Works With Fee Caps and Mandatory Wages

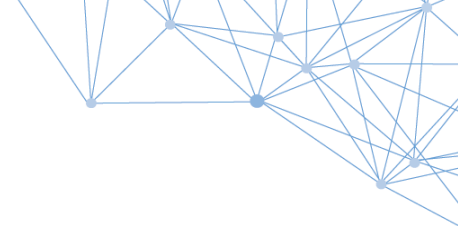


In the short-term, two categories of stakeholders benefit:

- Restaurants pay lower fees and should have higher margins.
- Deliverers may receive more pay for doing the same work (and in some cases, when the guaranteed wages apply to extended periods of time between deliveries, they are paid more for doing no work).

There are, however, offsetting short-term harms to two other categories of stakeholders:

- Apps have reduced revenue and increased labor costs – an unsustainable combination.
- Customers will pay more due to increased or new delivery app fees – as a way for apps to mitigate the effect of restaurant fee caps.



Additionally, the combination of government-mandated fee caps and wage increases causes long-term harm to all stakeholders:

- Customers will reduce delivery orders due to increased costs and reduced selection.
- Restaurants will suffer due to fewer marketing options (as they are prohibited from paying for more), reduced delivery orders, and diminished competition among apps, as some local apps either exit the market or consolidate.
- Deliverers will have fewer orders to deliver (and fewer apps to deliver for), and earn less money.
- Delivery service apps' revenue will be reduced, forcing consolidation, layoffs of employees and delivery workers, and likely reducing investment in New York City.

Additionally, there will be secondary or downstream harms from restaurant delivery app companies' reduced investment in New York City. These could include diminished competition that raises consumer prices, reduces orders, and forces more deliverer layoffs. Consumers in underserved neighborhoods are likely to be disproportionately affected by these negative downstream effects, given that lower-margin areas would be the front-line casualties of, for instance, delivery app companies reducing their geographic service areas to cover only higher-profit areas of the city. We also envision the potential for delivery services to invest in wholly-owned ghost kitchens that compete for food deliveries with small local restaurants, because delivery or marketing fee caps and service limits will not restrict such ghost kitchens.

Additional Data and Analysis on Fee Caps and Minimum Pay

In addition to our own analysis, there have been several studies on the impacts of restaurant delivery apps, fee caps, and wage mandates.

Restaurant delivery apps helped restaurants survive the earliest stage of the COVID-19 pandemic lockdowns

- A research [paper](#) utilizing data from Uber Eats documented the power of delivery apps to support independent restaurants, and not only in the short term. The authors demonstrated that the utilization of delivery apps made independent restaurants stronger, more resilient, and more likely to survive a full year of pandemic health restrictions. [*June 2020: Manav Raj (University of Pennsylvania) and Arun Sundararajan (NYU Stern School of Business)*]

Fee caps form an artificial price ceiling on what delivery apps can charge for services, which ultimately hurts small restaurants themselves and their customers

Several research projects have measured the negative impacts of restaurant delivery fee caps, particularly on small, independently-owned restaurants.

- A nationwide [study](#) of 200,000 restaurants, including 60,000 chain restaurants, found that after governments in 14 states and localities imposed fee caps, smaller independent restaurants experienced a 6.8



percent reduction in delivery demand and suffered reductions in overall revenues and net profit. In contrast, chain restaurants' delivery demand *increased* by 3.6 percent. Most likely, state and local legislators did not intend to promote chain restaurants and punish locally-owned restaurants. [*July 2021: Zhuoxin Li (University of Wisconsin-Madison School of Business) and Gang Wang (University of Delaware)*]

- A [study](#) of restaurant delivery ecosystems in 14 U.S. metropolitan statistical areas utilized 2020-21 data to determine that fee caps diminish market participants' welfare by 6.2% on average, primarily due to price increases imposed on consumers. [*January 2023: Michael Sullivan (Yale University)*]
- Delivery app Grubhub [published](#) data documenting those small NYC restaurants with lowered delivery service fees because of the law not only weren't benefiting but were also seeing far less growth than competitors that did not have their fees capped. Restaurants whose fees were above 15% pre-cap and had them lowered because of the cap saw modest 6 percent order growth after the cap went into effect. In contrast, restaurants whose fees were always below 15% and were not impacted by the cap saw order growth explode to nearly 80%. [*August 2022: Grubhub*]
- Similarly, delivery app DoorDash [published](#) data on the effects of fee caps in nearby Westchester County during the month of March 2021. The company noted that in areas where state and local governments instituted a fee cap, it began charging customers an *additional* fee (just as our model shows). The results in Westchester County were clear, as DoorDash restaurants experienced nearly a 4 percent monthly decrease in order volume, translating into over \$45,000 less in monthly tips. [*April 2021: DoorDash*]

Government-mandated wage floors increase consumer costs and decrease consumer choice, which ultimately backfires against the workers whose wages were boosted

In addition to capping how much delivery service apps can charge restaurants, NYC has also [proposed](#) guaranteeing minimum pay for deliverers. This combination of the government raising the cost of providing a service while simultaneously capping the price that can be charged for that same service is unprecedented in the history of economic regulation.

- We are unaware of a specific study of restaurant deliverer wages, but [a study](#) of downtown Chicago ride-sharing fees is analogous. A 2022 study of per-ride fees imposed on ride-sharing apps showed that more than 100% of the fee amounts were passed through to consumers. During the period studied, ride-sharing cost increases associated with government fees exceeded \$315,000 daily, and it isn't surprising that the study documented customers shifting to other methods of transportation, which harmed both ride-sharing companies and drivers. [*April 2022, Mario Leccese (University of Maryland)*]

Just like with fee caps, a government-mandated wage floor imposes extra costs on restaurant delivery apps, which can be passed on to consumers. This will harm restaurants and delivery workers when customers place fewer delivery orders and/or diminish the order amount. In sum, academic research suggests that wage floors will likely increase customer costs to the detriment of deliverers, restaurants, and customers.



Alternative approaches to improving the Restaurant Delivery Economy for small restaurants, their customers, and delivery workers

NYC's remarkably competitive Restaurant Delivery Economy is unsuitable for extra regulatory attention. First, there are many delivery service competitors. Second, the barriers to entry for new delivery competitors are relatively low. Finally, consumers, deliverers, and restaurants can and do use multiple delivery apps, which promotes competition.

Liad Wagman (Stuart School of Business, Illinois Institute of Technology) explains in a 2022 [paper](#) that government-imposed fee caps have not helped – and likely have hurt – NYC's small, independent restaurants in a post-COVID world. Instead, he proposes that NYC lawmakers aiming to support local restaurants should instead consider policies that (1) promote delivery app competition (including by increasing incentives and/or reducing barriers to entry for new delivery services), (2) encourage consumers and restaurants to use multiple platforms, and (3) provide direct support (i.e., access to capital) to smaller restaurants.

The fee cap policies in NYC and elsewhere offer cautionary tales of how policymakers who ignore economics and empirical research when regulating emerging technologies and marketplaces can harm constituents. It would be preferable for policymakers to use their oversight power to learn about new markets and then encourage market-driven solutions (e.g., tiered fees) that are dynamic, evolving with the industry, and are not confined to a particular geographic area.

About the Data Catalyst Institute

The [Data Catalyst Institute](#) (DCI) supports policymakers and other stakeholders as they undertake the important and difficult work of enacting sound public policy governing the use of technology and data. DCI reports on regulatory and legislative proposals to celebrate good policy and identify relevant challenges.

Proposals often evolve – before and even after enactment. DCI will monitor amendments, court cases, and other changes to adjust our analyses and conclusions to reflect future changes. Our objective is not to criticize or condemn but rather to support a better, broader understanding among all stakeholders.

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