

Services and the Food System Workshop  
13-16 April 2021



# COVID Impacts on the Food System and Services - The Case of Chinese Taipei

By  
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Advancing Free Trade  
for Asia-Pacific Prosperity

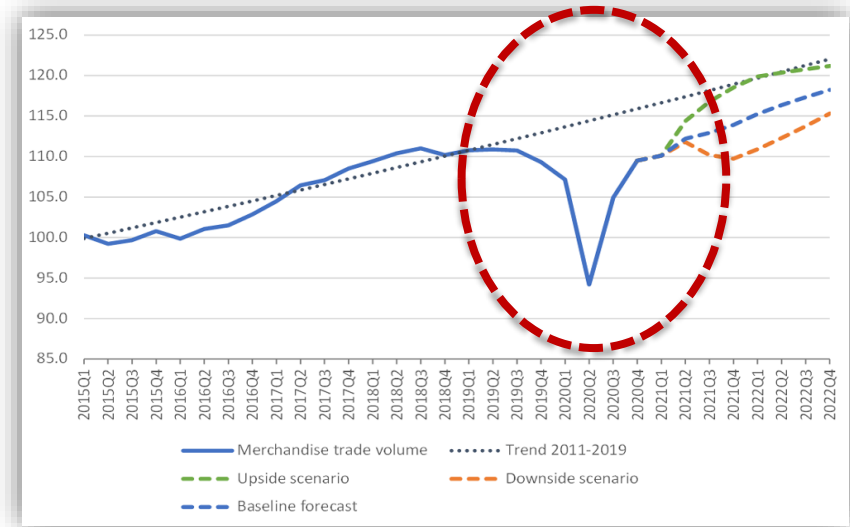
# Outline

- **Impacts**
- **Responses**
- **Three Cases**
- **Concluding Remarks**



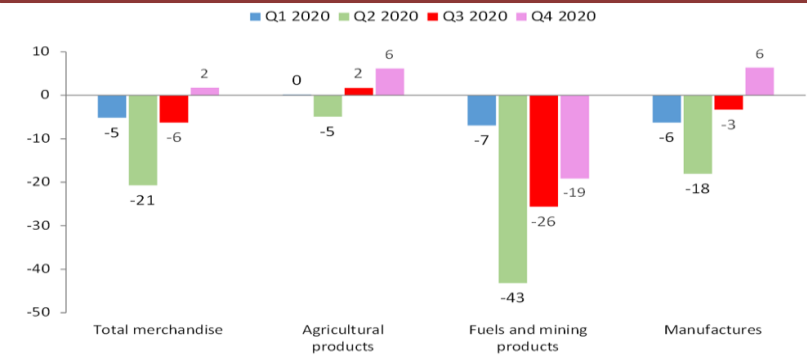
# Impacts of COVID-19 on Global Economy

- **World GDP** increases by 5.1% in 2021 and 3.8% in 2022, after contracting by 3.8% in 2020.
- **World merchandise trade volume** is expected to increase by 8.0% in 2021 after falling 5.3% in 2020
- **World services trade** fared less well, weighed down by travel and tourism as a result of mobility restrictions and social distancing

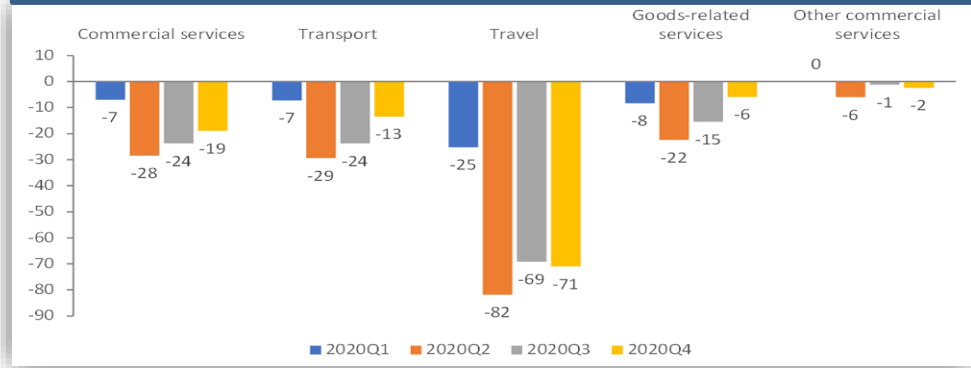


Sources: WTO and UNCTAD for trade volume data; WTO for forecasts.

## Merchandise Trade-2020 Q1~Q4



## Service Trade-2020 Q1~Q4



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Source: WTO (2021), "World trade primed for strong but uneven recovery after COVID-19 pandemic shock" Press release #876 [https://www.wto.org/english/news\\_e/pres21\\_e/pr876\\_e.htm](https://www.wto.org/english/news_e/pres21_e/pr876_e.htm).

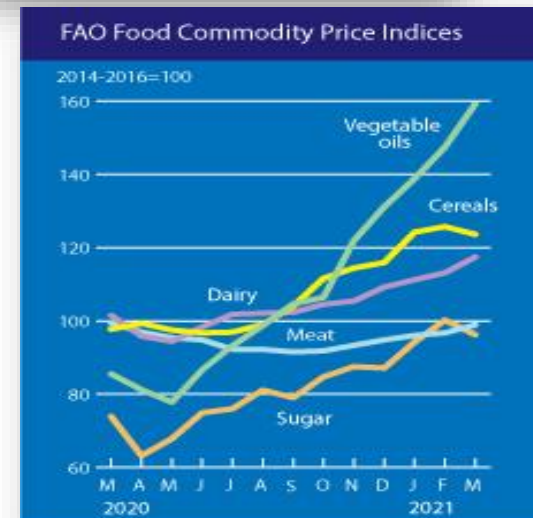
# Impacts of COVID-19 on Food System

## FAO (2020)

- COVID-19 has had impacts on **all segments of food supply chains** (farm to fork).
- An additional **83 to 132 million people** pushed to the rank of chronically undernourished as a result of COVID-19.

## APEC (Hredzak, 2020)

- COVID-19 resulted in a dual shock to commodity markets, affecting **both supply and demand**.
- APEC economies registered higher prices for food due to supply chain disruptions.
- **Trade** through value chains has helped people access food during the crisis.



Source: FAO, IFAD, UNICEF, WFP and WHO. 2020. [The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets](#). Rome, FAO.

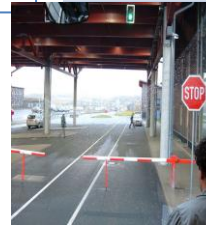
Hredzak, T., 2020. [Food Security Response to COVID-19](#). APEC Policy Support Unit, Policy Brief No.36.



# Impacts on Food System – 4 Key Triggers



**Panic buying**



**Border disruption**



**Labor & logistic  
disconnect**



**Consumer  
behavioral change**



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# Impacts of COVID-19 – Chinese Taipei

- **A well-contained local COVID-19 situation**
  - The first COVID-19 case was confirmed on January 21, 2020.
  - High transmissibility of COVID-19 before and immediately after symptom onset suggests that more generalized measures are required, such as **social distancing**.
  - With **proactive containment efforts and comprehensive contact tracing**, the number of COVID-19 cases remained low, as compared with other economies that had widespread outbreaks.
  - **Major containment measures** include travel alerts, home quarantine, comprehensive contact tracing.
  - The government proactively initiated a **name-based rationing system** for mask purchase and boosted production of face masks.

Source:

Cheng et al., Contact Tracing Assessment of COVID-19 Transmission Dynamics in Chinese Taipei and Risk at Different Exposure Periods Before and After Symptom Onset”, *JAMA Internal Med.* doi:10.1001/jamainternmed.2020.2020. Published online May 1, 2020.



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# Impacts on Overall Economy - Chinese Taipei

## Economic growth raised to 3.1% in 2020 and 4.6% in 2021

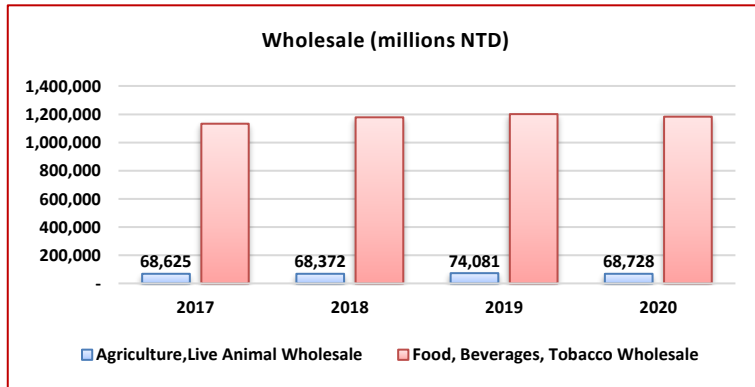
- ✓ The economy rebounded mainly driven by exports and private consumption, on the back of a well-contained local COVID-19 situation and fiscal support.
- ✓ Exports and Investment are bolstered by the strong demand for 5G and consumers high-end applications, as well as increased public infrastructure projects.
- ✓ Travel bans lower private consumption, but government issued stimulus vouchers and online shopping was given a massive boost.
- ✓ Fiscal stimulus measures will remain in place to support businesses and households that are hit hard by the pandemic.



# Impacts on Wholesale, Retail, Food Service – Chinese Taipei

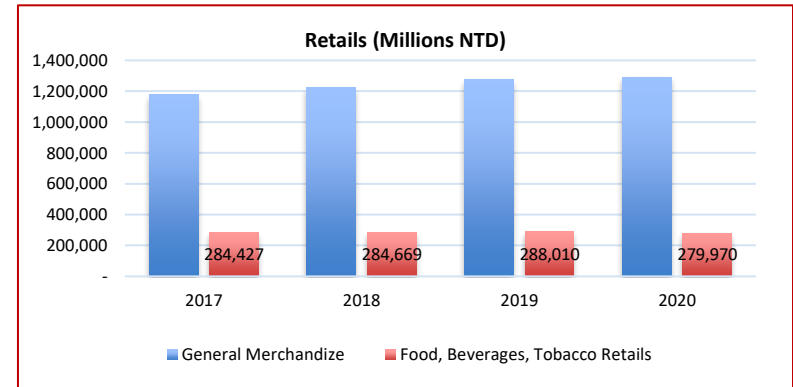
## Wholesale in 2020

- Crops and Live animal drop 7.23%
- Food beverages tobacco drop 1.55%



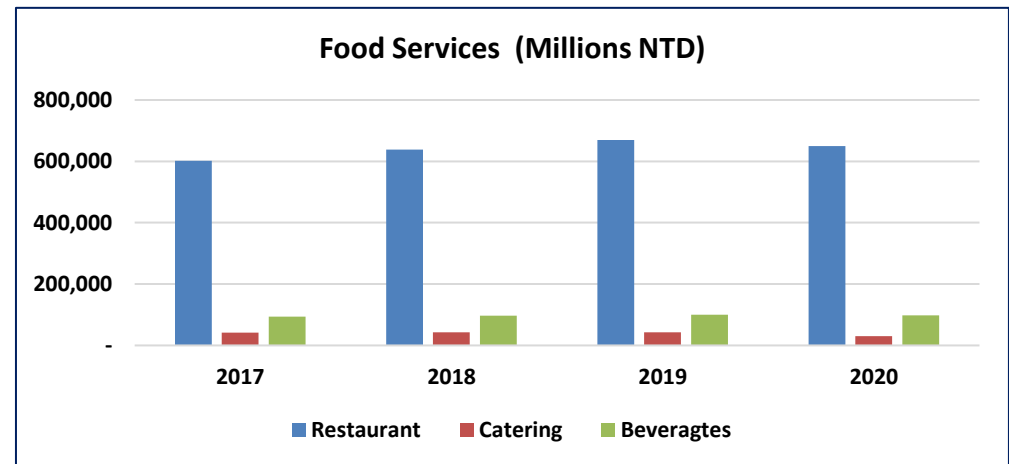
## Retails in 2020

- General merchandize grow 1.53%
- Food beverage tobacco drop 2.79%



## Food Services in 2020

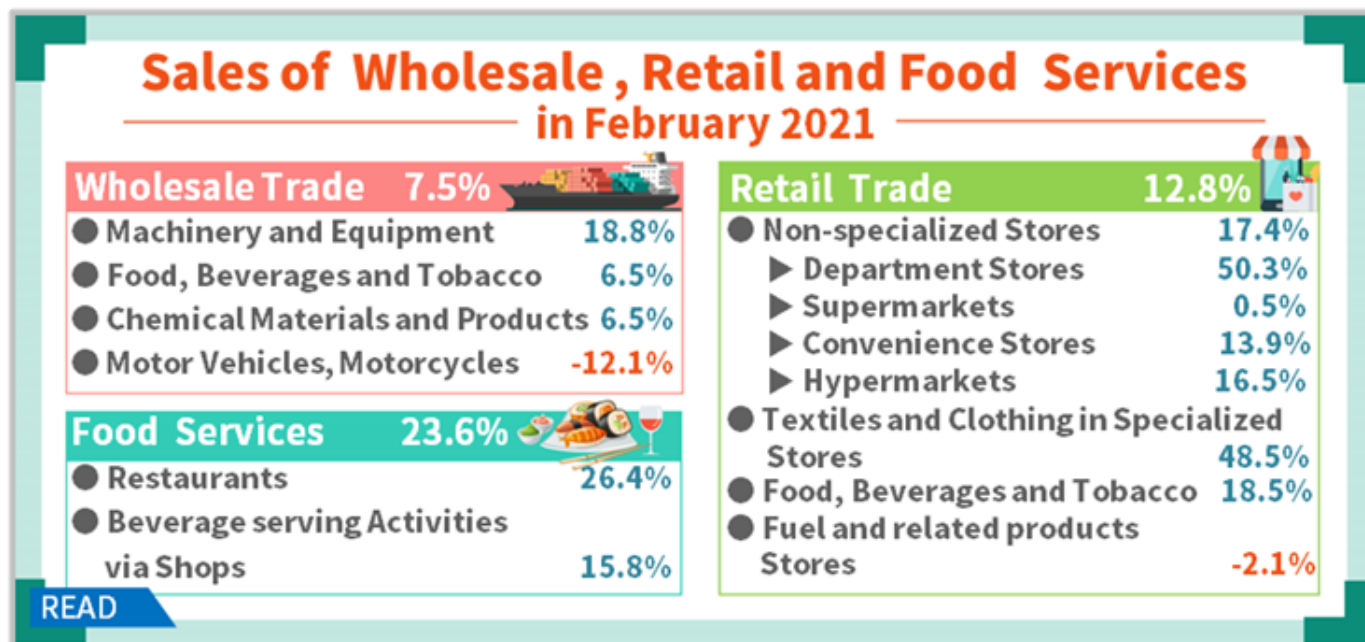
- Restaurants drop 2.94%
- Catering drop 29.87%
- Beverages drop 1.59%



# Impacts in Feb 2021 – Chinese Taipei

Compared with the same month in 2020  
(on a year to year basis)

- Wholesale trade sales: increased 7.5%.
- Retail trade sales: increased 12.8%.
- Food & beverage services: increased 23.6%



# Government's Response to COVID-19

Early Prevention

Damage Control

Fiscal Stimulus

## 1. Early Prevention

- a. Strengthen sanitation measures in wholesale markets and educate workers
- b. Strengthen sanitation in fishing harbors and educate workers/fishermen
- c. Strengthen surveillance and detection on all wild animal diseases

## 2. Damage Control

- a. Offer low-interest loan and relief packages
- b. Provide job and wage assurance to farm and food system workers

## 3. Fiscal Stimulus

- a. Foreign market promotion
- b. Domestic market vouchers
- c. Online platforms
- d. Local markets and restaurants vouchers



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Source: Central News Agency, 07/15/2020.

<https://www.cna.com.tw/news/firstnews/202007120122.aspx>

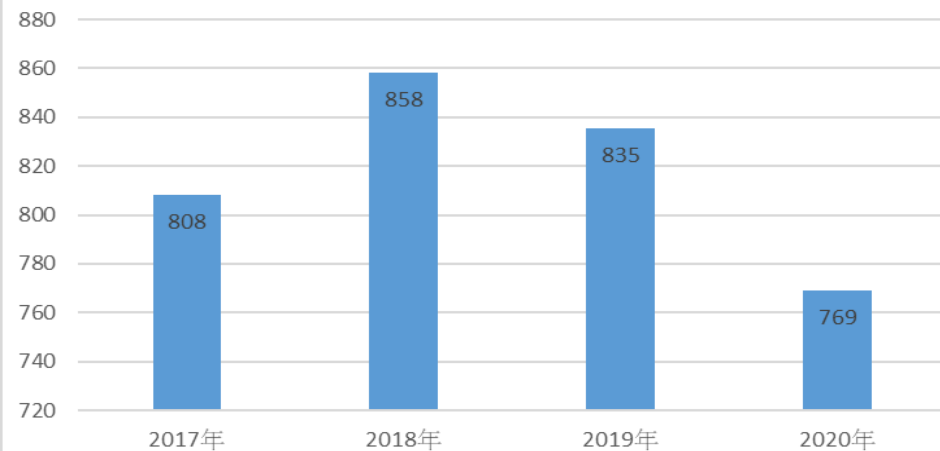
# Case 1 – Mango export to Japan

Despite hurdles created by COVID-19, **mango export to Japan continued in 2020** because

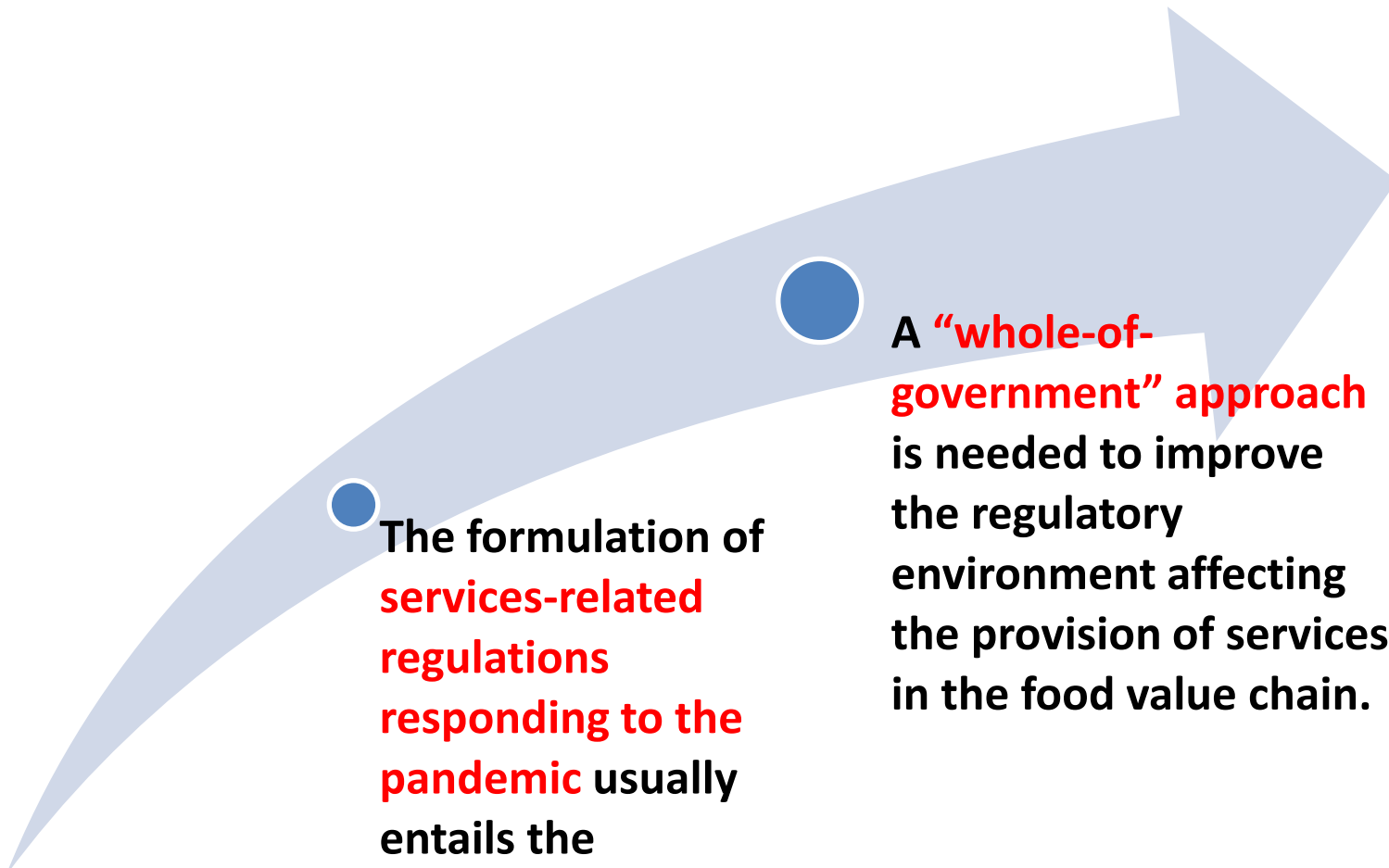
- SPS procedures require that the quarantine and vapor heat treatment be overseen by the Japanese inspectors before mangoes could be approved for export.
- This requirement cannot be met because of COVID-19 travel restrictions.
- The requirement was waived due to the COVID-19.



Export of Chinese Taipei mango to Japan (mt)



# Case 1 – Mango export to Japan



The formulation of **services-related regulations responding to the pandemic** usually entails the participation of several agencies

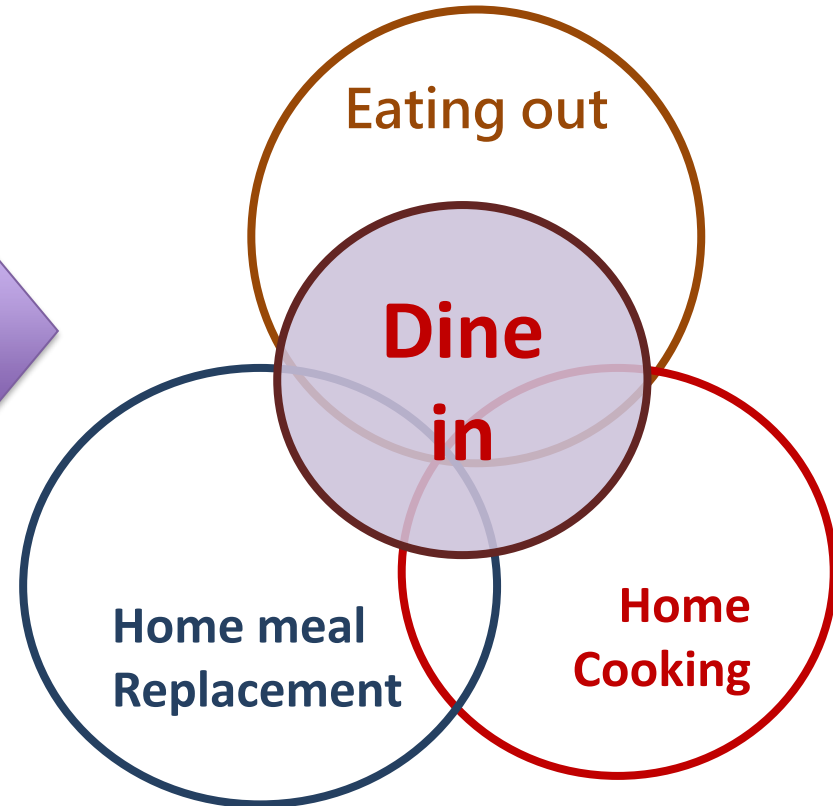
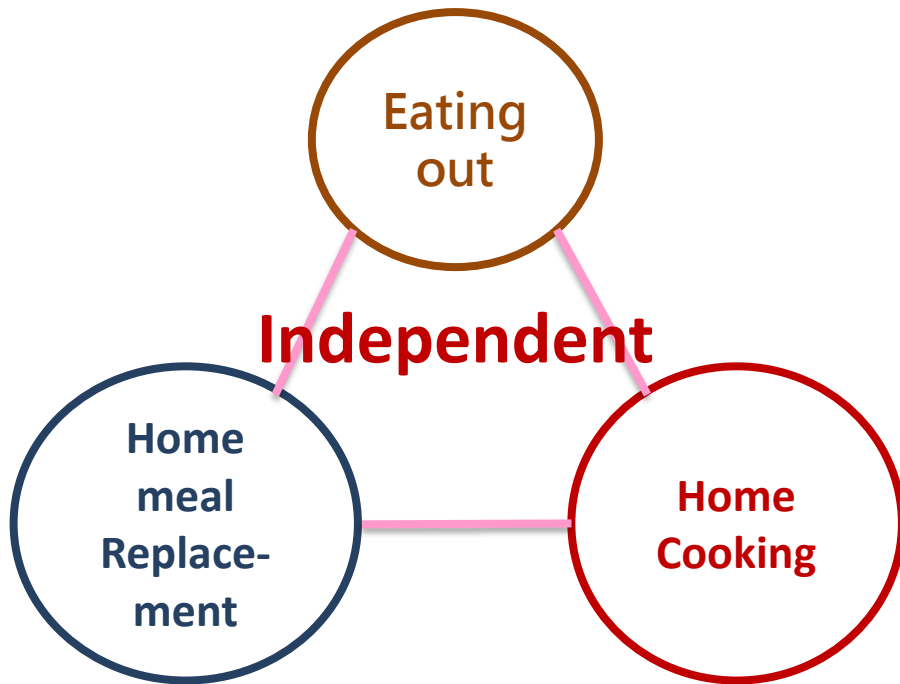
A **“whole-of-government”** approach is needed to improve the regulatory environment affecting the provision of services in the food value chain.



# Case 2- Changes in consumers behavior

Before COVID-19

New Normal



# Case 2- Marketing Strategy for New Normal

## Before COVID-19

- Eating at office or moving

- Limited time
- Limited space
- Limited budget



(One-size-fit-all)



## New Normal

- Eating at home, Free

- Varieties
- Quality
- Functional-Health



➔ Strengthen product lines in response to new consumer behaviors



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# Case 3- Bundled services provided by e-commerce

- E-commerce diffusion was accelerated by the disease (SARS, COVID-19)
- **Reardon et al (2021):** A key strategy is **“bundling” complementary services** to address constraints facing consumers and making their offer more attractive.
  - Introducing **finance platforms** to secure online payments for both suppliers and consumers for financial transactions
  - Both e-commerce firms and supermarket chains adding **home delivery** after an internet transaction - Highly dependent on **logistics**.





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<https://www.foodpanda.com.tw/en/?r=1>



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<https://www.taipeitimes.com/News/biz/archives/2020/09/19/2003743674>

# COVID-19 Stimulate the Demand for Online Food Shopping Services

## Chang and Meyerhoefer (2021)

- **Data:** the largest agri-food e-commerce platform in Chinese Taipei.
- **Main Findings:**
  1. An additional confirmed case of COVID-19 increased sales by **5.7%** and the number of customers by **4.9%**.
  2. The demand for **grains, fresh fruit & vegetables, frozen foods** increased the most, which benefited small farms over agribusinesses.
  3. Online food shopping was highly responsive to COVID-19 media coverage and online content.
- **WHY?** Chinese Taipei did not impose a stay-at-home order.



Source:

Chang H.H. and Meyerhoefer, 2021. "COVID-19 and the Demand for Online Food Shopping Services: Empirical Evidence from Chinese Taipei," *American Journal of Agricultural Economics*, forthcoming.

# Concluding Remarks

1. Promote **public-private partnerships** and **investments in ICT-related infrastructure** to improve food security and resilience in the food system.
2. Implement targeted measures to **assist workers** along the food value chain, especially in the affected industries and areas with vulnerable populations.
3. Encourage the acceptance of **Electronic Phytosanitary Certification** to minimize the pandemic's impacts without compromising food safety and quarantine-related considerations.
4. Promote **e-commerce** and **bundled services** as well as partnering with **retail SMEs** and **delivery intermediaries**.

Sources:

Hredzak, 2020. Food Security Response Measures to COVID-19, APEC PSU, Policy Brief No. 36.  
Pasadilla and Liu, 2018. Services and the Food System, APEC PSU, Policy Brief No. 21.



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**Thanks for Your Attention  
Comments are Welcome**

