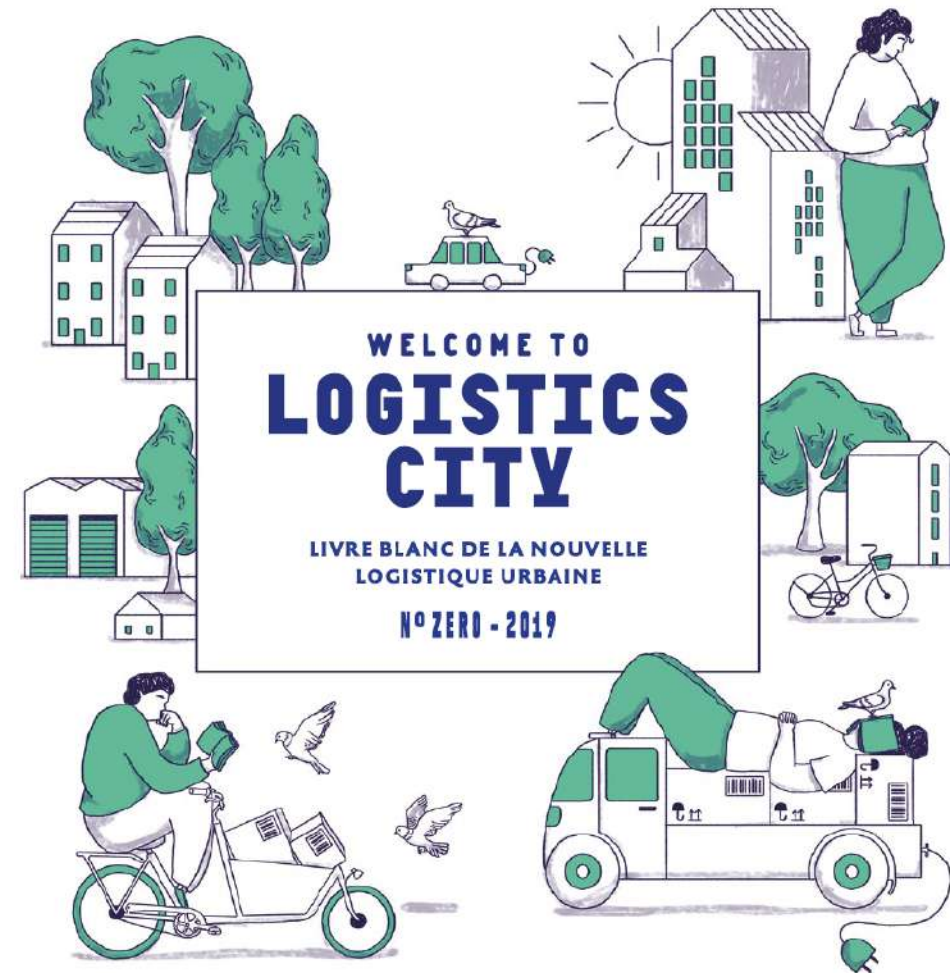


Urban logistics in times of lockdown

19 May 2020

Dr. Laetitia Dablanc



How COVID-19 is changing the world: a statistical perspective



“More than 90% of covid-19 cases are happening in urban areas”

(UNSTATS, CCSA, May 2020)

Urban logistics before the pandemic: converging patterns

- Global supply chains, technological changes, consumers' behavior, societal demands
- Converging logistics operations: DHL, Ifood, Prologis... brands catering for metropolitan areas worldwide
- Start-ups, urban freight tech everywhere



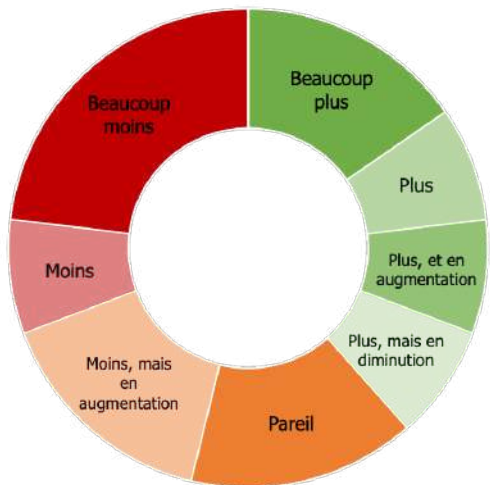
Barometer of urban logistics in times of lockdown



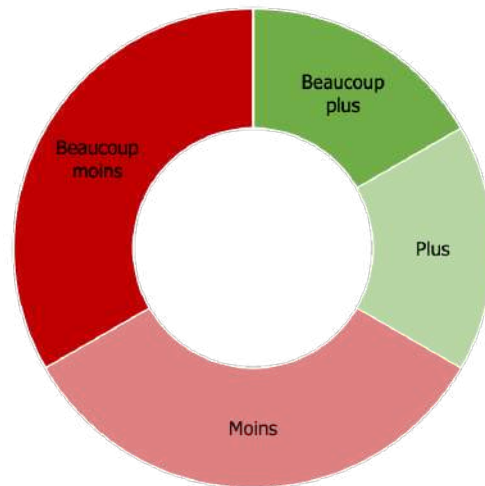
- Daily/weekly survey between March 20 and May 8, 2020
- Stable panel of companies representative of urban freight deliveries in the Paris region
- Including gig workers, delivery platforms, SMEs, large groups
- Four freight trade organizations
- After 20 April: a new question about gradual unlocking after 11 May

Total volume of delivery flows: permanently reduced by 30 to 50% during lockdown

Barometer #1
20-27 March 2020



Barometer #6
1-8 May 2020



- Demand decreased
- Demand changed



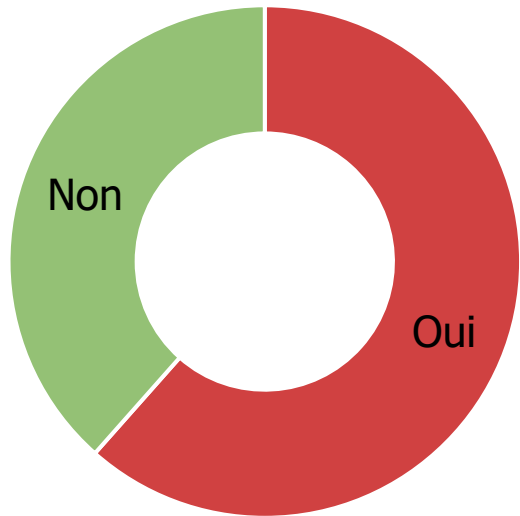
E-commerce (food, high tech, music, DIY)
Grocery

Non-food stores but also some B2C sites
Cafés, hotels

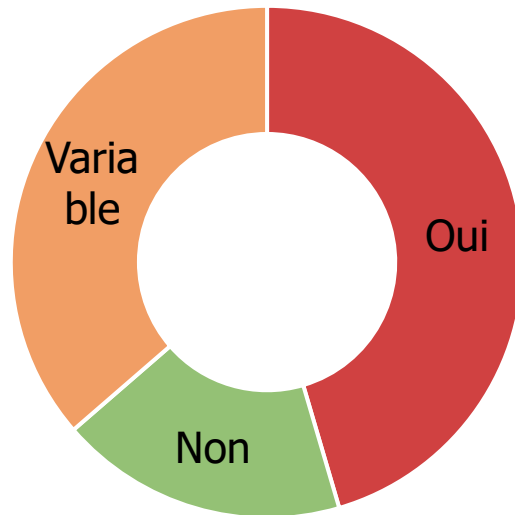
Restaurants: B2B supplies, also persistently low levels
for home meal deliveries

Face masks were missing during the whole lockdown period

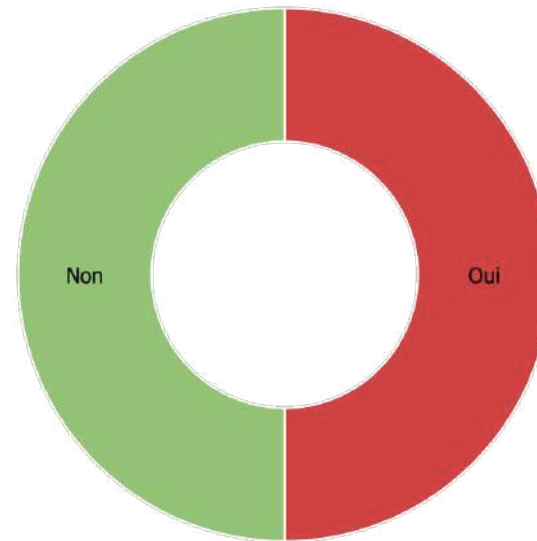
Barometer #1



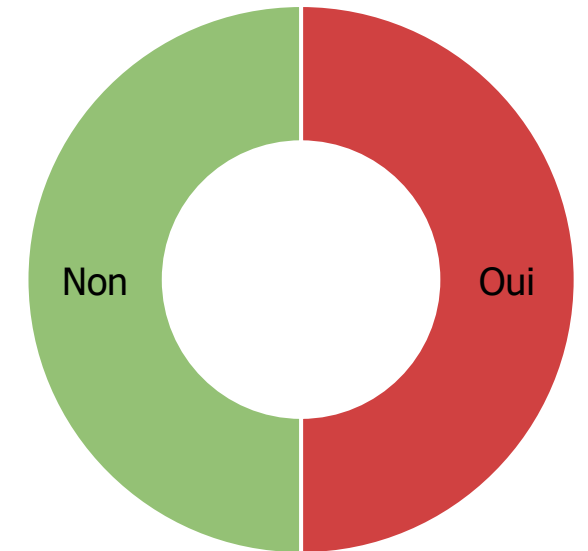
Barometer #2



Barometer #4



Barometer #6



Lockdown required a constant adaptation

- **Recruitment problems** for half of the panel: gig workers, temporary workers, employees, contractors
- Closing of pick-up-points in shops and many post offices: mechanical **increase of points of delivery**, therefore of the time and staff resources needed to deliver
- Some recipients wanted to be delivered indoors or upstairs, despite delivery protocols
- **Empty return trips** related to more general chain disorganizations and high order variability
- With the **improvement in traffic**, some clients requested more rounds per day
- **New markets**: home delivery to pharmacies increased by 300% for Minute Pharma
- Numerous initiatives (home deliveries from wholesale Rungis Market) and participation in several **solidarity initiatives** (delivery of chef meals to Paris public hospitals)
- Collaborative home delivery (peer-to-peer, neighbors) such as Yper settled in (Les Echos)

Post lockdown after May 11: difficult to anticipate operations

- Most companies expect a gradual resumption of demand and flows
- Anticipation of tensions on operations, recruitment
- Sanitary measures will complexify operations and increase costs



The pandemic accelerates strategic moves in 'instant deliveries'

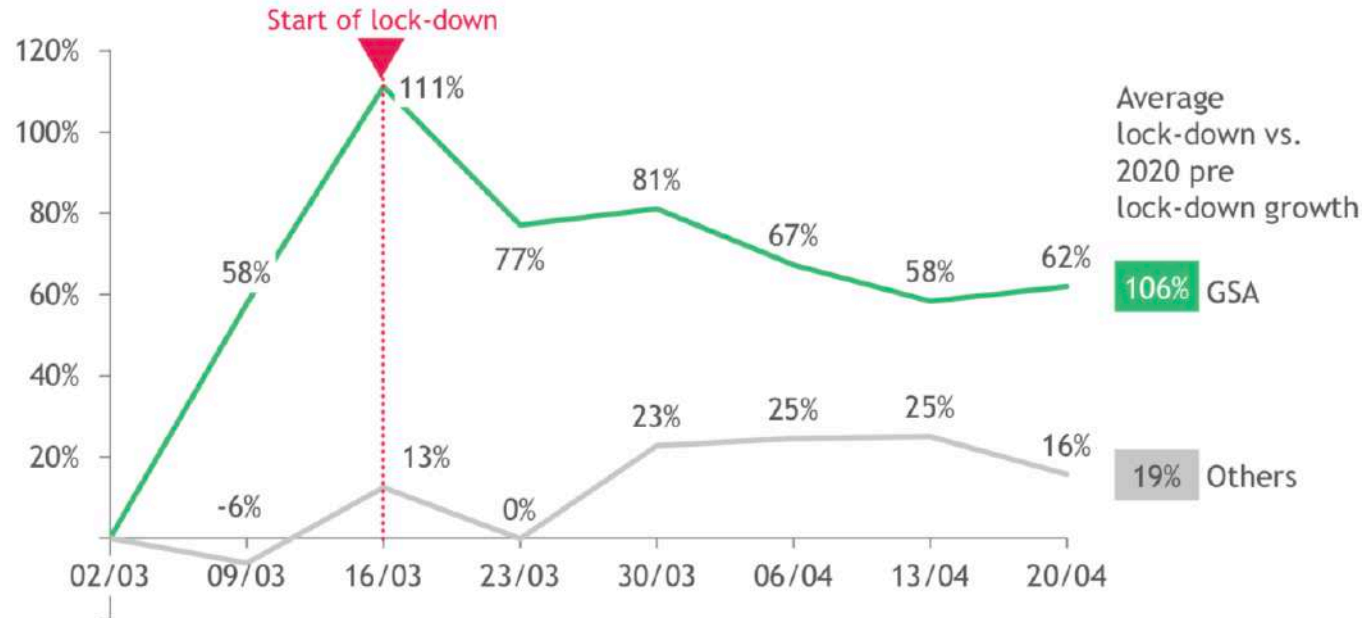
- Deliveroo increased its market share compared to UberEats (from 23% v. 55% to 27% v. 53%) in France
- Citing the company's difficulties linked to the pandemic, the UK Competition and Markets Authority authorises Deliveroo and Amazon to get closer
- Uber: worldwide turnover in the first quarter of 2020 is up 14% year-on-year, mainly "thanks to the increase in meal orders" (Les Echos, 8 May)
- UberEats (30% of Uber activities in 2019) worldwide increased by 89% in April (excluding India), however, the delivery activity remains strongly loss-making

Changes in B2C consumption even more dramatic abroad

- In France, 76% of B2C sites recorded a drop in activity at the beginning of the containment, but only 8% of store chains stopped their online sales activities (FEVAD)
- **Meal deliveries** have seen an upturn since Easter and the reopening of restaurant chains (KFC) but remained 30 to 40% lower than before the lockdown
- **Food E-commerce in France: +30-50%** compared to the beginning of March, Amazon Prime Now's breakthrough (Foxintelligence)
- **Non-food E-commerce remained at +10-20%** of its early March level, despite closure of Amazon warehouses ; strong increases for DIY and gardening, fashion and accessories
- Following court rulings (TJ Nanterre 14 April and CA Versailles 24 April), **Amazon closed its warehouses** in France (but not its parcel distribution centres) and delivered from European warehouses
- The increase in home deliveries, food and non-food, linked to containment seems to be **stronger in the United Kingdom, Germany or the US** (California, New York) than in France (Fox Intelligence; FreightWaves)

Strong on line growth of GSA since beginning of lock-down

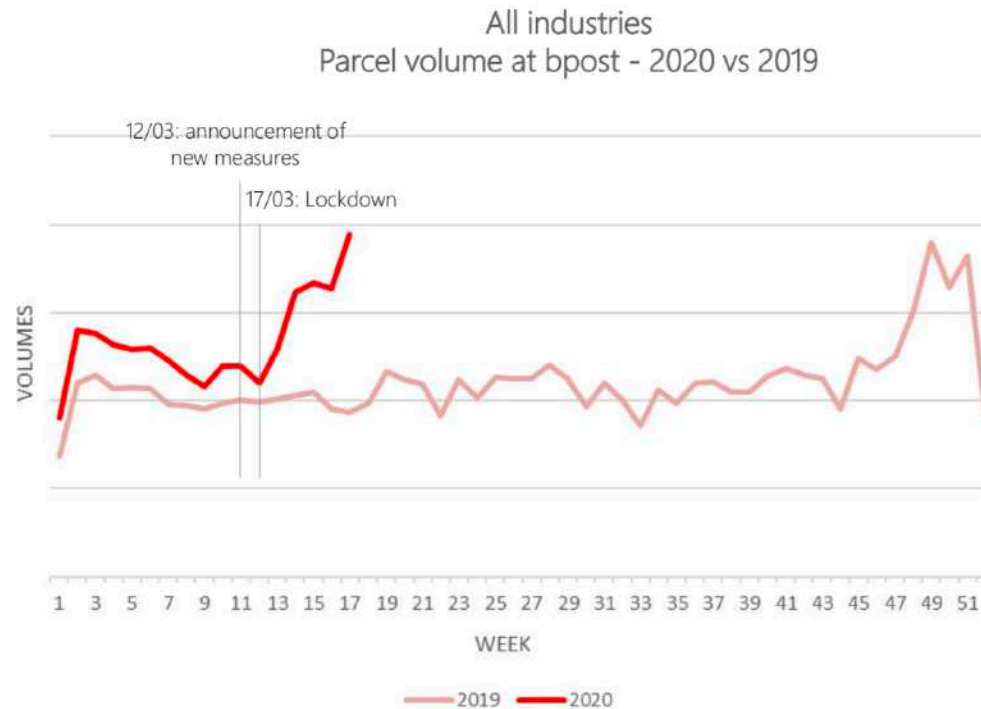
Evolution of weekly on line sales - GSA vs. Others
(with 2nd of March 2020 as index)



Source: Foxintelligence data

BCG+Fox Intelligence, Online growth during COVID-19 crisis, May 2020
Data for all France
GSA = grandes surfaces alimentaires (large retail grocery chains)

- DPD UK announces significant **increases in parcel deliveries** compared to the pre-lockdown situation
- Bpost : +60% (all sectors together)



Beijin, early April 2020



Home deliveries must be made on the sidewalk, delivery personnel are not allowed to enter residences

Source : Arte, Chine, le monde d'après

- The services of Meituan and Ele.me exploded during lockdown and have remained very high since then
- Meituan now employs one million gig delivery workers a day (The Economist, 4 April 2020)

Impacts of lockdown in New York City

(A. Conway, CCNY, 14 April 2020)

- The demand for consumer goods has structurally declined: many people have left the city and tourists are not around
- **Delivery lead times** much slower but very variable (sometimes very short)
- Difficult to book food delivery slots (FreshDirect, Amazon Fresh: **waiting lists**)
- New home delivery services: pharmacies deliver to homes and the municipality hires **taxi/Uber drivers to deliver food**
- **"Converting retail supply chains into residential supply chains is difficult"**
- Many restaurants closed, including home delivery service
- **Regulations** on delivery times, noise or alcohol have been relaxed in some cities
- The Governor of New York asked the City to convert streets into pedestrian-only areas to relieve crowded parks, but the city made a minimal plan
- At the beginning of lockdown, the **average speed** on New York's highway 495 increased from 26 to 61 km/h (ATRI)

Impacts of lockdown in Seoul

(S. Kang, KOTI, 23 April 2020)

- Life is back to "cautiously normal" since mid-April, the traffic jams have resumed.
- During containment, **massive recourse to online deliveries for food**: 3 to 4 bins every two days for a family (Coupang, Costco Korea, delivery packages)
- Very fast delivery times (**early morning next day delivery**), no difficulties
- In Korea a total of **17% growth in express parcel** (B2B and B2C) and meal delivery by mid April 2020, compared to February 2020
- **For the longer term**: "The pandemic will accelerate the adoption of the virtual economy even further, and the virtual economy will become a new norm. However, it will take much longer to **prepare the physical infrastructure, labor pool, labor training, equipment, and legal/business environment to cope with the expanding demand properly**"

Type	Changes in volume (approximate)
Containerized goods	-30%
Home/business delivery (B2B, B2C, C2C)	+18-20%
Automobile	-38%
Coal	-41%
Steel	-42%
Grain	-11%
Petroleum products	-14%
W&D based 3PL	+/-

Evolution of freight traffic by sector in Korea before and during lockdown
KOTI, 15 April 2020

Which urban logistics for tomorrow?

- The pandemic can be a "catalyst for the decarbonation of the transport sector" (Jean-Baptiste Djebbari, Secretary of State for Transport, before the Commission on Sustainable Development on 10 April)
- "We have to relocate part of the food production" (Celia Blauel, Environment Deputy Mayor in Paris)



Stratégie nationale bas-carbone



Purchasing behaviour: the lockdown accelerated changes already at work

- B2C has moved into **new age groups and socio-economic categories**
- 51% of Belgians who bought food online for the first time say they will continue to do so after the pandemic (Gondolia Academy)
- From 20 to 30% of **shopping outlets** in clothes, shoes, and restaurants cafés, will close (A. Culoz)
- Of all shops (physical or online), **large malls** are what European consumers will give up the most in their post-lockdown shopping behaviour (McKinsey survey 16-19 April 2020)
- Growing niches: short food circuits, local farmers
- Before lockdown, there were thirty urban farms in Paris (400 in France): a very small niche, with very high production costs (Les Echos, 11 April 2020)

A logistics city that may not be much more sustainable

- More B2C, meaning more motorised freight trips in cities
- Risk of slowing down the implementation of low emission zones in French cities
- London: Euro 6 low emission zone standard for trucks and vans scheduled for October 2020 is postponed by 4 months
- "Tactical urbanism", new curb management, complete street concept, new cycling facilities: where are deliveries?
- French government subsidy for the purchase of an electric vehicle by companies was halved last January
- Training for delivery workers and improving the attractiveness of the job: not yet in the public debate
- In a context when the crisis is going to hit the logistics transport sector hard

Barometer of urban logistics in times of lockdown:

<https://www.lvmt.fr/en/chaire/logistics-city/>

Chaire
LOGISTICS
CITY



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