

**Box 1.1****The Chinese New Year effects on Hong Kong's retail sales and merchandise exports**

The Chinese New Year (CNY) holidays, which are based on the Lunar calendar, fall in either January or February of the “Western calendar” (or Gregorian calendar), thereby causing notable additional seasonal fluctuations to economic indicators for January and February, which are reported according to the “Western calendar”. This note attempts to illustrate how CNY could distort the movements of certain monthly economic indicators, by taking Hong Kong's retail sales and merchandise exports as examples. Nevertheless, CNY does not have any notable effect on quarterly economic data, as it always falls in the first quarter.

**Distortions to year-on-year comparisons caused by shifting CNY holidays**

Year-on-year comparisons are frequently used to analyse the underlying trend of economic variables, as they are a simple and handy way of removing fixed seasonality, viz. seasonal factors that occur at fixed time points. However, directly comparing such rates of change in January and February could be rather misleading, particularly when the CNY holidays of the two years under comparison fall in different months (i.e. one falling in January but another in February).

Take 2015 as an example. The CNY took place in mid-February, whereas in 2014, it fell in late January. Thus, retail sales volume underwent huge fluctuations in these two months. It declined markedly by 13.8% year-on-year in January, but rose back significantly by 18.1% in February. The same applied to merchandise exports, which grew modestly by 0.9% year-on-year in volume terms in January, but increased by 6.6% in February. These year-on-year rates of change are distorted by the difference in timing of the CNY in 2014 and 2015.

**Components of retail sales and merchandise exports that are more affected by the CNY**

To better understand the issue, it is useful to examine the components of retail sales and merchandise exports that are more likely influenced by the CNY effect. For retail sales, the sales volume is generally higher in the weeks immediately before or during the CNY amid stronger consumption for celebrating this important festival. When analysed by retail outlet, items which are more related to the festive spending include “food, alcoholic drinks, and tobacco”, “supermarkets”, “clothing and footwear” and “commodities in department stores”.

As for merchandise exports, which comprise mainly re-exports, they are usually affected by the week-long CNY holidays in the Mainland, as almost 90% of Hong Kong's re-exports involve our hinterland. Exports to the Mainland generally pick up in the weeks preceding the CNY as firms rush through their export orders before the holidays kick-off and fall afterwards since production activity comes to a halt during the holidays.

**Table : Selected items of Hong Kong's retail sales and merchandise exports in recent years**

	Share in 2014 total (%)	Year-on-year rate of change in volume terms (%)							
		2012		2013		2014		2015	
		Jan*	Feb	Jan	Feb*	Jan*	Feb	Jan	Feb*
Sales of festive-related items <sup>^</sup>	39%	6.1	2.3	-2.9	21.6	14.6	-4.0	-13.1	19.0
Exports to the Mainland	54%	-18.4	10.8	31.2	-21.7	-8.2	3.7	6.9	-11.2

Notes: In 2011, CNY fell in February. Distortions occurred in all the year-on-year changes for January and February in the years from 2012 to 2015.

(\*) Denotes the CNY month.

(<sup>^</sup>) Festive-related items include “food, alcoholic drinks, and tobacco”, “supermarkets”, “clothing and footwear” and “commodities in department stores”.

The above **Table** clearly shows that the year-on-year rates of change of the selected components were notably affected by the shifts in CNY timing in 2012-2015.

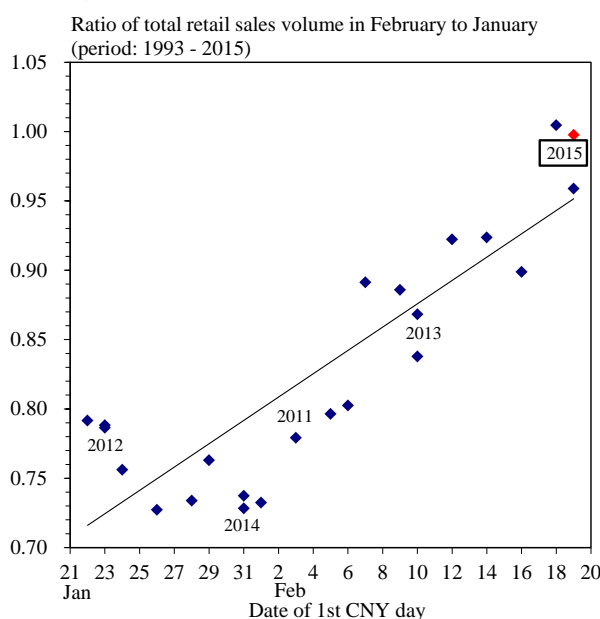
**Box 1.1 (Cont'd)**

For retail sales, it is observed that the CNY has a boosting impact on the sales of festive-related items during the month in which this festive season took place. On the contrary, the CNY has a dampening effect on exports to the Mainland in the CNY month. Since the sales of festive-related items and exports to the Mainland take up significant shares in total retail sales and overall merchandise exports (at 39% and 54% respectively in 2014), the distortions caused by the CNY on these two economic variables should not be taken lightly.

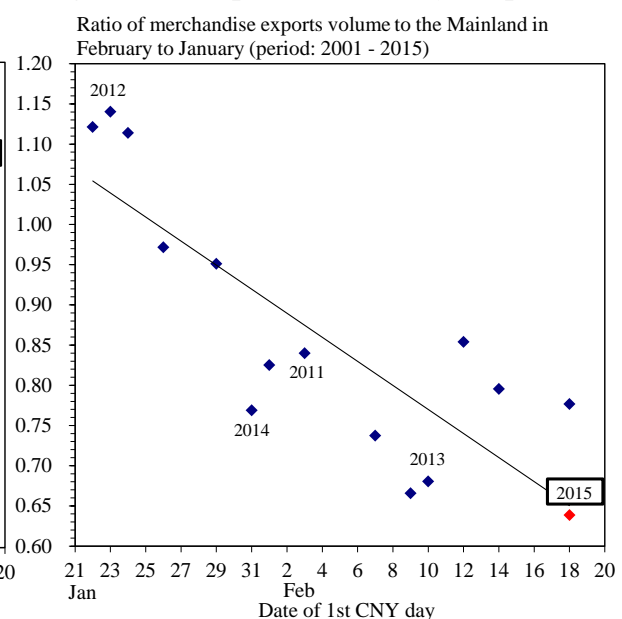
**Correlations between the magnitude of distortion and the exact CNY timing**

When taking a deeper look at the exact dates on which the CNY took place, it is interesting to observe that the augmenting effect of the CNY on February's retail sales tends to be stronger when the CNY holidays fall entirely in latter part of February, evident in the positive relationship shown in *Chart 1*. Again, the negative impact of the CNY on February's exports volume would be stronger when the CNY holidays fall closer to late February, which is particularly notable in our exports to the Mainland (*Chart 2*). Since the CNY of this year fell on 19<sup>th</sup> February, which was the nearest to end-February in nearly 20 years, this explains why the year-on-year rates of change in retail sales and merchandise exports fluctuated distinctly in January and February of 2015. By identifying such relationships, the CNY impacts on economic statistics for January and February of a particular year with known CNY timing can be more reliably assessed.

**Chart 1 : The later the CNY timing, the stronger the boost to February's retail sales**



**Chart 2 : The later the CNY timing, the more negative the impact on February's exports**



Note: Hong Kong's exports to the Mainland were used for the scatter plot in *Chart 2* in order to illustrate the more pronounced relationship between the volume of exports and the CNY timing.

**Concluding remarks**

In sum, Hong Kong's retail sales and merchandise exports, which give important indications of the overall economic performance of Hong Kong, are both visibly affected by this festive season. Caution is therefore needed when interpreting the economic indicators in January and February. For the purpose of examining their underlying trends, it would be more appropriate to analyse the economic indicators in the first two months combined, in order to neutralise the distortions caused by the difference in the timing of the CNY.