

“STAT6108 Assignment 2”

Yiu Chung Wong 1155017920

2

a

```
composite_CPI_DEC_2019 <- 111.4
composite_CPI_DEC_2018 <- 108.3

inflation_rate <- ((composite_CPI_DEC_2019 / composite_CPI_DEC_2018) - 1) * 100
```

As of 11/Mar/2020 the Composite CPI for December 2019 is 111.4; the “inflation rate” for that month is 2.8624192%.

b

```
GDP_chained_2017_dollar_3rd_2019 <- 673762
real_growth_rate <- -2.8
```

As of 11/Mar/2020 the GDP in chained (2017) dollars for 3rd quarter 2019 is 6.73762×10^5 million; the “real growth rate” for that quarter is -2.8%.

3

- household surveys provide data from the supply side; one can only give crude indication of his “industry” and “occupation”
- surveys of establishments provide data from the demand side; finer classifications of industry and occupation can be obtained. e.g. wage rates

4

- Language capability in communicate with interviewee. The recruit should be able to speak and understand common languages spoken by the populace.
- Able to deliver the ideas in a correct, and succinct manner. The interview should require minimal effort from the interviewee to understand the survey.
- Crisis management. Surveys are conducted in varying environments and unforeseen circumstances will come up. The recruit shall at least be able to manage themselves in terms of safety if such occasion do arise
- Be able to show respect and sympathy towards people of a different background or possess extremely uncommon characteristics.

Smoking is a habit of consuming tobacco practised by a significant portion of the population. This writing address exciting findings in the Thematic Household Survey Report No. 64, issues regarding smoking pattern among citizens of Hong Kong.

3.6 illustrates the distribution of smokers/non-smokers/people who used to smoke. The survey reveals that 10.8% of the population who are over 15 years old do smoke, which is a significant chunk of the populace. This has several implications regarding policy-making/actions that can be taken by relevant parties. First, the extent of the burden of death and disease that smoking cigarette imposes on the public's health is substantial. A smoker can suffer from both long and short term diseases. While short-term adverse health effects of cigarette smoking are less likely to be directly fatal, the health system must realise there will be roughly one-tenth of the population in danger to smoking-related fatal diseases in the future, such as lung cancer. And resource should be allocated to handle those who cannot afford private health services. Moreover, because of the number of smokers, policymaker should expect to face fierce opposition when discussing new policy in combating smoking. Policymakers must be prepared to battle elected officials who are likely to represent the smoking community. This includes increasing taxation on a cigarette or related products. Where there is a risk, there is an opportunity. Health issues brought by smoking can be used as business opportunities. For instance, insurance providers have a large market for providing smoking-related health insurance. Since one-tenth of the population smoke, there are plenty of people who will need related health services in the future.

Of those 615,000 daily cigarette smokers, 85.7% are males, and 14.3% are females (3.11). Smokers are disproportionately male dominant. Research can be conducted to understand the drive behind male smoking better and to tackle the rate of smoking among males more effectively. For instance, since smoking is often a habit picked up between age 10 and 19 (3.13), the resource should be

concentrated for research and intervention performed in school for boys to maximally reduce their chance of picking up the habit. And according to 3.17, 75.4% and 34.2% of smokers started smoking because of peer influence and curiosity/fun, respectively. Hence, school and family must act to buffer against the effect of peer/misunderstanding towards the use of tobacco. On the other hand, it is in the best interest of the tobacco industry to concentrate their effort in swaying young people to smoking early. As stated above, most people start smoking during adolescent. So this is the golden period to increase the user base. Moreover, 3.12 indicates that the 15 - 19 group are among the lowest rate in smoking. Once these people grow past their teens, the probability of them picking up a cigarette will be significantly lowered. The tobacco industry can invest in the exposure of cigarette via social network or the movie industry, where users are more likely to be from a younger age group. From table 3.3f, we also see that about 70% of the daily smoking population either never attempted or considered quitting. This further demonstrates the urgency to prevent young people from starting to smoke from a public health perspective; encourage people to start smoking early to maximise the profit of the tobacco industry. Consumption of tobacco is not a habit that is likely to quit. Table 3.10 further proves this by showing over 90% smoker never changed their smoking habit after the extension of no-smoking areas in March 2016.

According to 3.14, 60.5% of smokers consume up to 10 cigarettes a day, 37.0% consume up to 20 cigarettes a day; they average to 12.4 cigarettes a day. This is a piece of useful piece information for the design and optimisation of cigarettes packaging. People usually purchase cigarettes on a per pack/bundle basis. Hence, the optimal number of cigarettes being sold in a package should make reference to the number of cigarettes consumed for person per day. For example, a cigarettes company can sell one type of package that comes with 12 cigarettes, and another with 20 at a discount (since there are fewer people smoking this many a day). Ergonomic package design can also take advantage of knowing the fact that male dominate the cigarette market. They can, for

instance, design the size of each cigarette to best fit the male finger length; or a package that best fit into pockets, since male tend to go casual and keep their belongings inside pockets.

Lastly, from 3.16, we see that 78.7% of smokers are economically active. Since most smokers are working, they are more likely to be smoking in public area than at home on any given day. This should inform city planners when designing our community; as is it desirable to structure our community in the manner such that smokers gather in a small area instead of sparse. This way, fewer people are susceptible to secondary smoke. For instance, parks with the dedicated smoking area can be placed in densely populated commercial districts. More human resource for tobacco control should be allocated during lunch hour as people tend to smoke during this time of the day. The industry can also play a role in reducing employee smoking frequency. 13.1% of the working people smoke daily compared to just 5.3% who are non-working. At first glance, it is reasonable to hypothesise people consume cigarette/tobacco as work-stress relief. 3.18 also confirms that 8.1% of all daily smokers do so to "refreshing one's mind". Employers can thus incorporate other forms of stress relief in the working environment, such as games during lunch hour to incentivise an employee to practice more healthy habits.