

【Letter】

Supply Instability of Low-Priced Products amid the COVID-19 Pandemic

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1. Introduction

According to the monthly reports of the Family Income and Expenditure Survey, the ordinary incomes of workers' households have been stagnant or on the decline amid the COVID-19 pandemic. In particular, there has been a drop in the ordinary incomes of laborers' households starting from the second half of 2020, and this has made a significant dent in the budgets of these households. However, it is likely that the rise in prices of daily necessities due to consumer panic buying, rather than the reduction in income, had a major influence on household finances at the beginning of the spread of COVID-19. The escalating prices of daily necessities would markedly impact low-income families in particular.

With regard to the impact of COVID-19 on consumers' lives, the Consumer Co-operative Institute of Japan has published two studies in the Review of Consumer Co-operative Studies. One was released in the December 2020 issue (Vol. 539) with the title, "COVID-19 and Consumers' Everyday Lives," and another, in the July 2021 issue (Vol. 546) with the title, "Changes in People's Eating Habits before and after the COVID-19 Pandemic." These studies, however, offered little analysis from the perspective of consumer panic buying.

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For example, in the December 2020 issue, Kitahama (2020) touched on the panic buying phenomenon that emerged from public confusion as well as abrupt changes in society, including temporary school closures, the postponement of the Olympics, the distribution of face masks by the government, and the Go To Travel campaign. That said, the central theme of Kitahama's article (2020) was how marketing should be conducted in a way that considers consumer needs and preferences in the midst of such a confusion.

In addition, Miyazaki (2020) used family income and expenditure surveys to compile a list of items for which spending increased, as well as those for which spending decreased, during the period spanning from January through September 2020 as compared with the same period of the previous year. He pointed out that there might have been a stockpile demand for the items for which spending increased. Still, Miyazaki (2020) focused on the issue of suppressed consumption due to the consumption tax hike, followed by the COVID-19 shock.

Other than those, the December 2020 issue also featured articles by Ogata (2020) , whose theme was the deterioration of the employment situation, by Arai (2020) , who wrote on the subject of the lowered social participation status of elderly people, and Nakamura (2020) , who expanded on the subject of co-op home delivery usage situation.

In the case of the July 2021 issue, Kawasaki (2021) analyzed the trend of “*sugomori* (nesting) consumption” based on POS data from Co-op Sapporo, which indicated that, after a state of emergency was declared in Hokkaido, the sales of staple foods etc. increased, and that meat in the relatively low-price range was purchased more than meat in the high price range. However, this analysis did not include paper products, which were important targets of panic buying, and the main topic of Kawasaki (2021) was how best to develop co-op businesses for people who now spend more time at home.

In addition, based on family income and expenditure surveys, Shigekawa (2021) pointed out that, with the “nesting” demand, the consumption of raw food products for cooking at home has increased, whereas the demand for food services has decreased. Moreover, it was pointed out that the amount of spending on noodles and flour increased during the time when the panic buying phenomenon made the news, and that

the amount of low-unit-price meat purchased increased since the beginning of the COVID-19 pandemic. There was mention of panic buying, but the subject matter focused on by Shigekawa (2021) was the behavior of consumers trying to keep their spending down.

Articles published in the July 2021 issue also included a report by Miyazaki (2021), who examined the characteristics of households that utilized co-op home delivery, as well as a report by Nakamura (2021), who investigated the degree of satisfaction for co-op home delivery and the usage situation of this delivery.

Taken together, there have been some discussions that touched on panic buying under the COVID-19 pandemic as well as the “nesting” demand and reduced spending. However, only a few of those articles have examined these topics from the perspective of their effects on low-income households due to destabilization of the stable supply system for daily necessities, by following up on the actual shortage of goods caused by the panic buying phenomenon.

On the other hand, much research has been conducted on panic buying of daily necessities in times of disaster. For example, Hirose (1985) suggested, as one of the reasons why buying up of toilet papers preceded the events of panic buying of other products during the oil crisis, the fact that “some supermarkets were selling toilet paper at a considerably lower price than its market price, and in smaller amounts, as their eye-catcher.” (Hirose 1985: p. 46). In addition, he sorted out the information by dividing the progression of panic buying into the early, middle, and late stages, stating that although “the motivation of the early and mid-stage panic buying groups was to buy in large amounts low-priced items before their prices are raised, and to secure profits from differences in prices,” the motivation of the late-stage panic buying group was “of defensive nature, as in safeguarding one’s daily lives, to secure the necessary amount of goods in the event of actual shortage” (Hirose 1985: p. 50). As such, Hirose (1985) investigated what behaviors were common among price-conscious consumers, and to what extent low-priced products were supplied in response to such price consciousness - the presence of these perspectives is characteristic of his argument.

In addition, Ohtomo and Hirose (2014) analyzed the panic buying phenomenon that occurred after the Great East Japan Earthquake using a questionnaire on 10 items. Their analysis of purchase behaviors after the Great East Japan Earthquake revealed

that people who stocked up on goods immediately after the earthquake disaster continued to engage in this buying behavior subsequently, suggesting the importance of early interventions to prevent people from purchasing in excess to stock up (Ohtomo and Hirose 2014: p. 564) . However, they did not mention the degree of necessity of these 10 items in daily life or the differences in purchase behavior depending on the price range or occupation.

Matsumoto, Hayashi, & Tatsuki (2011) also analyzed the panic buying by people at the time of the Great East Japan Earthquake from the perspective of its relevance to social capital using a questionnaire survey. They analyzed food products purchased that were categorized into groups, such as “emergency food” and “instant/retort food,” but they did not analyze from the perspective of the price range. Moreover, due to the reason, “which item was subjected to change in purchase amount differs from individual to individual” (Matsumoto, Hayashi, & Tatsuki 2011: p. 468) , the degree of panic of people stocking up on goods was grasped by the sum of “spending amounts” and thus, the characteristics of stocking up by product are unclear.

Yamamoto, Oura, Morio, & Ono (2012) also analyzed the consumer behavior after the Great East Japan Earthquake using results from a questionnaire survey. The characteristic of this survey is that the proportion of households that procured 16 types of food products within one week after the earthquake (“procurement” includes purchasing as well as receiving “things that were given/provided”) was analyzed. The results of this analysis revealed that the “lifeline effect” as well as “planned blackouts” were factors that promoted the procurement of drinking water, rice, instant noodles in cups, etc., and that the number of household members was a factor that promoted the procurement of many food items (Yamamoto, Oura, Morio, & Ono 2012: p. 81) . However, the price range of products for which procurement was promoted was not clarified. Furthermore, although the effect of annual income as an explanatory variable was also estimated, there was no mention of the results of this estimation.

In the meantime, if we go way back in time and look at the history of “turmoil” of consumers stemming from the shortage of daily necessities, there appear incidents of postwar food crisis and rice riots.

Among the rice riots that had occurred, the 1918 rice riot that spread across the country has been the subject of numerous studies. For example, regarding the socio-

economic class of people who participated in the riot, Masujima pointed out that “the majority of riot participants were lower-class working men and women in small and medium-sized cities” (Masujima 1957: p. 95) . Nakasuji classified the forms of rice riots in Tokyo into “forcing price cutting,” “stoning windows” of retail stores in downtown areas, and “stoning the façade” of public institutions related to rice prices, and categorized the main actors responsible for each form of rice riots into the indigent, live-in clerks and mechanics, and live-out clerks and mechanics (Nakasuji 1993: p. 4) . Through these analyses, Nakasuji identified the “multilayered symbiosis of three kinds of people’s lives” with varying levels of hardship, although all were from the low-income class, in the context of rice riots (Nakasuji 1993: p. 7) .

As described above, studies on the 1918 rice riot consciously associated consumer behavior with low income, with the awareness that there were different levels of hardship among low-income people, and that their behaviors differed depending on the level of hardship. On the other hand, in studies on panic buying during the “oil shock,” there was less focus on the class structure of price-conscious consumers, although the association of consumer behavior with price consciousness (in the background is the presence of low-income households that demand price cutting) was also addressed. Furthermore, in studies on panic buying following the Great East Japan Earthquake, there was little awareness of the differences in consumer psychology by income bracket.

However, as mentioned at the beginning of this paper, household income has been hovering near the bottom in recent years. Therefore, this study examined the panic buying phenomenon in the face of the spread of COVID-19 from the perspective of an increase in the burden on low-income families.

2. Methods

The materials used in this study are as follows.

First, records of in-store observation are used to grasp the trend of panic buying. The targeted stores of in-store observation were general supermarkets and drugstores, which are the main suppliers of daily necessities that consumers buy almost every day. Also, given the necessity to stop by every day to observe changes, stores near the author’s residence were selected. Although there is also a regional supermarket near

the author's residence, this store was excluded, as it is mainly stocked with food items and is not the primary supplier of paper products, which are important targets of panic buying for consumers, and given the difficulty of conducting observations due to its early closing time.

In addition, since the observed stores were limited in terms of the region, it is unclear as to whether the trend of panic buying reflects that of the whole country. Therefore, press stories such as newspaper articles regarding panic buying were used to supplement nationwide changes.

Next, press stories such as newspaper articles and posted comments on these reports on the Internet were used to gain better grasp on the decrease in the demand for high-priced products and collapsing of their prices while panic buying of daily necessities was happening, and at the same time to understand how such price collapsing was perceived by consumers. Also, to confirm the nature of these reports and comments by numerical values, changes in the prices of high-priced meat and low-priced meat were compared using market information from the meat wholesale market.

Before I embarked on my concrete examination of panic buying, I checked the price trends of daily necessities in recent years according to changes in the Consumer Price Index (CPI) .

The 2015-base CPI for all items started to increase from 95.9 around March 2013 to 102.3 in December 2019. The CPI for food also began to rise from 93.0 around July 2013, reaching 105.2 in December 2019.

By item as well, the CPIs for rice, including non-glutinous rice-A (koshihikari) and non-glutinous rice-B (non-blended rice other than koshihikari) , which had been on the decline since around the end of 2012, rebounded after reaching their lowest in August 2015 (98.7 and 98.0, respectively) , reaching 112.6 for non-glutinous rice-A and 118.0 for non-glutinous rice-B as of December 2019. That period likely corresponds to the time when there was an increase in the price of non-glutinous rice-B, which, until then, could be purchased at a relatively low cost, and this had narrowed the choices of “inexpensive non-blended rice” for consumers. Similarly, prices have been continuously rising since around May 2013 for wheat flour; around March 2014 for spaghetti and instant noodles in cups; around the summer of 2013 for fresh fish and seafood (e.g., tuna, salmon, mackerel, and yellowtail) ; around the fall to winter of 2013 for meat; around the winter

of 2013 for toilet paper; and around the spring of 2013 for facial tissue.

The panic buying phenomenon at the beginning of the spread of COVID-19 occurred against this backdrop, during the increasing trend of prices of daily necessities continuing even before that time.

However, these increases in CPI do not directly reflect increases in purchase unit prices for consumers. The CPI, in principle, is generated from data in the report on the “Retail Price Survey (trend survey) ,” which surveys retail prices at surveyed stores on a specified day, e.g., “a Wednesday, Thursday, or Friday of the week that includes the 12th day of each month.” However, consumers do not necessarily visit a store on a fixed day of the week to shop certain items, and in fact, it is often the case that, after looking at flyers, they go to stores and browse through products, while also paying attention to clearance goods, to “make purchases at the bottom price.” Therefore, it is highly likely that the actual purchase unit prices for consumers are lower than the prices surveyed by the investigators.

To look at this point further, we compared the CPI (2015-base) with the item-by-item purchase unit price as listed in the monthly reports of the Family Income and Expenditure Survey during the period spanning December 2019, that is, immediately before COVID-19 related issues started to become a topic of concern in Japan, through May 2020. For ease of comparison, the CPIs for each month are presented as values relative to the CPI of December 2019 set to 100. Similarly, purchase unit prices are presented as indices, with the unit price of December 2019 set to 100. The results of comparison between the two indices are shown in Table 1.

The shaded cells show items whose magnitude of increase in purchase unit prices was larger than that in the CPI, indicating that “consumers started to buy brands with higher price tags.” This could either mean that “consumers indulged in luxury more than before,” or that “they had no choice but to buy more expensive things because nothing cheaper was sold.” Wheat flour and instant noodles in cups, which were bought up when panic buying occurred, likely belong to the latter, and this is considered to have imposed a burden on low-income families.

The cells in gray show items whose magnitude of increase in purchase unit prices was smaller than that in the CPI, which means that “consumers started to pick and buy brands with lower price tags,” or that “they had no choice but to buy cheaper things,

Table 1. Relationship between Consumer Price Index (CPI) and purchase unit prices in the monthly reports of the Family Income and Expenditure Survey

		CPI for May when CPI for December is set to 100		
		Increased	No change	Decreased
Index of purchase unit price for December is set to 100	Increased relative to CPI	wheat flour, radish, margarine		
	Increased	pasta, pork, cabbage, carrot, apple, shirts	Chinese noodle, instant noodles in cups, milk, sugar, green tea, coffee, <i>shochu</i> , distilled spirit, wine, women's stockings, umbrella	
	No change		edible oil	egg
	Decreased	tea, blouses, handbags	rice, bread, salmon, mackerel, beef, chicken, ham, sausage, bacon, tofu, sake, beer, whiskey, women's socks	
	Decreased relative to CPI			tuna, sea bream, yellowtail, onion, gasoline, strawberry, men's socks

Source: Ministry of Internal Affairs and Communications monthly reports of the "Family Income and Expenditure Survey," and Ministry of Internal Affairs and Communications "2015-Base Consumer Price Index."

Note: "No change" when indices are 99.0-101.0.

because even though they wanted to buy the more expensive brand, that brand was not sold." Beef, tuna, sea bream, etc. are considered to belong to the former. With respect to rice and pasta, as discussed in the next section, there is a tendency that "cheaper products are bought up first," and this kind of consumer behavior is thought to have had a certain effect. That said, given that the supply of low-cost items during the buying-up process was not necessarily stable, it is possible that some consumers had to purchase more expensive items. For such consumers that had no choice but to buy more expensive things, the burden of such purchase would have been considerable.

3. Results

1) Buying up of low-priced daily necessities

Panic buying occurred in the early days of the spread of COVID-19. Panic buying had also previously occurred, such as that triggered by the oil crisis in 1973 and that in the aftermath of the Great East Japan Earthquake. The panic buying observed this time differed from those after the Great East Japan Earthquake. There were repeated

occurrences of supply shortage in stores followed by easing to a certain extent. Through such repeated occurrences, I was able to see at individual stages the kinds of things consumers were buying up and the purchase timing. At the risk of being redundant, I will begin by describing how consumers behaved during such “waves” of panic buying, focusing on situations at a retail store in a city in Kanagawa Prefecture (hereinafter, “the Kanagawa retail store”) . I will also cite information from newspapers and other sources to supplement my records.

The first wave of panic buying began when people started buying up toilet paper. In Kumamoto City, a false rumor spread through SNS that “there will be a shortage of toilet paper, as materials used for masks and toilet paper are the same.” As a result, toilet paper disappeared from stores, and this buying-up behavior expanded to all paper products, from tissue paper and kitchen paper to sanitary products.

As for the newspaper coverage at the time, an article published at 9:44 on February 28, 2020 reported, “the panic buying phenomenon appears to be occurring only in Kumamoto City and nowhere else in the country, which has had industry groups quite puzzled as to why¹⁾.” However, an Asahi Shimbun article delivered at 21:00 on the same day reported, “on the afternoon of the 28th, a notice was placed at the front of a drug store in Tokyo, which read, ‘Toilet paper/tissue paper are all sold out.’” and “Soon after the store opened at 7:30, 20 people lined up at two cash registers, and all of the 80 packs of toilet paper and 120 packs of tissue paper that the store had stocked up for this coming weekend were immediately sold out²⁾.”

These reports indicate that the panic buying phenomenon that started in Kumamoto on the 27th spread to the whole country by the next morning. It was also around this time that face masks and toilet paper began to be resold at high prices on the Internet.

Toilet paper reappeared at the Kanagawa retail store around March 5. One reason for this may be that Mercari, a marketplace app, released a statement that it would restrict people from putting up toilet paper and tissue paper for sale on its website as of March 3, and this was followed by other Internet auction websites imposing restrictions on the sales of toilet paper/tissue paper at auction sites, thereby putting a brake on the buying-up attempts for the purpose of making profits from resale. Another factor that might have eased the supply and demand balance is that a round of toilet paper stockpiling by households had been completed for the time being. At that time,

however, toilet paper sold at the Kanagawa retail store had price tags of 300-400 yen for a pack of 12 rolls (50–60 m) , and the supply of products in the 200-yen range was still very unstable.

In the Chat Plaza of the Women's Park operated by Benesse Corp., there was a thread dated March 5, titled "*Relieved that toilet paper is now 398 yen*" ³⁾ , which included the following comment: "Ito-Yokado and 7-ELEVEN also sell them at 398 yen!" To this comment, someone posted, "Toilet paper was sold at a stable price, but not at the price I usually purchase, so I came back home without buying it. ... My family hasn't run out of toilet paper stock yet." Accordingly, this person had a stockpile of toilet paper at home and was waiting for the price to go down to the usual purchase price. Also in the same thread, there was another post that read, "stores have toilet paper rolls in the morning, but it is rare for them to still be there by the time evening comes," suggesting that the supply was still unstable then. Furthermore, someone posted a comment, "the supermarket in my neighborhood only had about four of those higher-priced 8-roll packs left," and so it appears that stores did have some higher-priced toilet paper in stock. After that, it was not until mid-March that toilet paper rolls in the lower price range finally started to reappear at the Kanagawa retail store, which was after the government announcement on March 10 (enforced on the 15th) regarding regulations prohibiting the reselling of face masks on the Internet.

In addition, at the Kanagawa retail store, in the heels of panic buying of paper products, rice and pasta, instant noodles in cups, frozen food, and processed meat products such as sausages—all are somewhat storable food items—were being bought up starting from February 28, which went on through the beginning of March. This was likely in response to the increases in household consumption due to school closure targeting all elementary, junior high, and high schools starting on March 2, which was requested by the Prime Minister on February 27, in addition to the increasing anxiety due to a rise in the number of infected people. Consequently, those items disappeared from stores.

After that, the supply of these food items gradually recovered, but the restoration of rice supply at the Kanagawa retail store, as was the case with toilet paper, first began with brands in the mid to high price range, such as those that cost 1,800-2,000 yen for 5 kg, and there was a delay in the stabilization of supply of those priced in a lower range

at 1,400-1,700 yen. When the panic buying phenomenon started to occur, people were buying up products at a high speed, and as all households rushed to secure their at-home stock, even items in the higher price range were sold out. As supply gradually stabilized, the buying-up behavior became less urgent, aiming at building stockpiles for future consumption well in advance; thus, things in the lower price range were first bought up. As a result, store stocks that were relatively stable were likely those in the mid to high price range.

Then, rice stocks at the Kanagawa retail store also began to recover, and by mid to the end of March, toilet paper at around 200 yen (for 12 rolls) , as well as rice at around 1,500 yen (for 5 kg) , were reappearing at the Kanagawa retail store. It appeared as if store supplies had been fully restored, but once again in the end of March, out-of-stock signs started to become noticeable. The second wave of panic buying was triggered by the government setting up a special task force on March 26 on the basis of the Act on Special Measures for Pandemic Influenza and New Infectious Diseases Preparedness and Response, as the number of infected people in metropolitan areas, including Tokyo, rapidly increased, and prefectural governments started demanding restrictions on going out. Again, at the Kanagawa retail store, rice, pasta, instant noodles in cups, processed meat products, and toilet paper disappeared. However, it is likely that people already had built up their at-home stock through repeated purchases since the time of the first wave of panic buying, so some stores occasionally had rice and toilet paper available. Even in such cases, however, it was rare that products in the lower price range (about 1,400-1,700 yen for 5 kg of rice, less than 200 yen per kg of pasta) were spotted at the storefront. However, the period when these products disappeared from store shelves was short at the Kanagawa retail store, and by April 4, store supplies were restored, including low-priced rice, pasta, and instant noodle in cups. As for toilet paper, however, store supplies for low-priced brands were not yet fully restored.

Next, the third wave of panic buying began sometime in the night of April 5 through the morning of April 6, when people started to speculate that the Prime Minister might decide to declare a state of emergency, as it was revealed the number of infected people in Tokyo exceeded 100 for two days straight, marking 147 as the highest number. An Asahi Shimbun article delivered at 17:55 on April 6 titled, "*Panic*

buying precedes the declaration of a state of emergency, stores plead, 'Please act calmly,'” reported the following: “Shops in Tokyo were crowded with customers from early in the morning. However, as things are now, the panic-buying behavior does not seem to be as bad as when the Tokyo Metropolitan Government issued a request to refrain from going out in the end of March⁴⁾.” In the early evening of April 6, the Prime Minister announced that the declaration of a state of emergency will be issued in the Tokyo metropolitan area and other areas starting from the 7th. The situation at the Kanagawa retail store as of the night of April 7 was such that, although there was plenty of rice in stock including low-priced brands, instant noodles in cups, pasta, chilled pizza, retort-pouch curry, bread, natto, and tissue paper were almost out of stock. As for toilet paper, only a few packs of 100% pulp 12-roll toilet paper manufactured by a popular major brand priced at around 400 yen remained.

Moreover, on April 9, the Governor of Tokyo made an announcement requesting that all stores voluntarily close from the 10th. As a general rule, living infrastructure such as supermarkets was categorized into facilities that could continue their business⁵⁾. However, the situation in the retail sector on the 10th was such that, while rice was still sufficient, some stores had run out of toilet paper, and even stores with stocks had only a few packs of higher-priced brands available. On the night of April 16, the declaration of a state of emergency was expanded to the entire country. Then, on April 19, while there were enough stocks of rice including lower-priced brands at the Kanagawa retail store, instant noodles in cups, pasta, tissue paper, toilet paper, and others were almost all sold out. For toilet paper in particular, even stores with stocks had only a few packs of higher-priced brands left⁶⁾.

Looking at the circumstances of these panic buying situations, store stocks of rice were tight at the beginning but became relatively stable thereafter. On the other hand, those of pasta, instant noodles in cups, and toilet paper were unstable, which lasted for a long time. This may be because working from home and suspension of classes increased the demand from households and decreased that from schools and businesses, but owing to differences in packing style and other factors, it was not easy to repurpose the items catered to schools and businesses for household use. Moreover, in addition to the long-term trend of excess rice supply, it is also possible that people might have already built up their at-home stock to the upper limit of expiration date after repeated

stockpiling, since the shelf life of rice, once refined, is not very long. In contrast, some pasta products sold at stores have an expiration date of 2-3 years from the date of purchase, whereas toilet paper has no expiration date. Hence, it is likely that consumers rushed to the store to buy up these items whenever they felt anxious, which in turn led to the very delayed stabilization of their store stocks.

Looking at the trends of panic buying for rice at the beginning, as well as those for toilet paper and pasta which persisted longer afterward, we can see that among these items, which are all daily necessities, those sold at a lower price especially had a more unstable store supply. Even in the midst of panic buying situations, relatively higher-priced brands remained unsold. Of course, even if they are sold at a higher price, people would have had no choice but to purchase them when they have used up all their stocks, since they are daily necessities. This is evident from the fact that, before restrictions were placed on people auctioning off toilet paper rolls on the Internet, auction websites had many items priced several times higher than the regular price. For example, nonwoven fabric face masks, which at pre-pandemic days were sold at around 500 yen per package of 50, were being sold at roughly 3,500 yen in April. That said, from the above observations of store stocks, we can see that the basic demand, when it comes to daily necessities, was for things sold at lower prices.

While there are many reports on panic buying itself, only a few reports noted that it was low-priced items that were bought up first. An Asahi Shimbun article delivered at 5:00 on April 22, *“No school lunch, struggling low-income household—To provide lunch for children, mothers skipped dinner and lost 4 kg,”* covered a story of single-parent households, reporting that when the Governor of Tokyo Yuriko Koike called for everyone to refrain from going out in the end of March, their finances were strained even more. Foods and daily necessities were bought up, and foods were sold out, starting with low-priced items⁷⁾.

Given these situations surrounding panic buying, we can understand the importance of establishing a stable supply mechanism for daily necessities, including foodstuffs. We have witnessed on several occasions (e.g., oil crisis, the Great East Japan Earthquake) how the stable supply of daily necessities could collapse so easily; but even with these previous experiences, we have not yet been able to build such a mechanism. Panic buying occurs not only in Japan but everywhere in the world in an almost similar

fashion. There is a need to establish a stable supply mechanism based on the premise that no matter how much we raise people's awareness of "building an at-home stock in preparation for a disaster" in peacetime and no matter how much we tell each other, "there is enough in stock" and "don't panic buy" in the event of a disaster, humans will always end up acting that way.

2) Price collapse of luxury food

While tightened supply and demand balances continued for daily necessities, prices of luxury goods that are, by no means, considered 'daily necessities' collapsed due to the loss of inbound consumption and people refraining from holding/attending events. This point can be summarized by sorting out opinions on the mass media and online, as follows.

A Yomiuri Shimbun article released at 19:15 on March 6, 2020 titled, "*A sharp decline in foreign visitors to Japan, people refraining from having dinner parties ... Prices of luxury food, such as wagyu beef, fall due to a decline in the eating-out demand,*" reported the following: "The average wholesale price for premium beef (A4 rank) at the Tokyo Metropolitan Central Wholesale Meat Market in late February was 2,026 yen per kilogram, which is roughly 19% lower than in the previous year." "The wholesale price for bluefin tuna from February 21 through 27 in the medium price range was 4,134 yen per kilogram, which is 27% lower than in the previous year⁸⁾."

In addition, Asahi Shimbun released an article at 11:00 on March 21, 2020 titled, "*COVID-19 hits directly, prices of luxury food collapse - A big pile of unsold fatty tuna in stock,*" reported that "prices of crabs, bluefin tuna, and wagyu beef dropped by 20% to almost 50%," and that "while it is a predicament for producers, it is a good chance for consumers to easily enjoy food that is usually unaffordable in the comfort of their homes⁹⁾."

In dealing with the mounting stocks and falling prices, initiatives to secure new sales channels, rather than resorting to disposal, were also reported, such as holding "sales" so that consumers, who do not go out as much any longer, could enjoy luxury food at home. For example, the Nihon Keizai Shimbun distributed an article at 12:44 on March 18, 2020 titled, "*Premium seafood at supermarkets—AEON holds a sale, low prices due to COVID-19.*" According to this report, owing to the effects of the new

coronavirus, “not only the demand for food services but also exports to China went down, and prices of premium seafood have fallen sharply,” and because of this, major supermarkets are holding a “cheering-up sale” of premium seafood, where “sea urchins are sold at 3,980 yen (tax excluded) , as compared with the normal price that is almost twice as high¹⁰⁾ .”

The coverage of these movements by the mass media was generally positive; for example, an article on STV News Hokkaido at 19:43 on March 27 titled, “*Remarkable deal on salmon roe bowl lunch, as well as steak—Prices of luxury food drop across the board—Sapporo (Hokkaido)* ,” reported the voices of supermarket users, including comments such as “We are so happy. We can eat things we normally can’t have¹¹⁾ .” An article on FNN PRIME at 13:30 on March 28 titled, “*Supply turnover is stagnant due to decreased demands for food services ... with consumption at restaurants down, supermarkets stock up ‘luxury food’ for a sale,*” reported a story of “a man who bought a black sea bream,” which reads, “Sashimi and salt-grilled fish. I am going to enjoy this luxury¹²⁾ .”

On the other hand, comments posted on “Yahoo! News” suggest that these discount sales of luxury food were surprisingly unpopular. There are, however, unfavorable images of people who post negative comments on “Yahoo! News,” such as, “they only complain.” Indeed, it is certainly true that those comments are “a mixture of wheat and chaff,” with inappropriate expressions and irrelevant remarks here and there, as you can see from the top five comments posted for the article “*Two cloth face masks each will be distributed to all households—the Prime Minister announces,*” from “Nippon TV NEWS24” on April 1 at 18:49, which led the top comment ranking as of 10:30 a.m. on April 2, 2020 (listed in the ‘recommended’ order, excluding the authors’ comments) . That said, at least the comments listed below (numbers indicate the ranking, and parts of comments are omitted but expressions are unchanged) are not necessarily unfair ‘complaints’ : (1) “To prepare for the shipment, the efforts, the shipping costs, and the time—all is a waste; aren’t there other things to do?” ; (2) “Please do something more beneficial with the same amount of money. If you want to distribute cloth masks, please do it for only those who want them” ; (5) “I wonder what a household of three or more family members would do.” Moreover, even if those are the opinions of “people who only complain,” we can grasp the fact that there are a certain number of people who

are “dissatisfied.”

Now, with the understanding that Yahoo comments have these characteristics, let us see what comments were posted to the news stories regarding luxury food discount sales and others. Below I examine the posted comments on seven news articles (all digital versions, the date of browsing is March 31) .

Article A [Diamond Online] March 16 at 6:05 “*Toyosu personnel express grief, ‘It’s worse than the World Financial Crisis’—premium fish lingers on the market due to COVID-19*”

Articles B [HTB News] March 18 at 18:51 “*Why luxury food significantly falls in price?*”

Article C [Asahi Shimbun] March 19 at 6:30 “*AEON holds a ‘premium seafood sale,’ Declining demand due to COVID-19, prices fall*”

Article D [Asahi Shimbun] March 21 at 11:00 “*COVID-19 hits directly, prices of luxury food collapse—A big pile of unsold fatty tuna in stock*”

Article E [STV News Hokkaido] March 27 at 19:43 “*Remarkable deal on salmon roe bowl lunch, as well as steak—Prices of luxury food drop across the board—Sapporo (Hokkaido)*”

Article F [FNNPRIME online] March 28 at 13:30 “*Supply turnover is stagnant due to decreased demands for food services ... with consumption at restaurants down, supermarkets stock up ‘luxury food’ for a sale*”

Among the posted comments on these news articles, those that are related to consumption behavior can be categorized mainly into the groups shown in Table 2. Letters A-F at the end of each comment correspond to Articles A-F in the above.

As shown above, in the comment sections, there were not only opinions that perceived the news to be something positive, as in those reported by the mass media, but also other various opinions presented, with many saying that luxury foods are still unaffordable even if prices go down, and that the domestic market should be valued more, focusing on the supply of food that average people can eat. In addition, comments that were not cited here, which contained harsh language that was too strong for me to directly quote, included many that were disapproving of the fact that luxury food had been traded at such high prices. Those opinions, together with cases of rice and toilet paper presented as examples in the beginning of this paper, suggest the importance of

Table 2. Yahoo comments on news reports on luxury item discount sales

Gist of comments	Specific examples of comments
Prices have been set for inbound tourists, becoming unreachable for the Japanese (locals) . People have got used to leading their daily lives without having luxury food on their tables, with an increasing tendency to be detached from luxury food, since, after all, it is not daily necessities.	<ul style="list-style-type: none"> - In the first place, standard fish in our meals has always been horse mackerel, saury, sardine, and such. Things have just got too extravagant, perhaps? (A) - I don't think people in Hokkaido have the opportunity to eat crabs in their daily lives. Only tourists eat crabs. (B)
The domestic market should be valued more, focusing on the supply of items that Japanese people can easily afford and eat and setting prices accordingly.	<ul style="list-style-type: none"> - I hope we will have our normal daily lives back, in which even ordinary Japanese people can eat decent crabs, tuna fish, scallops, and eels on celebrative occasions. (D) - I don't care about premium food or non-essential food. Daily food and daily necessities are important. (E)
Opinions similar to mass media reports: We want to seize this opportunity to purchase luxury food so that we can enjoy a little luxury at home, and there should be demand if prices are lowered	<ul style="list-style-type: none"> - When I went to a supermarket, I saw luxury seafood like sea bream, abalone, and Japanese spiny lobster being sold at such low prices, which is impossible in normal times. Thankfully, I was able to indulge in luxury at a reasonable cost. (A) - Please sell them cheap. Customers will definitely come. This is a big chance to buy stuff you can't easily buy in normal times! (D)
The lowered prices have just returned to what they should be.	<ul style="list-style-type: none"> - I think they've just been too expensive; prices now have come down to be reasonable. (A) - No Hokkaido residents would pay that much money for crabs and salmon roe. It should be viewed as prices having finally become reasonable. (D)
We won't buy them because it doesn't feel like the prices have come down so much.	<ul style="list-style-type: none"> - A 4,500-yen hair crab... Even if they say it got cheaper, I don't think I'll buy it. Hairy crabs are delicious, and I used to buy them at places like a supermarket when they were sold cheap, but it's not something I want to pay several thousand yen to eat. (B) - Prices haven't come down that much at supermarkets. Aren't the original prices high? (D)
If prices are lower now, luxury food, which are originally high-priced, are still not affordable for us; it is still not something anyone can buy just because the price has fallen.	<ul style="list-style-type: none"> - I have no confidence to buy fresh fish at this price. (C) - Just because something I don't normally get to eat becomes a little cheaper, it's still expensive so I can't afford it. (F)
Producers will be in trouble if the prices go down.	<ul style="list-style-type: none"> - Drastic cuts in the price—that's unthinkable! Fishers won't be able to go fishing if the prices go down even further! (B) - In the spirit of helping each other, I might consider buying just one of them. (C)

Source: Prepared from Yahoo comments on March 31, 2020

supplying daily necessities for average people living in Japan at prices that they can afford and the fact that the demand for luxury goods is difficult to predict (matter of chance) . We can also grasp the ‘annoyance’ and sense of resentment toward the luxury goods market among people who could not participate in the buying and selling of luxury goods (i.e., average people who have been left out of so-called “luxury seekers”) .

3) “Luxury” versus “average” from the perspective of transaction trends in the meat wholesale market

In the previous sections, I discussed the trends of panic buying and falling prices of luxury food based on the various news reports and comments, which are, in a sense, “perceptual” information. In the section that follows, I will present numbers, or price trends, taken from the “Poultry Market Information” (Tokyo) and “Meat Wholesale Market Survey” (Tokyo Central Wholesale Market) of the Ministry of Agriculture, Forestry and Fisheries to support the “perceptions” described in the preceding sections.

First, regarding chicken prices shown in Figs. 1 and 2, the price of chicken thighs (median price) in 2019—before the COVID-19 pandemic—was stable from early in the new year until the end of February, declined from the beginning of March over the summer, and then increased from fall to Christmas and toward the New Year’s holidays. In contrast to this, in 2020, the price was stable from early in the new year until mid-January, but then it started to fall. However, after it hit the bottom in late March, it started to rise again in April. Almost the same trend can be observed for chicken breast price (median price) ; in 2019, the price declined from early in the new year to the end of April, became stable at the bottom price thereafter, and then increased from late August until the end of the year. In 2020, the price fell from early in the new year until mid-March, hit the bottom, and turned upward in late April. In other words, in 2020, there was an increasing trend of price from April, which differed from the previous year. April was the time when protection measures at ports and airports (“quarantine policies”) against COVID-19 were strengthened, and the declaration of a state of emergency was issued, which were measures that led to the downsizing of inbound consumption and domestic economic activities. During this period, there was a

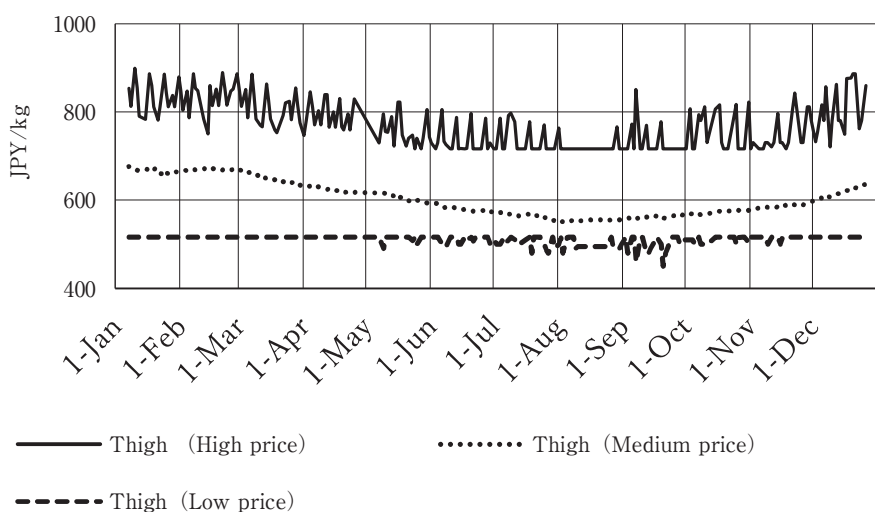


Fig. 1 Price of chicken thighs in 2019

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries, "Poultry Market Information"

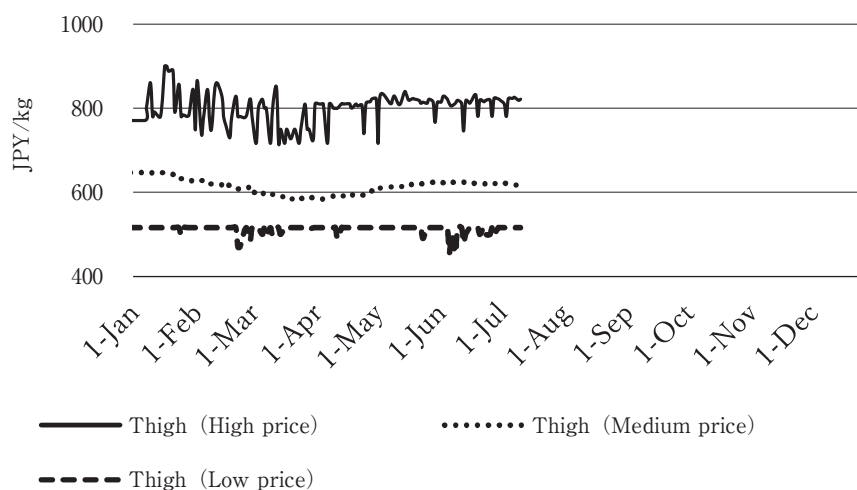


Fig. 2 Price of chicken thighs in 2020

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries, "Poultry Market Information"

rise in the market price for chicken.

Next, as shown in Figs. 3 and 4, the pork carcass price (average) was stable just after the New Year's holidays but fell from mid to late January in 2019. From late January to early February, the price kept rising and then plateaued, mostly from early February until the end of March. Thereafter, the price rose again until early June, fluctuated rather violently over the summer, and hit the year's high of 633 yen on August 20. In 2020 as well, trends were similar in that the price fell after the New Year's holidays, followed by a rise from the lowest in the end of January, as in 2019. However, in 2019, the price fell to the lowest on January 28 at 338 yen, and hit the highest on April 30 at 598 yen. In 2020, the lowest price of 306 yen was recorded on January 27, reaching 747 yen on April 28. In other words, the degree of price increase from around the time when China banned overseas package tours on January 27 was greater in 2020 than in 2019.

As described above, chicken and pork prices increased despite the shrinking inbound demand and economic activities, but for beef, a contrasting trend has been observed. Let us look at the changes in the market price of beef carcass for breeds/grades for which the number of livestock committed to packers was 50 or more for at least one day during the period between January and March 2020 (wagyu female/A5, wagyu female/A4, wagyu bullock/A5, wagyu bullock/A4, dairy cattle female/C1, crossbred cow/B3, crossbred bullock/B3) . As shown in Figs. 5 and 6, in 2019, the price of wagyu female/A5 was mostly stable throughout the year, although there was a cycle of being high on Mondays and low on other days, changing within the range of about 2,600-3,400 yen except in the end of the year. However, in 2020, while the price went up and down between 2,500 yen and 3,100 yen from early in the new year until March 2, starting from March 2 (Mon) to 6 (Fri) , it rapidly fell and reached the lowest price of 2,248 yen since January 6. Then, at the beginning of the following week on March 9 (Mon) , the 'Monday market' slightly turned around, but then a further fall began on March 10 (Tue) , dropping to 2,102 yen on the 13th (Fri) . The week of March 2 (Mon) followed the week of toilet paper panic buying, which occurred on February 28 (Fri) , after the announcement of the nationwide school closure on the 27th (Thu) . In other words, the sharp fall in the transaction price of wagyu occurred amid the sudden school closure and the phenomenon of panic buying of daily necessities. It was considered that

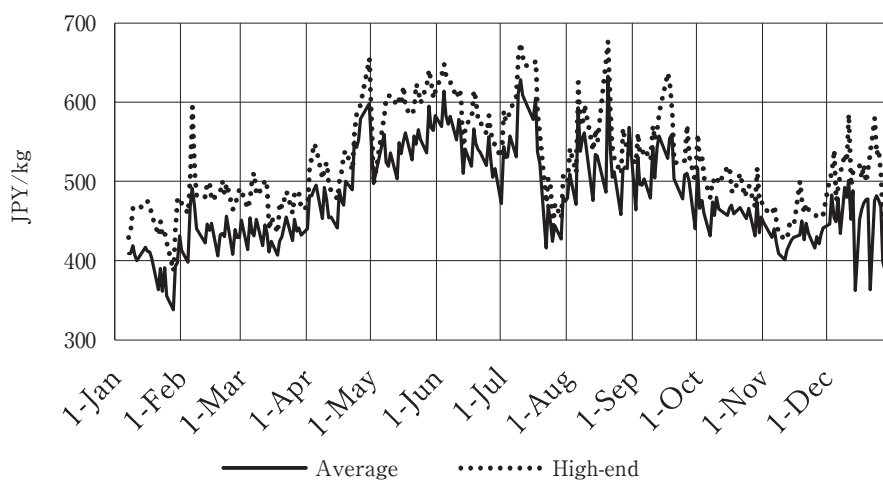


Fig. 3 Transaction price of pork carcass in 2019

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries "Meat Wholesale Market Survey (Daily) Pork" (for the meat market of the Tokyo Central Wholesale Market)

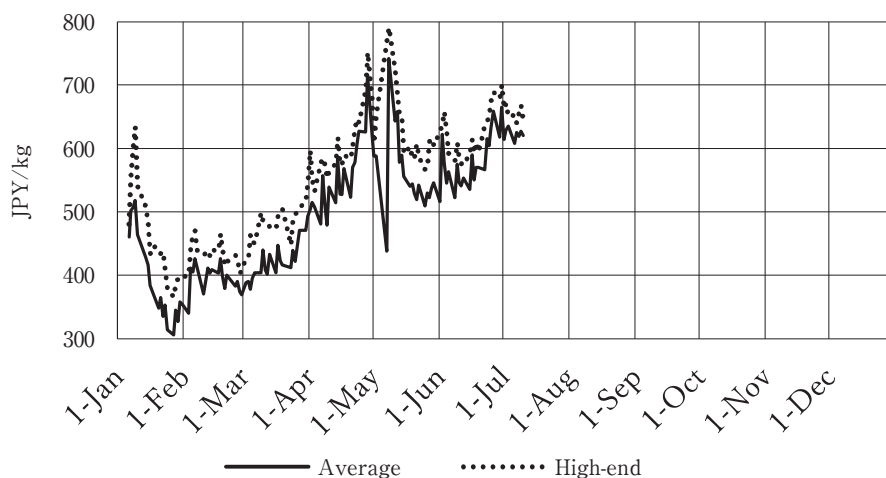


Fig. 4 Transaction price of pork carcass in 2020

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries "Meat Wholesale Market Survey (Daily) Pork" (for the meat market of the Tokyo Central Wholesale Market)

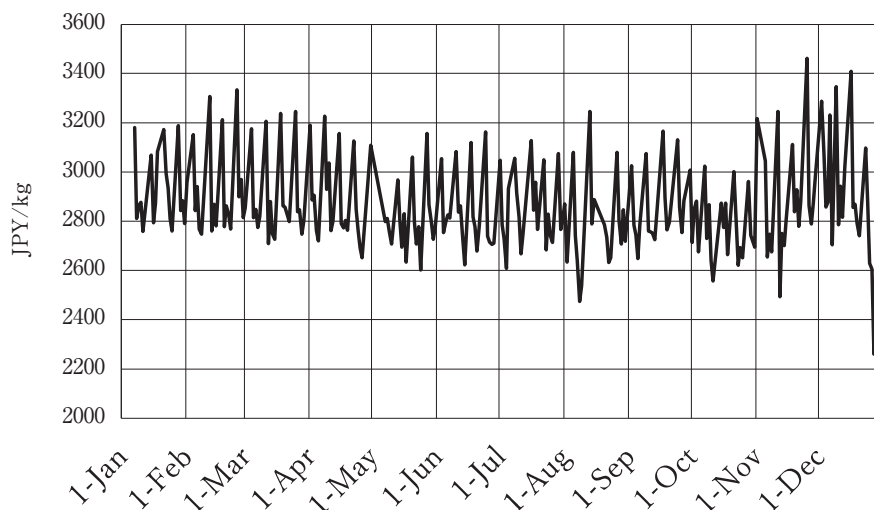


Fig. 5 Transaction price of wagyu female/A5 in 2019

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries "Meat Wholesale Market Survey (Daily) Beef" (for the meat market of the Tokyo Central Wholesale Market)

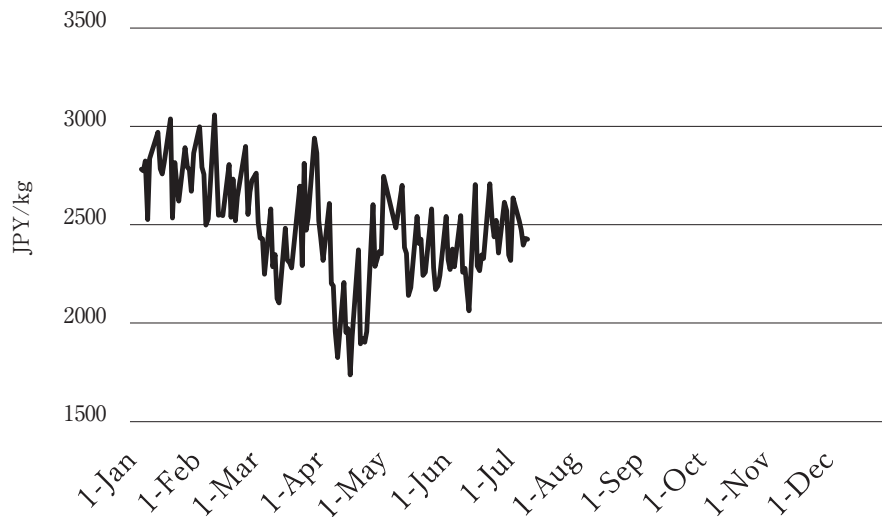


Fig. 6 Transaction price of wagyu female/A5 in 2020

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries "Meat Wholesale Market Survey (Daily) Beef" (for the meat market of the Tokyo Central Wholesale Market)

the decline in inbound market caused the fall of the wagyu transaction price. However, China, which was the major source of inbound tourism, banned overseas package tours on January 27, and Japan officially banned the entry into Japan from Hubei Province on February 1. On March 5, Japan placed restrictions on entry from China and South Korea (two weeks of waiting time at a designated location, put into practice on March 9) . Therefore, it can be considered that the sharp fall in the wagyu female/A5 market price from March 2 may be linked to the school closure and panic buying phenomenon, not the inbound restrictions.

The wagyu female/A5 market price was picking up, for the time being at least, after it had hit the bottom on March 13 (Fri) , reaching 2,940 yen on March 30 (Mon). However, the decline began again on the next day (the 31st) , which lasted until April 16 (1,739 yen) . This period corresponded to the time when the announcement was made on April 1 to include additional countries denied entry to Japan as part of the “new measures related to the strengthening of quarantine policies,” which might have an association with inbound tourism. Moreover, on April 6 the government announced that the declaration of a state of emergency would be issued (taking effect on April 8 at 0:00 am) . This declaration likely led to the rapid further drop in the transaction price of wagyu meat on April 6 and thereafter.

Similar changes in price were generally observed for wagyu female/A4, wagyu bullock/A5, wagyu bullock/A4, crossbred female/B3, and crossbred bullock/B3.

Note that a trade agreement between Japan and the United States came into effect on January 1, 2020, and tariff on beef produced in the United States was largely reduced from 38.5% to 26.6%, which is almost the same as that under Japan-Europe EPA/TPP. Although there was no competition with each other in terms of meat quality, there was still a possibility that this has had some impact on the price decline observed for crossbred beef from mid-January. However, although the TPP tariff had already been lowered to 26.6% in 2019, the price trends in 2020 greatly differed from those in 2019. This suggests that the price trends especially since late February were rooted in the decrease in consumption due to COVID-19, rather than tariffs. This decrease in consumption was most likely due to the decrease in consumption among people living in Japan, in addition to the decrease in the inbound demand, which was commonly observed for A5, A4, and B3, that is, market conditions for wagyu and crossbred beef

carcass responded sensitively to the declaration of a state of emergency and the panic buying phenomenon, which are deeply related to the consumption of Japanese residents, as well as the trends of entry restrictions, which are profoundly related to the inbound demand.

In contrast to this, the trend for dairy cattle female/C1, as shown in Figs. 7 and 8, was unique. In 2019, the price increased from early in the new year to the end of February, decreased from the end of February to the end of March, and increased from the end of March to the end of June, the month when the year's highest price was recorded. The trend in 2020 followed almost the same pattern, with the increasing trend maintained until late June. For dairy cattle female/C1, although it is said that their quality is competitive with frozen imported beef, there does not seem to be much impact from the lowered tariffs. Moreover, the price began to increase in the end of February, with no effects from the announcement of nationwide school closure on February 27, or the panic buying phenomenon revealed on February 28, which led to decreases in the transaction price for many wagyu and crossbred cattle beef.

In other words, the trends suggest that while the consumption of high-end foods such as wagyu and crossbred beef has declined since the phenomenon of panic buying, the prices of inexpensive beef (i.e., dairy cattle female), pork, and chicken went up, which means their supply and demand have become more stringent.

4. Discussion

The decrease in the consumption of high-priced meat and the increase in the price of low-priced meat are consistent with the course of panic buying incidents, in which items that are in the low-price range were bought up first, when it comes to products such as toilet paper, pasta, and rice.

In addition, it should be noted that the degree of price preference has been increasing from the long-term perspective as well. For example, according to the “consumer trend survey” by the Japan Finance Corporation, “domestic preference” in the “current food preference” has been on a decreasing trend since July 2017; the percentage of consumers responding that they “do not care” whether the food is produced in Japan when they purchase has been on an increasing trend since January 2018; that of people responding that they “do not care” whether ingredients were

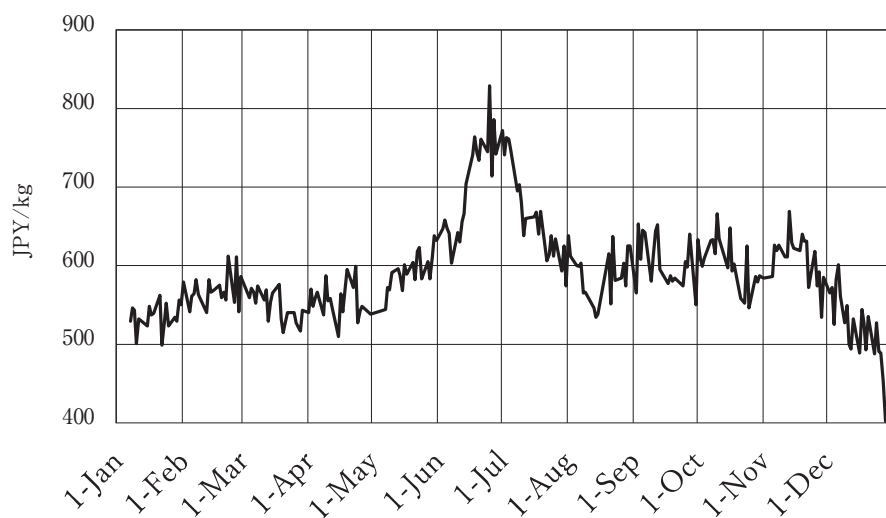


Fig. 7 The transaction price for dairy cattle female/C1 in 2019

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries "Meat Wholesale Market Survey (Daily) Beef" (for the meat market of the Tokyo Central Wholesale Market)

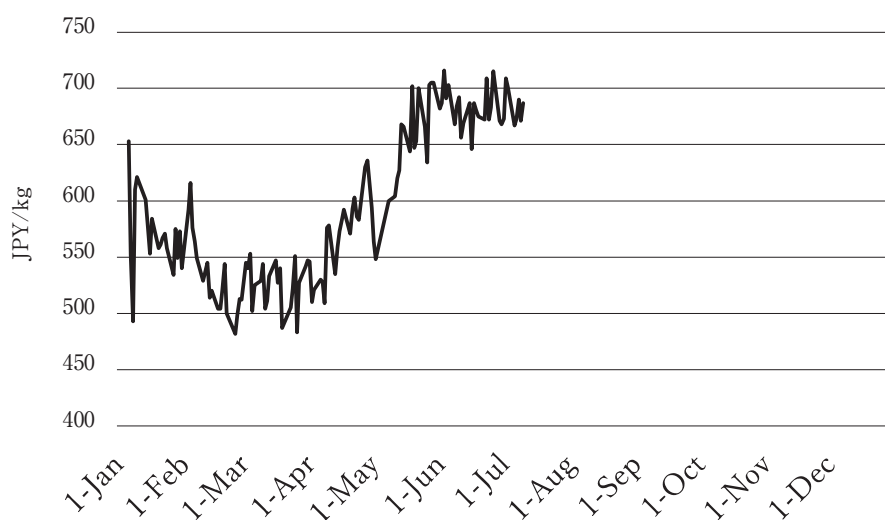


Fig. 8 Transaction price of dairy cattle female/C1 in 2020

Source: Created based on data from the Ministry of Agriculture, Forestry and Fisheries "Meat Wholesale Market Survey (Daily) Beef" (for the meat market of the Tokyo Central Wholesale Market)

produced in Japan when they eat out has been on an increasing trend since January 2016; and that of people responding that they would choose food produced in Japan even if the price is relatively high (i.e., in terms of tolerance to the price of imported food) has been on a decreasing trend since January 2017—as a whole, “domestic preference” has become weaker, whereas “price preference” has become stronger, since 2017. In other words, while the buying pattern of consumers to “buy up cheap things first” during the recent panic buying phenomenon emerged erratically and intensely due to the anxieties brought about by the shock of COVID-19 regarding the supply of daily necessities and people’s lives in the future, “price preference” was likely the underlying reason. The price preference of consumers and the rise in prices of low-end products with the spread of COVID-19 indicate that (1) the previous pattern of purchasing slightly higher priced products has shifted to purchasing lower-priced products due to income anxiety, and at the same time, (2) the burden on the finances of low-income households, which had been purchasing low-priced products, has increased. For example, families that have been purchasing wagyu beef can shift their consumption to crossbred beef, and families that have been purchasing crossbred beef can shift their consumption to dairy cattle beef or imported beef, or to pork and chicken; however, for families whose intake of animal protein has depended on dairy cattle beef or imported pork and chicken, it is difficult to shift to something else when the prices rise. They have no choice but to reduce the amount of consumption itself, reduce consumption of other low-priority goods, or dig into their savings, if they have any.

5. Conclusions

As such, it is inevitable that the rise in prices of daily necessities and the destabilization of supply with the spread of COVID-19 have greatly impacted low-income households. Moreover, these low-income households suffer from instability of employment per se, which must have significantly affected their income as well. In these households, the rising prices of essential goods will directly lead to the collapse of their incomes, which have been reduced even though their spending on daily necessities has been increased.

To prevent these problems from occurring, social security measures, such as

regulating employment and contract agreements to prevent employment instability, increasing the minimum wage, and raising the standard of public welfare, are essential. At the same time, measures to stabilize the supply of daily necessities such as food are also necessary. We cannot completely prevent the occurrence of new infectious diseases and natural disasters themselves. However, we should be able to create a mechanism that, when they do occur, destabilization of the supply of daily necessities can be prevented. The “just-in-time” system to improve efficiency makes such destabilization likely to occur when the volume of distribution/inventory decreases. The just-in-time system has increased efficiency by eliminating “superfluous inventory.” However, “superfluosness” might be just what we need to maintain stability in times of crisis. The Basic Plan for Food, Agriculture and Rural Areas requires producers, who are the initial point of distribution, and consumers, who are the end points, to build stocks to ensure a stable supply of food, but this is also part of the process of eliminating “superfluosness” in distribution. Families that can create home stocks are those with relatively higher incomes. However, for those who must think every time their payday approaches, “what should we eat today, will the rice last until payday?” there is not enough money to build their home stocks. In addition, in times of crisis, those who can rush to a store to buy up products, thinking, “I’m worried so let’s stock up a little more,” are families that have the “money to buy up.” Measures that rely on home stocks to ensure a stable supply cannot guarantee a stable food supply for low-income families. Of course, it might be true that “If you put your mind to it, water can be wrung even from a dry towel”¹³⁾. However, it is not always the case that one can “use their ingenuity” readily. No crisis would wait for us to “use our ingenuity.” To respond to a crisis, indeed, we need to have a “sufficiently wet towel” ready. We need to evaluate “superfluosness” once again.

Notes

- 1) Mainichi Shimbun “*A series of incidents of toilet paper panic buying - False rumor about the effect of COVID-19 - In Kumamoto*” February 28, 2020, 09:44 (last updated on February 29, 13:02) , <https://mainichi.jp/articles/20200228/k00/00m/040/055000c>, accessed on March 31, 2020
- 2) Asahi Shimbun Digital “*False rumor spreads, toilet paper disappeared - ‘Enough stocks’*” February 28, 2020, 21:00, <https://www.asahi.com/articles/ASN2X6CXLN2XULFA03L.html>, Accessed on March 31, 2020

- 3) “*Relieved that toilet paper is now 398 yen*” March 5, 2020, 17:52, https://women.benesse.ne.jp/forum/zboca040?CONTENTS_ID=t6lePWt6cl6smswswspXZOend4n3&MESSAGE_ID=408769&SEARCH=no&TARGETPAGE=2, accessed on March 31, 2020
- 4) Asahi Shimbun Digital “*Panic buying precedes the declaration of a state of emergency, stores plead, ‘Please act calmly’*” April 6, 2020, 17:55, <https://www.asahi.com/articles/ASN465SZ9N46ULFA029.html>, accessed on April 6, 2020
- 5) Tokyo Metropolis “Governor Koike ‘Governor’s Room’/Press interview,” updated on April 10, 2020, <https://www.metro.tokyo.lg.jp/tosei/governor/governor/kishakaiken/2020/04/10.html>, accessed on April 22, 2020
- 6) Note that fresh vegetables and fish are originally prone to large changes in price and store stock, and since it is difficult to judge whether changes in their retail prices are due to COVID-19, they are omitted from the detailed discussion in this paper.
- 7) Asahi Shimbun Digital “ (COVID-19) *No school lunch, struggling low-income households - To provide lunch for children, mother skipped dinner and lost 4 kg*” April 22, 2020, 5:00, <https://www.asahi.com/articles/DA3S14450897.html>, accessed on April 22, 2020
- 8) Yomiuri Shimbun Online “*A sharp decline in foreign visitors to Japan, people refraining from having dinner parties ... Prices of luxury food, such as wagyu beef, fall due to a decline in the eating-out demand*” March 6, 2020, 19:15, <https://www.yomiuri.co.jp/economy/20200306-OYT1T50211/>, accessed on March 31, 2020
- 9) Asahi Shimbun Digital “*Novel coronavirus hits directly, prices of luxury food collapse - A big pile of unsold fatty tuna in stock*” March 21, 2020, 11:00, <https://www.asahi.com/articles/ASN3N6WVDN3MULFA03D.html>, accessed on April 2, 2020
- 10) Nihon Keizai Shimbun “*Premium seafood at supermarkets - AEON holds a sale, low prices due to COVID-19*” March 18, 2020, 12:44, <https://www.nikkei.com/article/DGXMZO56933830Y0A310C2HE6A00/>, accessed on April 1, 2020
- 11) STV News Hokkaido “*Remarkable deal on salmon roe bowl lunch, as well as steak - Prices of luxury food drop across the board - Sapporo (Hokkaido)* ” March 27, 19:43, <https://headlines.yahoo.co.jp/hl?a=20200327-00000382-stv-hok>, accessed on April 2, 2020
- 12) FNN PRIME Online “*Supply turnover is stagnant due to decreased demands for food services ... with consumption at restaurants down, supermarkets stock up ‘luxury food’ for a sale*” March 28, 2020, 13:30, <https://headlines.yahoo.co.jp/hl?a=20200328-00010007-fnnprimev-soci>, accessed on March 31, 2020
- 13) This saying has been passed on as a famous quote attributed to Eiji Toyota, the 5th president of Toyota Motor Corporation. For example, in an interview article on Business Insights vol. 51 (February 2014) , Atsushi Niimi, the former vice president of Toyota Motor Corporation, introduced the quote, saying, “You may have heard about the famous story of Mr. Eiji Toyota

saying, 'Water can be wrung even from a dry towel'. However, some words missing in the quote. What he actually said was, "If you put your mind to it, water can be wrung even from a (seemingly) dry towel."

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新型コロナウイルス感染症拡大下における低価格帯商品の供給不安定化

要旨

COVID-19拡大に伴う買占め騒動は、低価格な銘柄ほど顕著であり、店頭供給が不安定となった。このことは低所得層により大きな影響を与えた。他方で、生活必需品とは言い難い高級品では値崩れが生じた。こうした事実は、コロナ禍のような危機時においても、庶民向けに基礎的な生活必需品を安定的に供給することの重要性を示している。そして平時においては「無駄」と考えられているものが危機下における「安定」の源泉となりうる。

