31 Oct 2019 (No. of pages: 13)

Japanese report: 30 Oct 2019

Thorough Analysis of Last-Minute Demand (by Industry & Product)

Most prominent in areas that fell through the cracks. Be on the alert for future reactionary decline.

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Summary

- Most outlooks see the possibilities of the increase in consumption tax beginning in October breaking the back of consumption as being extremely limited. Reasons are (1) consumption maintains a firm undertone, (2) last-minute demand and reactionary decline have been kept under control with various demand leveling measures, and (3) the combined effects of the introduction of a reduced tax rate and free education have kept the negative income effect small. However, recent reports suggest that assuming last-minute demand actually did occur to an unexpected degree, then it goes without saying that (2) doesn't hold water, while the claim according to (1) cannot be completely valid either.

- In this report, we make use of currently available macro-economic statistics as well as industry statistics to examine two important facts associated with last minute demand occurring up through the month of September, just before the consumption tax hike went into effect. The first of these is the fact that in comparison to the last two times the consumption tax was increased, the scale of last-minute demand was kept under control to a certain degree. One of the reasons behind this was government measures implemented to keep demand at an even keel, such as reduction of the automobile tax and reward points for using cashless payment.

- However, the other fact that was discovered is that last minute demand did indeed take place. Last-minute demand occurred most prominently in those areas that fell through the cracks in the government's countermeasures. Demand grew considerably just before the tax hike went into effect in a variety of areas, including automobiles – especially regular vehicles and light vehicles – while in the area of housing, demand grew for owned dwellings and those built for sale. Meanwhile, in the area of retailing, demand grew especially for department stores, mass retailers of household electronics, and drug stores.

- Now we must be vigilant regarding the future, with the expectation not only of a reactionary decline in response to last-minute demand, but reaction to last-minute shipments as well, which appeared before last-minute demand. Last-minute shipments were especially prominent in industries including household electronics, pulp, paper & paper products, and chemicals. Though this phenomenon may have contributed to growth initially, that effect will disappear in the future and likely shift into a reactionary decline.

__Is favorable consumption despite stagnant income the result of last-minute demand?__

The consumption tax was raised from 8% to 10% on October 1. This most recent instance of raising the consumption tax differs from the last one in that most outlooks see the possibilities of the increase in consumption tax breaking the back of consumption and the Japanese economy as being extremely limited. There are three major reasons for this assumption. Mainly, (1) consumption maintains a firm undertone, (2) last-minute demand and reactionary decline have been kept under control with various demand leveling measures, and (3) the effects of the introduction of a reduced tax rate and free education are keeping the negative income effect small.

As for the issue of the negative income effect, a detailed analysis of this situation can be found in the DIR report dated 2019 September 20, *Thorough analysis of consumption tax hike countermeasures and their effects: Comprehensive examination of income effect and substitution effect by age group, and industry*, by Shunsuke Kobayashi and Yutaro Suzuki. As is explained in this report, the net fiscal austerity effect after this most recent consumption tax increase is around two-trillion yen. This figure is less than that experienced the last time (about eight-trillion yen) the consumption tax was raised.

However, there is still room for skepticism in regard to arguments (1) and (2) above. In recent days there have been frequent news reports suggesting that, assuming last-minute demand actually did occur to an unexpected degree, then, it goes without saying that the second claim doesn't hold water. The first argument also has problems, since there is a very good possibility that consumption performance rose until just recently. Put in a different way, it is possible that if we remove the effects of last-minute demand, consumption was not as strong as it seemed.

In support of this argument is the fact that growth in gross national income has continued a downward path since 2018 (Chart 1). Growth in nominal gross national income was just over 1% y/y most recently. This is a major drop when we consider the fact that it's most recent peak it was at around 4% during the first half of 2018.

The main causes of sluggish growth in wage income of employees are (1) sluggish growth in employment and (2) a decline in working hours per person. Of these two, the latter is also affected by factors having nothing to do with the business cycle, for instance the increase in days off associated with the new imperial era and the effects of new overtime regulations. However, the former is unrelated to these kinds of special factors. But one certainly can't say that it is unrelated to the economic slowdown in which overseas demand was the leader in the slump. Meanwhile, the trend of corporations changing the status of non-regular employees[1] to that of regular employees has lost its momentum[2].

One of the factors behind favorable domestic demand lead by household consumption, which occurred despite sluggish wage income of employees, was last-minute demand prior to the increase in the consumption tax – something that is impossible to ignore. With the awareness of this problem as a starting point, in the next sections we make use of currently available macro-economic statistics as well as industry statistics to examine two important facts associated with last minute demand occurring up through the month of September, just before the consumption tax hike went into effect.

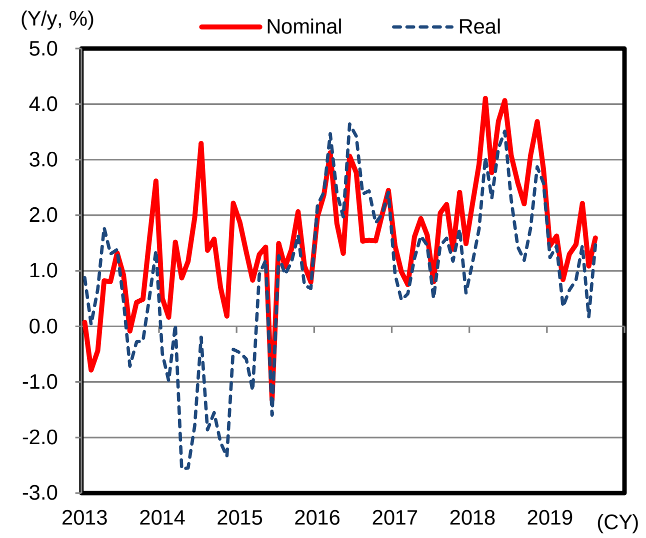
[1] For details see the DIR report dated 2018 July 27, *Has the Phillips Curve Lost its Validity?: Outlook for the Labor Market: The Big Picture*, by Shunsuke Kobayashi and Yota Hirono.

[2] For details see the DIR report dated 2019 August 27, *Japan's Economy: Monthly Outlook (August 2019): 1.The statistical trick in the superior GDP results: last-minute shipping 2.The consumption tax hike and free education: some age groups will be winners, while others will lose out 3.Revised economic outlook: FY2019 +0.9%, FY2020 +0.4% 4.US-China negotiations break down again: moving toward additional tariff of 10% on remaining 300 billion dollars*, by Shunsuke Kobayashi and Yutaro Suzuki.

Was last-minute demand and reactionary decline associated with consumption tax hike avoided?

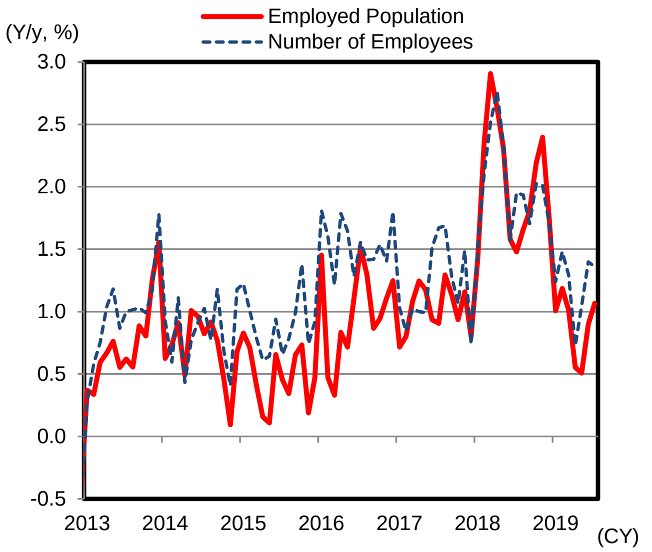
From the following section on we will take a look at automobiles, housing, and retail stores to confirm whether last-minute demand actually took place. First of all, two general facts were discovered. The first of these is that last-minute demand did indeed take place. Demand grew just before the tax hike went into effect in a variety of areas, including automobiles – especially regular vehicles and light vehicles – while in the area of housing demand grew for owned dwellings and those built for sale. Meanwhile, in the area of retailing, demand grew especially for department stores, mass retailers of household electronics, and drug stores. One more thing is that in comparison to the last two times the consumption tax was increased, the scale of last-minute demand was kept under control to a certain degree. One of the reasons behind this was government measures implemented to keep demand at an even keel, such as reduction of the automobile tax and reward points for using cashless payment.

Changes in Japan's Wage income of employees — Chart 1



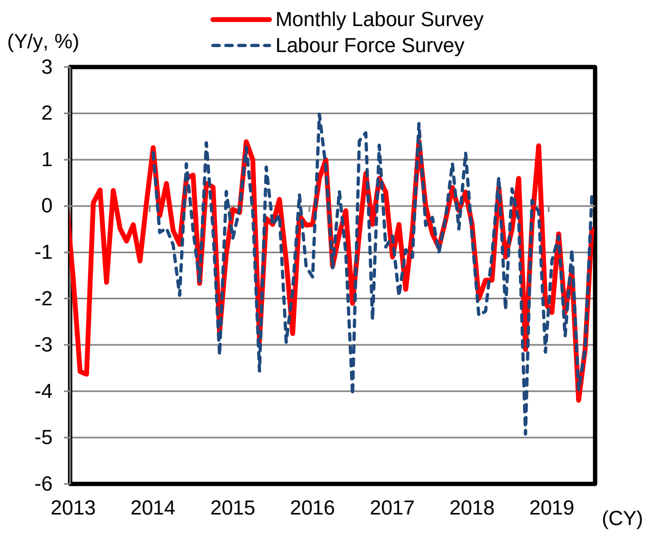
Source: Cabinet Office; compiled by DIR.

Changes in Employment — Chart 2



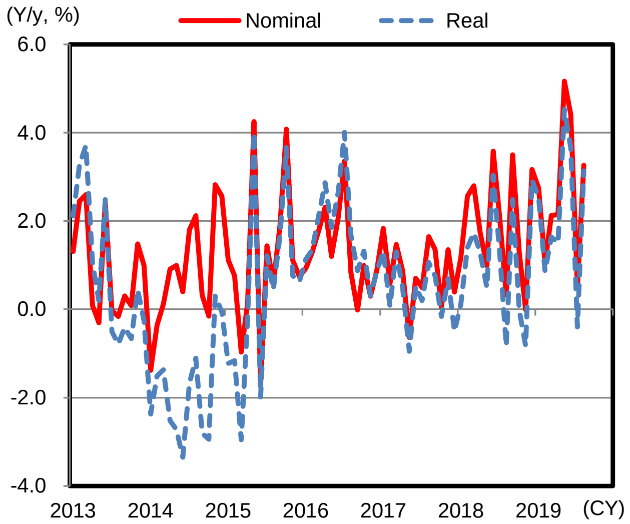
Source: Ministry of Internal Affairs and Communications; compiled by DIR.

Changes in Working Hours per Person — Chart 3



Source: Ministry of Ministry of Internal Affairs and Communications, Ministry of Health, Labour and Welfare; compiled by DIR.
Note: Monthly Labour Survey uses common data set.

Changes in Hourly Wage — Chart 4

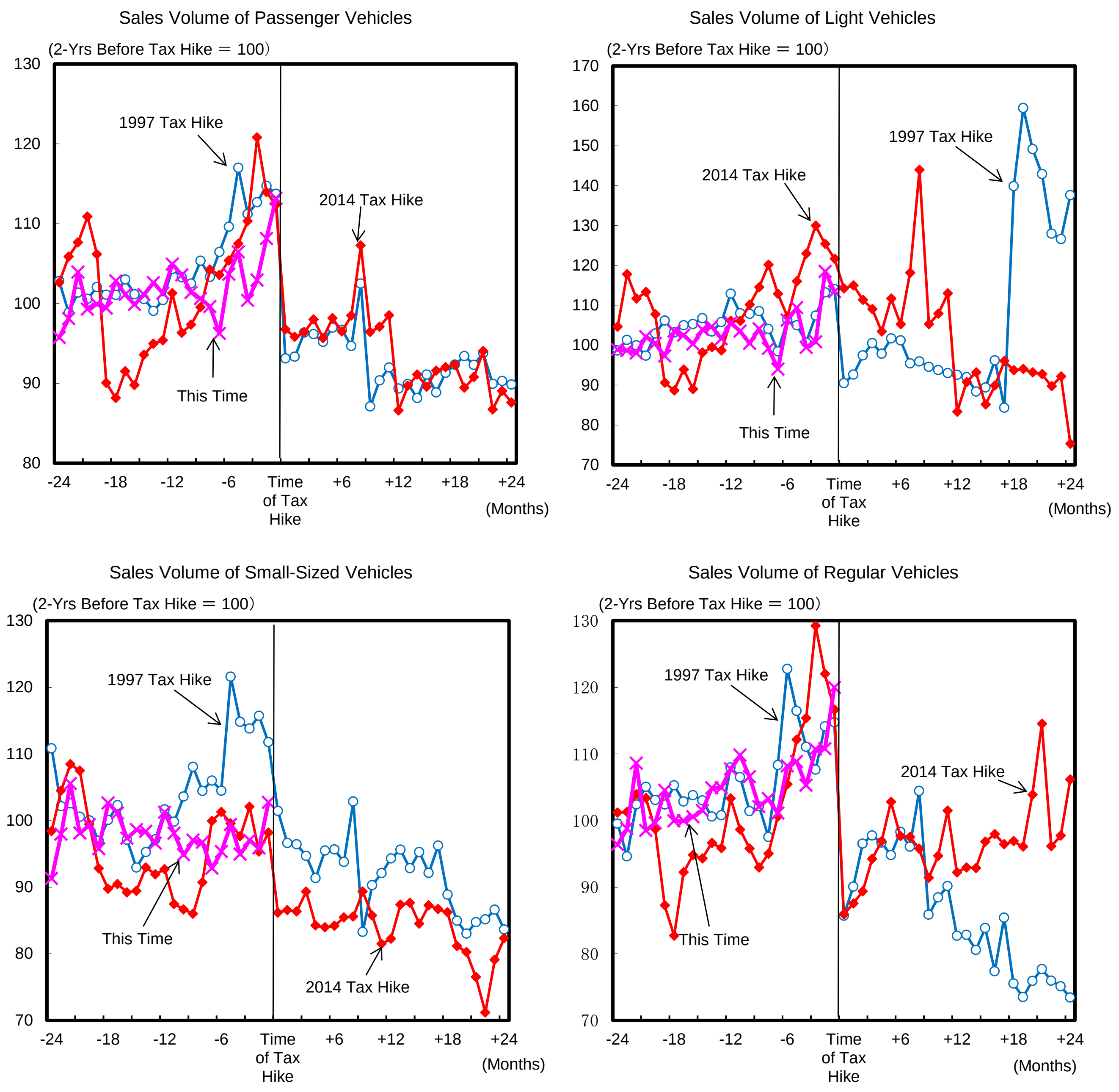


Source: Cabinet Office, Ministry of Internal Affairs and Communications, Ministry of Health, Labour and Welfare; compiled by DIR.
Note: Reverse calculation taking Cabinet Office total and dividing by Ministry of Internal Affairs and Communications total and Ministry of Health, Labour and Welfare total.

Passenger Vehicles: Last-Minute Demand Appeared for Regular and Light Vehicles

In this section and the sections that follow, we examine the occurrence of last-minute demand of passenger vehicles. First of all, looking at Chart 5 to confirm whether last-minute demand occurred, we can see from total sales volume (upper left) that last-minute purchases did occur. However, the amount is limited in comparison to the last two times the consumption tax was increased. Now looking closer by type of vehicle, we see that in the case of regular vehicles (lower right) and light vehicles (upper right), last-minute purchases occurred at pretty much the same rate as the last two times the consumption tax was increased. On the other hand, small-sized vehicles (lower left) hardly experienced last-minute purchases at all.

Sales Volume of Passenger Vehicles (Comparison with Last Two Tax Hikes) **Chart 5**



Source: Japan Automobile Dealers Association, Japan Mini Vehicles Association; compiled by DIR.
Note: Figures are seasonally adjusted. Seasonal adjustment by DIR.

Differences in last-minute purchasing behaviors based on the type of vehicle can be attributed to the government's policies implemented to level out demand. The major leveling measures in relation to automobile sales introduced to match the tax hike are as follows: (1) reduction of the automobile tax, and (2) introduction of an environmental performance discount, as well as a repeal of the vehicle excise tax. Further data on reduction of the automobile tax (tax payable by car owners on an annual basis) is shown in Chart 6. The benefits of purchasing a small-sized vehicle are great (in other words, on purchases made on and after October).

Concretely speaking, taking a closer look at the tax reduction, we see that on purchases of small-sized vehicles (2,000cc and below) on and after October 2019, the purchaser receives an annual tax reduction of somewhere between 3,500 to 4,500 yen. However, in the case of purchasing a regular vehicle of over 2,000cc, tax reduction would be between 1,000 and 1,500 yen. In most cases, it will be difficult to offset the increase in the purchase amount resulting from the consumption tax increase. Light weight vehicles are not eligible for the tax reduction.

Comparison of Old and New Automobile Tax **Chart 6**

Class	Engine Displacement	Through September 2019	After Tax Cut (Oct. 2019 and beyond)	Reduction
Light Vehicles	660cc and below	10,800	10,800	0
Small-Sized Vehicles	660cc or more 1000cc and below	29,500	25,000	4,500
	1000cc or more 1500cc and below	34,500	30,500	4,000
	1500cc or more 2000cc and below	39,500	36,000	3,500

Class	Engine Displacement	Through September 2019	After Tax Cut (Oct. 2019 and beyond)	Reduction
Regular Vehicles	2000cc or more 2500cc and below	45,000	43,500	1,500
	2500cc or more 3000cc and below	51,000	50,000	1,000
	3000cc or more 3500cc and below	58,000	57,000	1,000
	3500cc or more 4000cc and below	66,500	65,500	1,000
	4000cc or more 4500cc and below	76,500	75,500	1,000
	4500cc or more 6000cc and below	88,000	87,000	1,000
	6000cc or more	111,000	110,000	1,000

Source: Japan Automobile Manufacturers Association; compiled by DIR.
Note: Tax rates for registered privately owned passenger vehicles.

Next we take a look at the introduction of the environmental performance discount. The environmental performance discount replaces the vehicle excise tax and the Eco-Car tax reduction. It affects the tax burden at the time of purchase. Charts 7 & 8 present a comparison of tax rates occurring at time of purchase with the introduction of this new program. In most cases, the tax exemption does not offset the 2%pt increase in the consumption tax.

In the past, the vehicle excise tax was, in principle, 3% on vehicles subject to automobile registration tax, and 2% on light vehicles and commercial vehicles. Then on vehicles with advanced environmental performance, there was a tax exemption in the form of the Eco-Car tax reduction. This would reduce tax by anywhere from 20% to 100%. The environmental performance discount is essentially the same program, the only differences being the fuel efficiency standard and the amount of the tax exemption.

But the complicated thing is that at the same time the program is being changed, there is also the demand leveling measures valid for only a limited time. For a short time a purchaser can therefore take advantage of both. For automobiles which do not have especially high environmental performance, the tax rate at time of purchase will be reduced by 1%pt between October 1, 2019 and September 30, 2020. In either case, as was mentioned previously, in most cases, the tax exemption does not offset the 2%pt increase in the consumption tax.

Tax Rate Upon Purchasing a Regular Vehicle (Private Use) — **Chart 7**

	2020 Fuel Efficiency Standard					
	Not Achieved	Achieved	+10%	+20%	+30%	+40%～
Till consumption tax hike (Oct. 2019) Eco-Car tax reduction (75% reduction in 2005 emission regulations, or 50% reduction in 2018 regulations)	3%	2.4%	2.25%	1.5%		0%
After consumption tax hike (Oct. 2019) Environmental performance discount: Items in parenthesis are valid until Sept. 30, 2020.	3% (2%)	2% (1%)	1% (0%)	0%		
Difference: Items in parenthesis are valid until Sept. 30, 2020.	0% (1%)	0.4% (1.4%)	1.25% (2.25%)	1.5%	1.5%	0%

Source: Japan Automobile Manufacturers Association, Ministry of Economy, Trade and Industry; compiled by DIR.

Tax Rate Upon Purchasing a Light Vehicle — **Chart 8**

	2020 Fuel Efficiency Standard					
	Not Achieved	+5%	+10%	+15%	+20%	+25%～
Till consumption tax hike (Oct. 2019) Eco-Car tax reduction (75% reduction in 2005 emission regulations, or 50% reduction in 2018 regulations)	2%	1.6%	1.2%	0.8%	0.4%	0%
After consumption tax hike (Oct. 2019) Environmental performance discount: Items in parenthesis are valid until Sept. 30, 2020.	2% (1%)	1% (0%)	0% (0%)			
Difference: Items in parenthesis are valid until Sept. 30, 2020.	0% (1%)	0.6% (1.6%)	1.2%	0.8%	0.4%	0%

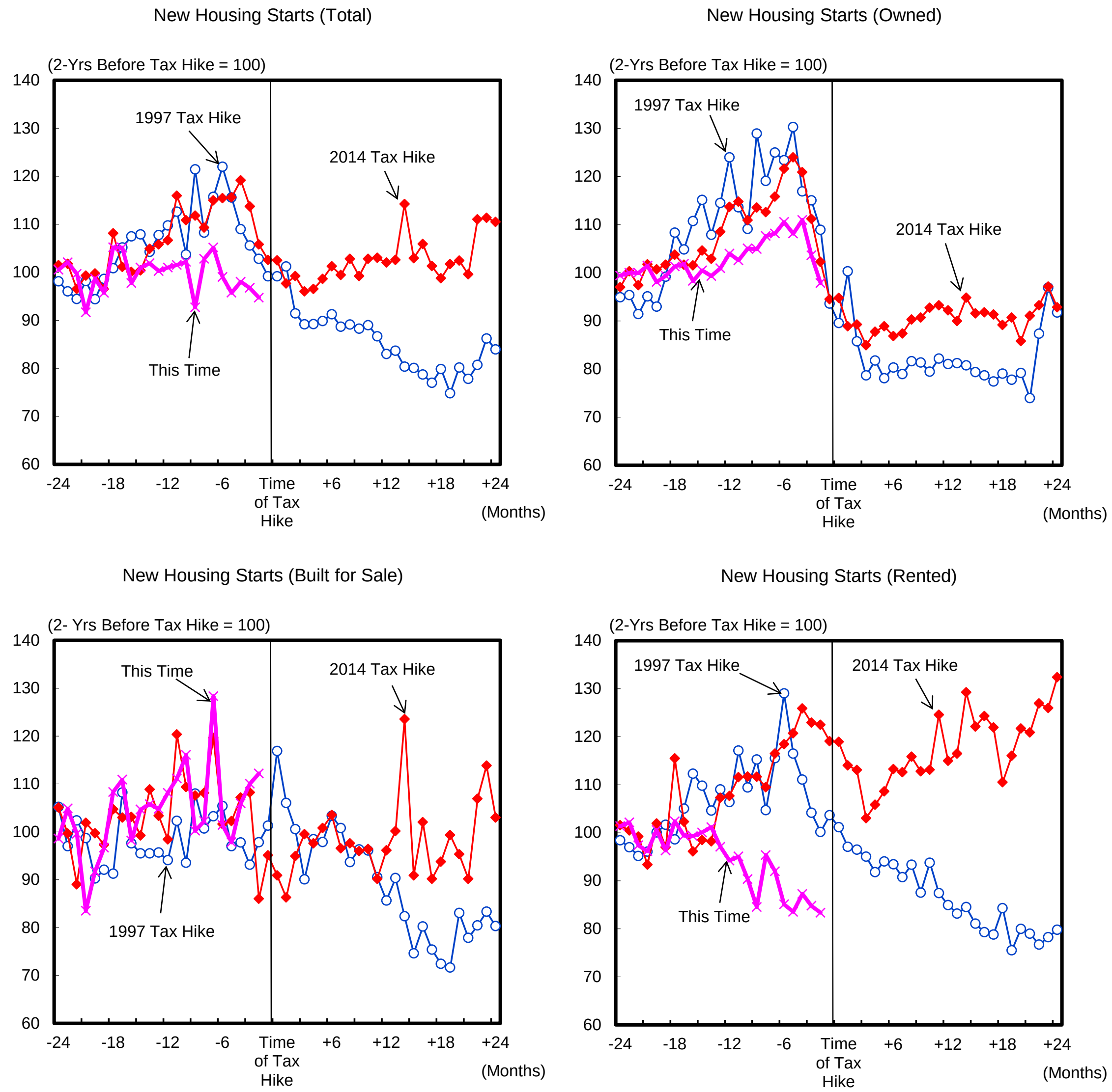
Source: Japan Automobile Manufacturers Association, Ministry of Economy, Trade and Industry; compiled by DIR.

Housing: Last-minute demand was manifest for both owned dwellings and those built for sale

Looking at Chart 9 to confirm last-minute demand in housing, we see the same uneven distribution as was found in data on automobiles. Looking at owned dwellings (top right of the chart) we see that last-minute housing starts occurred here. Meanwhile, in the built for sale category (lower left), buying behavior shows wide fluctuations from month to month making it difficult to tell for sure whether last-minute demand actually took place, but the overall trend shows housing starts to have been generally prevalent. On the other hand, in the case of rented (lower right), no last-minute housing starts were detected at all. In this case of course, demand leveling measures are not applicable to rentals in the first place.

Now to interpret these results, it seems that demand leveling measures were insufficient, leading to last-minute housing starts for both owned dwellings and those built for sale. The scale of last-minute demand was limited in comparison to the last time the consumption tax was raised, but this appears not to have been due to the government's demand leveling measures. Rather, persons who purchased houses the previous time there was last-minute demand are no longer in need, and the housing investment market, which had been showing signs of maturation in recent years, was hit by scandals, causing investors to shy away from purchases. For these reasons the appetite for investment had declined.

New Housing Starts (Comparison with Past Two Tax Hikes) — Chart 9



Source: Ministry of Land, Infrastructure, Transport and Tourism; compiled by DIR.
Note: Seasonally adjusted.

Largely speaking, there are two types of demand leveling measures introduced which are applicable to owned dwellings and those built for sale. These are (1) extension of tax reduction period on housing loans, and (2) increase in amount of housing cash payments (called "*sumai kyufu*"). The housing loan tax reduction is summarized in Chart 10. First of all, there was already a 1% tax exemption from the local resident's tax on a maximum of 40 million yen of the balance on a housing loan for a period of 10-years. This tax exemption period was extended for another three years beyond that after the consumption tax hike, making it possible to receive a tax exemption for a period of 13-years. In the case of general housing, a maximum of four million yen in tax exemptions was applied over a ten-year period. For purchases taking place after the increase in consumption tax, there will be a maximum of 4.8 million yen in tax exemptions applied[3]. So the incentive to wait till after the tax hike to purchase a house is this difference of 800,000 yen. However, this incentive is not necessarily all that large considering the 2% increase in consumption tax charged at the time of purchase.

[3] Regarding the extension to the anywhere from the 11th to 13th year: The tax reduction is the lowest of the two amounts (1) 1% of the year-end balance of the housing loan (a maximum of 40 million yen), or (2) purchase price of the building (a maximum of 40 million yen) x 2/3%. Therefore the total amount of the tax reduction over a period of three years would be maximum 800,000 yen.

A summary of the housing cash payments is shown in Chart 11. According to this measure, the lower a household's income is, the larger the amount of benefits they can receive. For instance, if one's income was 4.25 million yen, one could receive 300,000 yen in benefits according to the old version of this program. After the increase in consumption tax, this amount will grow to 500,000 yen, or an additional 200,000 yen. However, there is not necessarily much advantage in taking this benefit[4].

Housing Loan Tax Reduction (Summary) **Chart 10**

Deduction Period	Annual Deduction Limit Between 11th & 13th Year after Application (General Housing)
3-Year Extension (from 10-yrs to 13-yrs)	Smaller of the below amounts ① 1% of year-end balance of loan (maximum of 40 million yen) ② 2-3% of building purchase price (maximum 40 million yen) (2% ÷ 3-yrs) * In case of a certified home, maximum of 50 million yen of year-end balance, and 50 million yen of building purchase price.

Source: Ministry of Land, Infrastructure, Transport and Tourism; compiled by DIR.
Note: To be applied on housing purchases where 10% in consumption tax has been paid, and purchaser has resided in said residence between October 1, 2019 and December 31, 2020.

Housing Cash Payments (Summary) **Chart 11**

Consumption Tax Rate of 8%

Income Guideline	Local Taxes, Taxation on Income Basis	Basic Benefit Amount
Y4.25 mil or less	Y68,900	Y300,000
Y4.25 mil or more	Y68,900 or more	Y200,000
Y4.75 mil or less	Y83,900 or less	
Y4.75 mil or more	Y83,900 or more	Y100,000
Y5.1 mil or less	Y93,800 or less	

Consumption Tax Rate of 10%

Income Guideline	Local Taxes, Taxation on Income Basis	Basic Benefit Amount
Y4.5 mil or less	Y76,000 or less	Y500,000
Y4.5 mil or more	Y76,000 or more	Y400,000
Y5.25 mil or less	Y97,900 or less	
Y5.25 mil or more	Y97,900 or more	Y300,000
Y6 mil or less	Y119,000 or less	
Y6 mill or more	Y119,000 or more	Y200,000
Y6.75 mil or less	Y140,600 or less	
Y6.75 mil or more	Y140,600 or more	Y100,000
Y7.75 mil or less	Y172,600 or less	

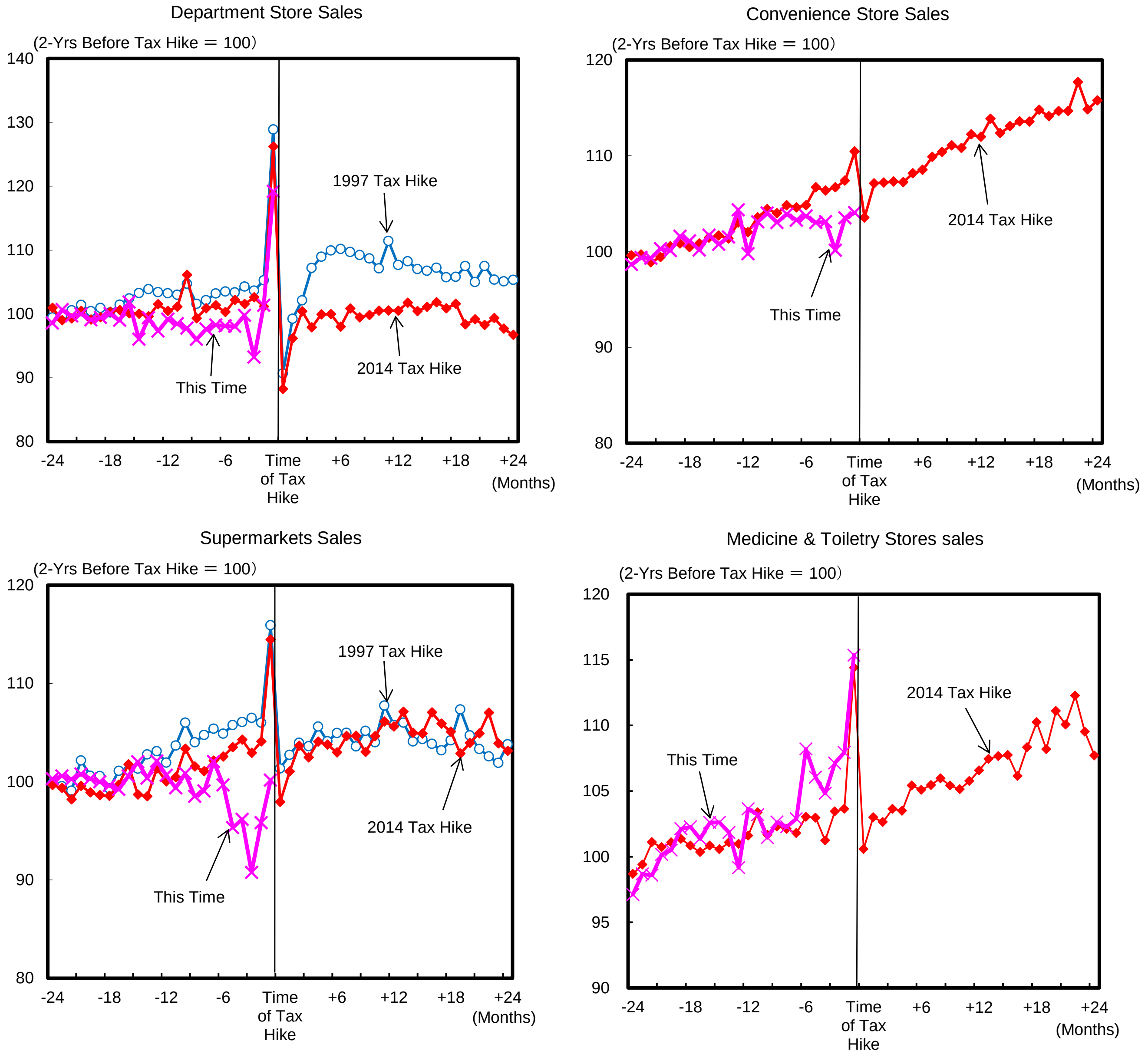
Source: Ministry of Land, Infrastructure, Transport and Tourism; compiled by DIR.
Note: Kanagawa Prefecture has a different tax rate than other prefectures, so even where the income guideline is the same, the discount differs from the above.

Retail Stores: Last-minute demand appeared in September just before the consumption tax hike

Finally we confirm the manifestation of last-minute demand in the area of retailing as shown in Charts 12 & 13. Last-minute demand became especially noticeable in September, the month before the consumption tax hike, occurring most prominently in the case of department stores, mass retailers of household electronics, and drug stores. This tendency is the same as occurred the last two times the consumption tax was raised. However, in the case of convenience stores, last-minute demand was much smaller in comparison to the last two times the consumption tax was raised. In the case of supermarkets also, last-minute demand was much smaller in comparison to the last two times the consumption tax was raised. One reason for this is the unavoidable fact that consumption as such is not exactly strong with income growth dull as a result of the recent economic environment. But an additional reason is that this may actually indicate a certain level of effectiveness in the reduce tax rate measures affecting food purchases, and the reward points program for using cashless payment.

[4] In addition, housing differs from a purchase such as an automobile in that last-minute housing starts occur not just before the increase in the consumption tax, but around six months earlier. This is because consumption tax is applied to housing using the tax rate valid at the point the keys are handed over to the purchaser, or when the service agreement is signed. More concretely speaking, in the case of this most recent increase in consumption tax, if the keys were handed over by September 30th, or if the service agreement was signed by March 31st, then the consumption tax rate applied would be 8%.

Change in Retail Sales (Comparison with Past Two Tax Hikes) Chart 12



Source: Japan Department Store Association, Japan Franchise Association; compiled by DIR.
Note: 1) Figures are seasonally adjusted. Seasonal adjustment was performed by DIR.
2) All charts are nominal.

Let us confirm the trend in actual retail sales. First we take a look at department store sales on a nationwide basis (Chart 12, top left). September sales saw a y/y increase of +22.8%, or +17.6% in comparison to the previous month (seasonally adjusted by DIR). Looking at sales by product we see that the following items contributed to growth: sundry goods, including art, jewelry, and precious metals, clothing, and personal items. These goods all attracted last-minute demand the last time the consumption tax was raised and the same patterns were seen again this time around.

Next, drugs and retail sales of cosmetics, including drugstore sales (Chart 12, bottom right) jacked up +16.4% y/y in sales, or +6.9% m/m (seasonally adjusted by DIR), exhibiting especially noticeably last-minute demand as was the case during past instances of consumption tax increases. Looking at performance by product, beauty care products (cosmetics and accessories), household goods & daily consumables, pet supplies, and toiletries contributed to growth.

Looking at the trend in household electronics sales, including mass retailers of household electronics (retail sales of machinery & equipment also included in Chart 13, upper left), we see that September achieved major growth in sales at +37.9% y/y, or +28.2% m/m, indicating that here, too, last-minute demand was generated. Looking at performance by product, last-minute demand was seen in home appliances and information appliances.

On the other hand, looking at convenience store sales on an existing outlet basis (Chart 12, upper right), last-minute demand was noticeably weak, with September recorded a decline of -1.1% y/y, with growth of just +0.5% m/m (seasonally adjusted by DIR). Even averaging out sales performance by including the entire Jul-Sep period, we still see a y/y decline of -0.9%. This contrasts greatly with sales performance the last time the consumption tax was raised, when sales registered growth of +5.9% y/y. Part of the reason for the uninspiring performance is the fact that a large portion of convenience store sales are accounted for by food items, which get the reduced tax rate. In addition, the reward points program for using cashless payment began during the same month the consumption tax was raised.

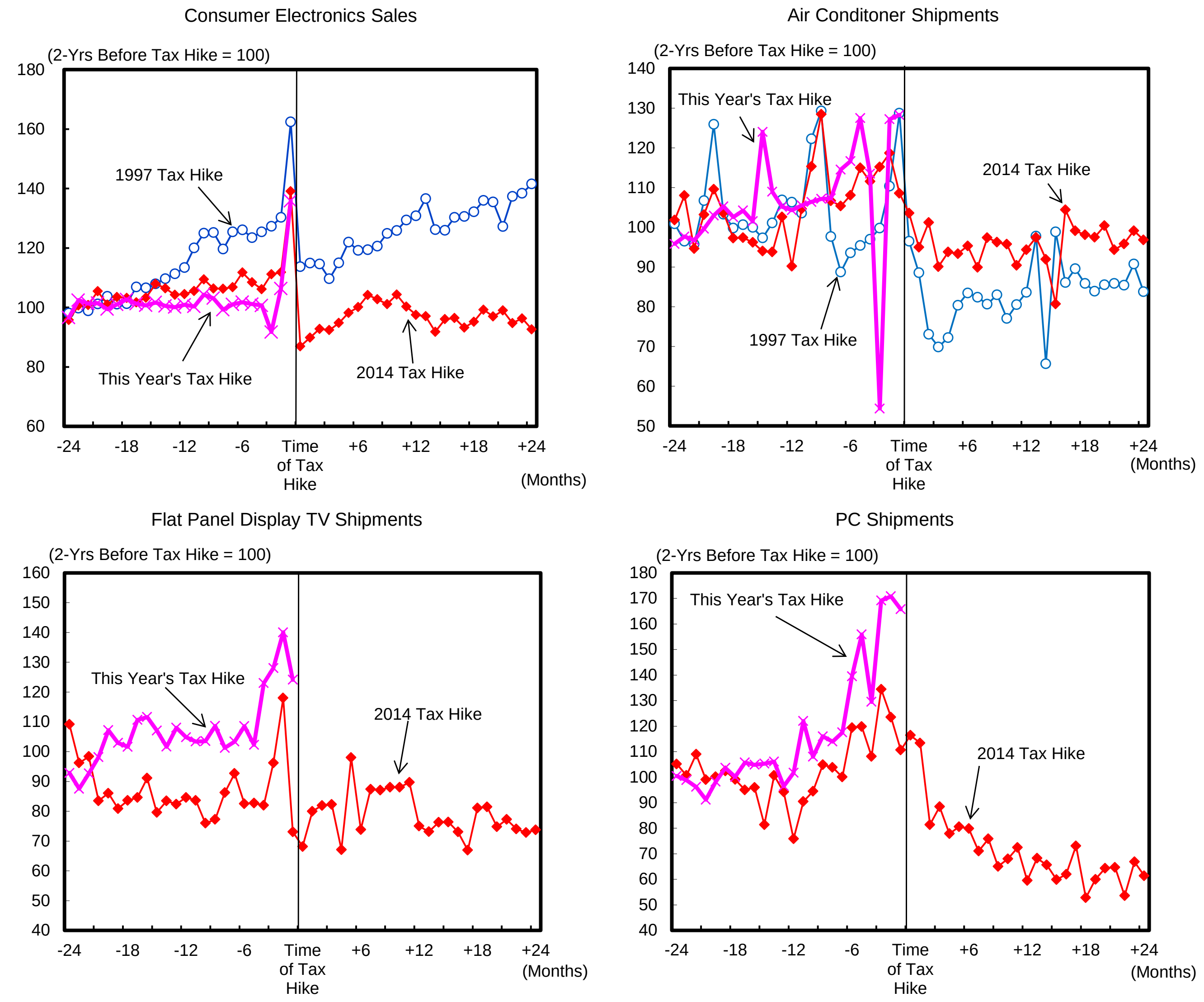
Meanwhile, looking at the trend in supermarket sales on an all-outlets basis (Chart 12, lower left), we see that last-minute demand was limited in comparison to past increases in consumption tax, with September sales at -1.8% y/y and +4.5% m/m (seasonal adjustment by DIR). Looking at the average during the Jul-Sep period, sales suffered a decline of -5.9% y/y. This contrasts greatly the last time the consumption tax was raised, when sales grew by +7.6%. Approximately 70% of supermarket sales is accounted for by foods, which are covered by the reduced tax rate.

As was mentioned above, the trend in convenience store sales is unavoidably associated with the reward points program for using cashless payment, which is part of the government's demand leveling measures. These measures were implemented in October after the consumption tax hike both as a means of evening out demand and promote the use of cashless payment.

Under the reward points program for cashless payment, small and medium-sized retailers (including service businesses and restaurants) give reward points to consumers who use a credit card, electronic money or QR code in their purchase. The expense to do so is handled by the government. Small and medium-sized retailers give a 5% reduction rate for points to customers. The rate is 2% in the case of major chain store franchises. Therefore the advantage of shopping at a small to medium-sized retailer has increased for the consumer since the raising of the consumption tax.

However, this policy measure is only temporary. It will last for a period of nine months from October 2019 till June 2020. It should be noted that, although demand was leveled out by these measures around the time of the consumption tax hike, there is a possibility that another bout of last minute-demand could occur just before the points reward program ends.

Consumer Electronics Sales & Shipments **Chart 13**



Source: Ministry of Economy, Trade and Industry, Japan Refrigeration and Air Conditioning Industry Association, Japan Electronics and Information Technology Industries Association; compiled by DIR.

Note: 1) Seasonally adjusted. Figures for air conditioners, flat panel display TVs, and PCs were seasonally adjusted by DIR.
2) Consumer Electronic Sales are made from Machinery & Equipment sales.
3) Consumer Electronic Sales are nominal.

The thing to watch out for is reactionary decline in relation to last-minute shipments

Considering the above arguments we can conclude that although last-minute demand was avoided by these demand leveling measures around the time of the consumption tax hike, last-minute demand was still detected as having occurred. For this reason, there is a good possibility that reactionary decline will occur.

In addition, there remain two more issues which we must be aware of. It goes without saying that one of these is the negative income effect. A detailed analysis of this situation can be found in the DIR report dated 2019 September 20, *Thorough analysis of consumption tax hike countermeasures and their effects: Comprehensive examination of income effect and substitution effect by age group, and industry*, by Shunsuke Kobayashi and Yutaro Suzuki. When we look at this problem from the viewpoint of macro impact, after October 2019 households will face a net fiscal austerity effect of around two-trillion yen. This figure is less than that experienced the last time (about eight-trillion yen) the consumption tax was raised, but it is still clearly at a scale which cannot be ignored.

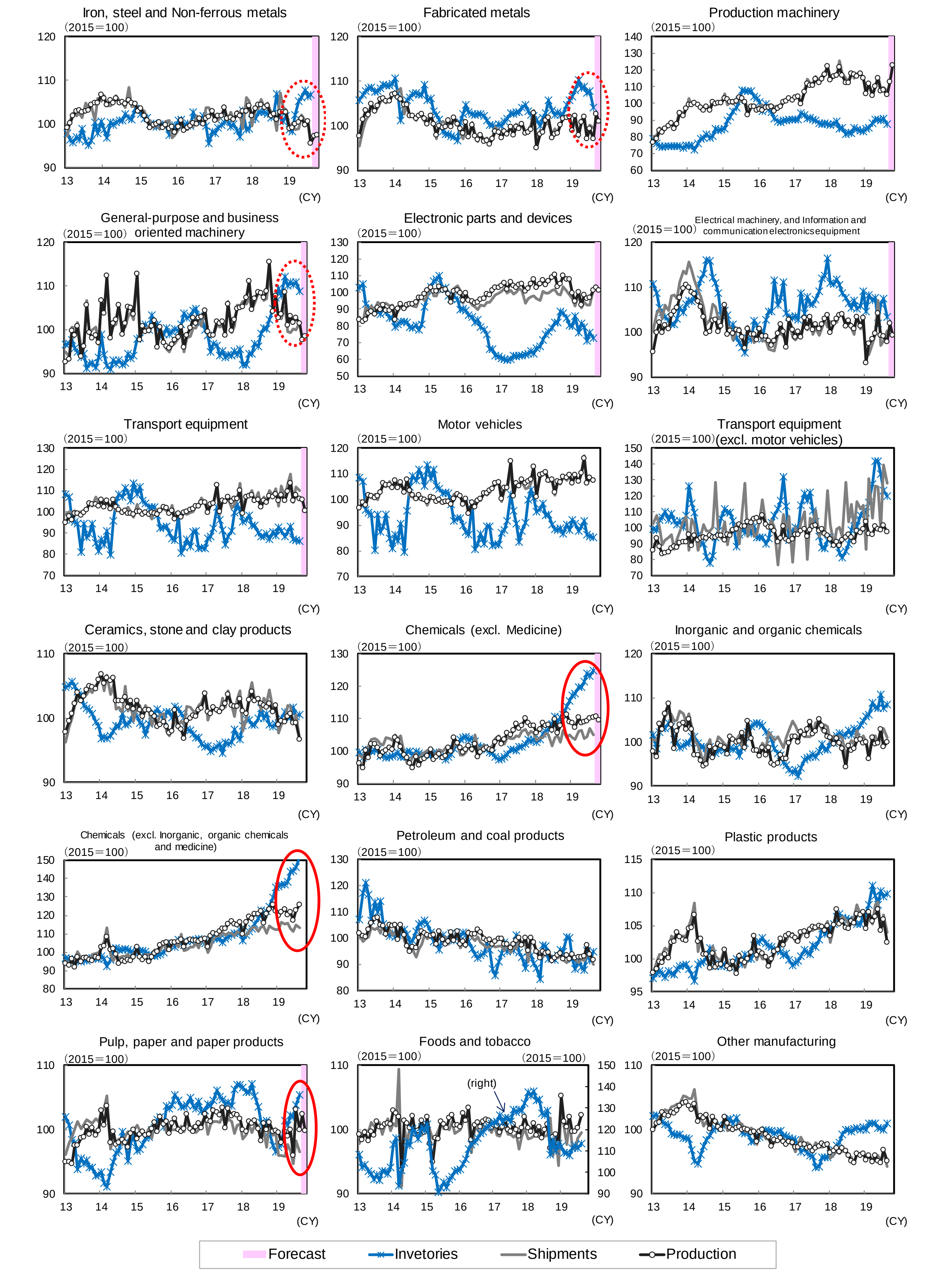
One more worry remains. This is the problem of last-minute shipments. As is shown in Chart 14, growth in shipments of household electronic products was stronger than that of sales. This likely occurred in expectation of the points rewards system which would go into effect in October, so to hand this, retailers accumulated store inventory. Even if this inventory were all successfully sold, production and shipments which had been increased up to this point could very possibly move into an adjustment phase in the future.

Another industry which catches the eye for the same reasons is chemicals (excluding medicine). The area in this industry which is experiencing inventory accumulation is cosmetics, and it has been pointed out that this may be due to the handling of last-minute demand prior to the increase in consumption tax. However, inventory growth in this industry began in 2017, and since 2018 the process has actually accelerated. Behind this development is the fact that demand for cosmetics products was strong in inbound consumption and in e-commerce (this indicates stock build-up, or intentional inventory accumulation). Since 2018, growth in demand of this sort has come to a standstill (unintentional stock build-up is most likely the reason here)[5]. In other words, inventory growth in this industry is due to more than just measures to handle last-minute demand.

In either case, we must remain cautious in the future regarding both reactionary decline in response to last-minute demand and the reaction to last-minute shipments. Demand related items to watch out for include regular vehicles and light weight vehicles, as well as single family dwellings and condominiums. In the area of shipments there is household electronics products, pulp, paper and paper products, and chemicals. Caution in regard to reactionary decline in all of these areas is required.

[5] Unintentional stock build-up has been observed in the iron, steel and non-ferrous metals industries, as well as the fabricated metals industry and the general-purpose and business oriented machinery industry. This is due to declining demand associated with the global economic slowdown centering on China.

Production, Shipments, and Inventory by Industry — Chart 14



Source: Ministry of Economy, Trade and Industry; compiled by DIR.
Note: The expected value of the Indices of Industrial Production is from the Manufacturing Industry Production Forecast Survey. The expected value for the chemicals industry (excluding medicine) is from the forecast figures for the entire chemical industry.