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# Financial challenges faced by households in Hong Kong

#### November 2016

Local households usually strive to save some of their income as a buffer against unemployment or sickness on the one hand, and as a long-term family planning on the other. However, many lower to middle income families may not be able to do so and need to rely on past savings or other resources to finance their monthly household expenditure.

Average monthly spending of a retired couple household ranges from HK\$6,600 to HK\$38,300. As drawdown of MPF assets and family contribution can render only partial support, retirees need to accumulate substantial savings before they can live in a self-reliant manner.

In parallel with this challenge in household finance, household debt has been on a rapid uptrend. On average, each household bore a non-mortgage debt of HK\$192,500 at end-2015, more than twice the respective level of HK\$72,900 a decade ago.

The subjects of financial burden of low-income and middle class and household debt were discussed at the Council meetings on several occasions between 2013 and 2016.

#### 1. Introduction

1.1 There have been public concerns over economic well-being and financial situation of local families in recent years, in face of slowing economic growth, slackening social mobility, continued inflation and escalating property cost in Hong Kong.<sup>1</sup> In the light of these persistent concerns, three motions calling on the Government to relieve the financial burden of lower to middle income households have been moved by Members at the Legislative Council meetings over the past four years.<sup>2</sup> This Research Brief analyses the recent developments in household outlays, saving and debt, highlighting a few financial challenges faced by local households in family planning.

A study by the University of Hong Kong showed that nearly half of workers experienced no earning mobility after 10 years of work. While overall consumer prices have gone up by a total of 23% during the past five years, housing prices have surged by 97%. Housing affordability in Hong Kong was ranked the lowest amongst 367 major cities in the world for the sixth consecutive year in 2016. See Legislative Council Secretariat (2015) and Demographia (2016).

The subjects of these three motions were "reducing taxes across the board" which was moved at the Council meeting of 20 November 2013, "establishing a low income subsidy system" at the Council meeting of 4 December 2013 and "expanding the ratio of middle-class population" at the Council meeting of 18 March 2015. The detailed wording of these motions included, inter alia, asking the Government to alleviate the financial burden of either the low income households or middle-class people.

### 2. Recent trend in household expenditure and its composition

2.1 In April 2016, the Census and Statistics Department ("C&SD") released the findings of the latest round of five-yearly household expenditure survey ("HES")<sup>3</sup>, tracking changes in the detailed spending pattern of local households in Hong Kong.<sup>4</sup> According to the survey findings, average household expenditure went up noticeably by a cumulative 46% during the past decade to HK\$27,600 per month in 2015, faster than the 37% rise in overall consumer prices.<sup>5</sup> This represents an improvement in living standard of local families in real terms on the one hand, but an enlarged burden of household budget on the other (**Figure 1**).

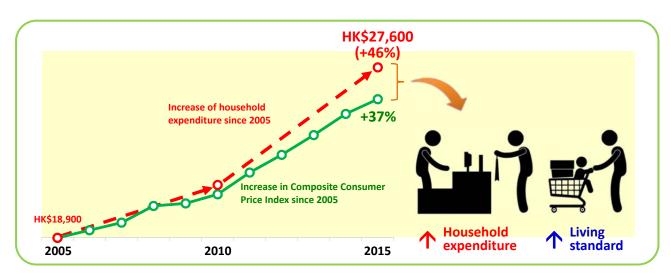


Figure 1 – Average monthly household expenditure, 2005-2015

Data source: Census and Statistics Department.

2.2 Analysed by commodity, *housing* is the most prominent household spending category, accounting for 36% of monthly spending of an average household in 2015. Upon closer examination, the share of accommodation cost was noted to be significantly higher for families living in private housing (40.5%), as compared with households in public rental housing (12%). This can be partly attributable to a sharp rise in flat prices and rentals in the residential property market by a cumulative 223% and 100% respectively during 2005-2015.

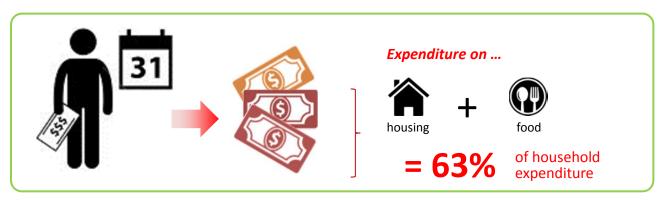
C&SD conducts HES on a quinquennial basis, collecting up-to-date information on the expenditure pattern of households in Hong Kong for compilation of consumer price indices. Results of the 2014-2015-based HES were released in April 2016. For details, see Census and Statistics Department (2016).

<sup>&</sup>lt;sup>4</sup> HES does not cover expenditure spending of recipients of Comprehensive Social Security Assistance. Their expenditure pattern and the respective impact of price changes are covered in another targeted survey conducted by the Social Welfare Department.

As the 2014-2015-based HES was conducted during the 12 months between October 2014 and September 2015, this Research Brief simply takes 2015 as the reference year for presentation convenience, instead of 2014-2015. This also applies to earlier rounds of HES.

2.3 **Food** is the second largest consumption category for an average household in Hong Kong, taking up 27% of the monthly household spending in 2015. Two-thirds of this spending went to "meals away home", conceivably due to long working hours in the workplace. More specifically, the share of food in total household spending hit 46% for families living in public rental housing, about twice the respective figures for households living in private housing (23%). This suggests that families in public rental housing allocate relatively more resources to food in their budget, upon subsidized accommodation cost. Notwithstanding a certain degree of trade-off between food and housing, these two items takes up a lion share of almost two-thirds of local household budget as a whole (**Figure 2**).

Figure 2 – Average share of housing and food in monthly household expenditure in 2015



Data source: Census and Statistics Department.

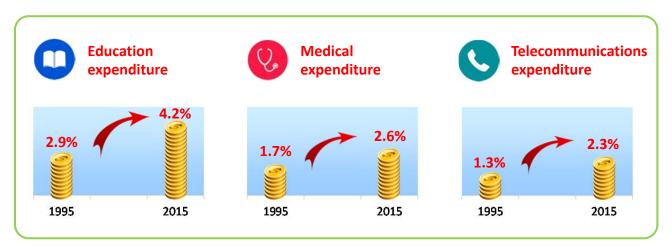
Miscellaneous services are the third largest consumption category, accounting for 16% of the monthly household spending on average in 2015. Within this total, there was a visible increase in the respective share of educational services from 2.9% to 4.2% during 1995-2015, along with increased attention to children education in the local society. The share of medical services also leaped from 1.7% to 2.6%, due in part to the ageing trend and enhanced public awareness of the importance of healthcare. The share of telecommunications services almost doubled from 1.3% to 2.3%, reflecting proliferation of information technology products such as smartphones into the daily life of local citizens nowadays (Figure 3).

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According to a study of a global bank, employees on average worked 50.1 hours per week in Hong Kong in 2015, the highest amongst 71 global cities included in the study. For details, see UBS (2015).

Yet this territory-wide figure includes also families without children still in schooling in calculation. Confining to families with children engaging in full-time study, their actual education expense is much higher than the average figure. This will be discussed in greater detail in paragraph 4.2.

Figure 3 – Average share of selected services in monthly household expenditure, 1995-2015



Data source: Census and Statistics Department.

#### 3. Household saving and their distribution in Hong Kong

3.1 Local households usually strive to live within the means and to save some of their monthly income whenever possible. Not only can household saving act as a precautionary buffer against contingencies like unemployment or sickness, it can also affect households' long-term spending decisions. Moreover, household saving can improve livelihood over time when it is used in education and skills upgrading to lift the earnings capability of family members. From a macroeconomic perspective, household saving can mitigate reliance on social welfare payments and alleviate fiscal burden of the Government on the one hand, and act as social investment funds driving economic growth on the other.

3.2 While C&SD has not released any statistics on household saving for Hong Kong, this can be crudely derived from HES data for a glimpse of the overall financial situation of local families. In this connection, household income data by 10 decile groups is obtained from HES for further analysis, but the top and bottom deciles are left out for computation reliability. Putting household income and expenditure from the same data source side by side, the monthly unspent household income can then be derived (**Figure 4**).

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According to C&SD, income data collected in HES are mainly for consistency check against the reported expenditure data, and hence, may be subject to a larger margin of error. While acknowledging this caveat, it is considered that an analysis of both the income and expenditure from the same data source can shed light on the issue of household finance in Hong Kong. In HES, imputed rent of owner-occupied housing is captured into both household income and household expenditure.

At the request of the Research Office, C&SD has furnished the HES income-expenditure statistics ranked by 10 decile groups in household income distribution for the purpose of this study. Yet the top decile group is left out from the study, as its monthly income ranging from HK\$85,000 to infinity is too wide for derivation of a reliable average income figure. Similarly, the bottom decile households are also dropped from the study, as the monthly income range from zero to HK\$11,000 is also too wide for computation of a reliable average figure.

Figure 4 – Average monthly household income and expenditure by decile of income distribution in 2015

	2 <sup>nd</sup> decile	3 <sup>rd</sup> decile	4 <sup>th</sup> decile	5 <sup>th</sup> decile	6 <sup>th</sup> decile	7 <sup>th</sup> decile	8 <sup>th</sup> decile	9 <sup>th</sup> decile
	(HK\$)							
Range of household income	11,000 - 16,000	16,000 - 21,000	21,000 - 26,000	26,000 - 32,000	32,000 - 39,000	39,000 - 48,000	48,000 - 61,000	61,000 - 85,000
Mid-point of income range	13,500	18,500	23,500	29,000	35,500	43,500	54,500	73,000
Less: Average household expenditure	13,200	15,000	19,200	21,800	25,000	28,600	33,400	42,500
	•	•	•	•	•	•	•	-
Remainder:								
Unspent income*	300	3,500	4,300	7,200	10,500	14,900	21,100	30,500

Note: (\*) Unspent income before salaries tax payment and employee's contribution to the Mandatory Provident Fund. Figures are rounded to the nearest hundred.

Data source: Census and Statistics Department.

3.3 Unspent income can then be translated into household saving, after netting out employees' monthly contribution to the Mandatory Provident Fund ("MPF") and salaries tax payment at the end of the fiscal year. <sup>10</sup> For the eight decile groups included in this study, the following are the salient findings of their pattern of saving or dissaving:

(a) **Negative saving for grassroots families**: For grassroots families lying within the second decile of income distribution, they had an average monthly income of HK\$13,500 in 2015. Subtracting monthly provision of 5% for MPF contribution<sup>11</sup> and 0.1% for salaries tax payment<sup>12</sup>, the disposable income was less than the monthly outlays of HK\$13,200 as revealed from HES. These grassroots families may need to draw down their past savings or resort to borrowing to meet

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According to standard definition in macroeconomics, disposable income is the part of income remaining after deduction of direct tax and social security contribution, which can be used "either for consumption or for saving". See Tucker (2008).

As income data includes MPF contribution made by employees, it needs to be factored out to derive disposable income or take-home cash. With mandatory monthly contribution rate confined to 5% of the relevant income range of HK\$7,100-HK\$30,000, MPF contribution as a share of family income for grassroots households is generally higher than better-off families.

Taking account of all sorts of allowances, deductions and self-education expense, taxpayers within the monthly income range HK\$12,500 – HK\$15,000 needed to pay a salaries tax of HK\$239 on average in 2014-2015, while those higher income earners with monthly income HK\$66,600 – HK\$75,000 had an average tax payment of HK\$63,473. For details, see Schedule 5 of Inland Revenue Department (2016).

the shortfall of HK\$400, which is equivalent to 3% of monthly income.<sup>13</sup>

- (b) **Higher saving for better-off families:** By contrast, better-off families have a larger saving buffer. For instance, households within the ninth decile had an average monthly income of HK\$73,000 and an average monthly expenditure of HK\$42,500 in 2015. Netting out monthly provision for MPF contribution (2.1%) and salaries tax payment (7.2%), these families on average could save HK\$23,700 per month in 2015, the highest amongst all income groups under study.
- (c) **Saving varying with household income**: Families lying between the above two deciles of two ends managed to save part of their income, and the level of saving bears a positive correlation with their respective level of household income. In 2015, the derived monthly average saving ranged from HK\$2,400 for the third decile families to HK\$17,000 for the eighth decile families (**Figure 5**).

Figure 5 – Average monthly household saving by decile income group in 2015

	2 <sup>nd</sup> decile	3 <sup>rd</sup> decile	4 <sup>th</sup> decile	5 <sup>th</sup> decile	6 <sup>th</sup> decile	7 <sup>th</sup> decile	8 <sup>th</sup> decile	9 <sup>th</sup> decile
	(HK\$)							
Range of household income	11,000 - 16,000	16,000 - 21,000	21,000 - 26,000	26,000 - 32,000	32,000 - 39,000	39,000 - 48,000	48,000 - 61,000	61,000 - 85,000
Mid-point of income range	13,500	18,500	23,500	29,000	35,500	43,500	54,500	73,000
Less: Household expenditure	•	•	-	•	•	•	-	•
= Unspent income	300	3,500	4,300	7,200	10,500	14,900	21,100	30,500
Less:								
Contribution to MPF	675	925	1,175	1,450	1,500	1,500	1,500	1,500
Salaries tax (annual)	239	1,004	1,902	3,340	8,220	17,802	30,389	63,473
Remainder:								
Average saving*	-400	2,400	2,900	5,500	8,300	11,900	17,000	23,700

Note: (\*) Saving figures are rounded to the nearest hundred.

Data sources: Census and Statistics Department, Inland Revenue Department and Mandatory Provident Fund Schemes Authority.

Dissaving in the second decile group was partly due to a higher concentration of retired persons who generally lived on past savings. According to HES, 42% of the households in the second decile income group had at least one retired person, higher than the respective proportion of 32% in all households.

3.4 Yet the derived saving is subject to certain caveats and needs to be interpreted with caution. For instance, it does not take into account "hidden outlays" in household budget such as financial support to parents, which are not counted as an expenditure item in HES. Should the hidden outlays be taken into account, the apparently high level of saving shown above would be much reduced. These will be discussed in detail in the next section.

#### 4. Hidden household spending

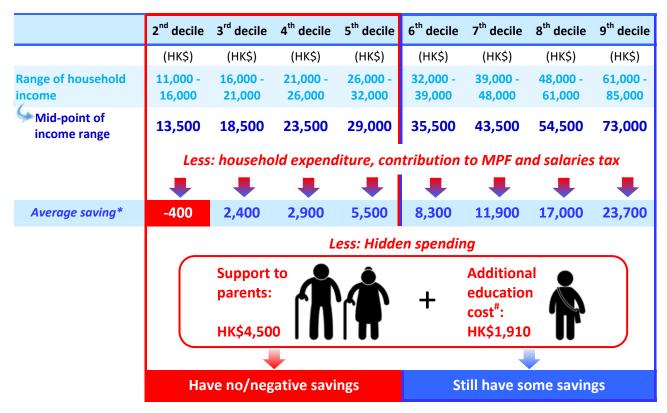
- 4.1 As discussed above, the level of saving derived for most of the decile groups cannot adequately reflect certain hidden expenditure flows of families. For instance, most of local families usually need to provide *monthly financial support to their parents or retired family members*, which is a transfer payment within families. According to an earlier survey conducted by C&SD, the median value of the average monthly financial support from family members to retired persons was HK\$4,000 in 2012, which can be adjusted to HK\$4,500 at 2015 prices.<sup>14</sup>
- Moreover, for families with children within the schooling age, they need to incur *extra education expense* compared with those without. As discussed in paragraph 2.4 above, a local household spent an average HK\$1,160 or 4.2% of their monthly budget on overall education services in 2015. Narrowing down to those families with children in full-time study from pre-nurseries to universities, the respective monthly average spending on overall education services increased by HK\$1,910 to HK\$3,070 in 2015, or 9.3% of their monthly budget. This was more than twice the territory-wide average figure.
- 4.3 Taking into account the above two items of hidden spending, the cushion of monthly household saving derived from HES is not as significant as it appears. In case the families concerned need to shoulder both items of hidden spending in full, the lower to middle income families may use up all of their disposable income, with their notional saving much reduced to the break-even level or even the negative territory. Only the better-off families lying between the sixth to the ninth deciles could maintain positive saving (**Figure 6**).

The survey on "retirement planning and the financial situation in old age" was conducted in 2012. According to the survey findings of C&SD, about 70% of retirees currently receive monthly financial support from family members. The adjustment is based on the 12% rise in overall consumer prices during 2012-2015. For details of the survey findings, see Census and Statistics Department (2013).

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According to HES, altogether there were 660 000 households living with full-time students aged 24 and below in 2015, representing about one-third of households covered in the survey. Their monthly education expense is much higher than the rest of households without children engaging in full-time study. The average figure in paragraph 2.4 should thus have underestimated the actual burden of households with children in full-time study.

Figure 6 – Average monthly hidden spending of households in 2015



Notes: (\*) Saving figures are rounded to the nearest hundred.

(#) Extra education expense for families living with children engaging in full-time study.

Data source: Census and Statistics Department.

# 5. Financial challenges in retirement planning

In view of the aforementioned tight situation in household finance, there are concerns whether local families can accumulate adequate saving to finance their livelihood after retirement. Based on HES statistics, the average monthly spending of a retired couple household ranged from HK\$6,600 in the bottom quartile to HK\$38,300 in the top quartile in 2015, including imputed rent of owner-occupiers. In case these retired couples lived in owner-occupied flats, their monthly out-of-the-pocket spending would be smaller by some 35%-60%.

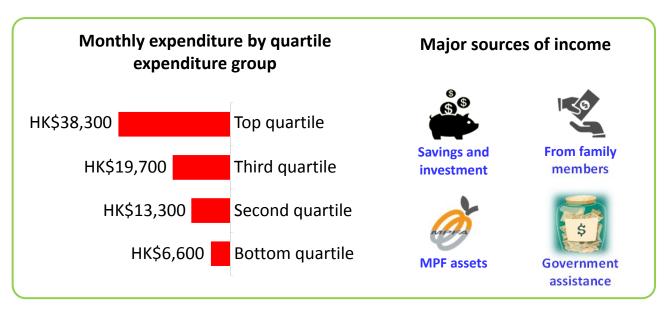
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According to HES, a household comprising only retired couple in the bottom quartile of expenditure group on average spent HK\$6,600 per month in 2015, while the respective spending for retired couples in the second to the top quartiles were HK\$13,300, HK\$19,700 and HK\$38,300. These figures included imputed rents of retired couples living in owner-occupied housing.

In 2015, some 24%, 73%, 90% and 91% for these retired couple households in the four quartiles lived in their owned flats. For these owner-occupiers, the out-of-pocket expenditure should be lowered by some 35%-60% each month, after netting out the imputed rent.

- 5.2 While financial contribution from family members may offer support to retirees, the aforementioned C&SD survey shows that the median average value of such contribution was about HK\$4,500 per month at 2015 prices. This could meet only part of the average monthly spending of a retired couple household.
- Retirees can also draw down their MPF assets. At end-2015, average MPF benefits held by scheme members was HK\$144,000<sup>19</sup>, which could meet less than two years of spending of a retired couple household. In other words, even with family support and MPF assets, elderly persons still need to accumulate substantial saving before retirement.<sup>20</sup> This is a challenging task for local families, especially for grassroots families as they have little saving left after taking into account their financial support to parents and additional education expenses for children engaging in full-time study. These families may turn to the government for assistance when they live beyond the means (**Figure 7**).

Figure 7 – Major sources of income and monthly expenditure of retired persons



Data source: Census and Statistics Department.

See Mandatory Provident Fund Schemes Authority (2016).

<sup>&</sup>lt;sup>18</sup> See discussion in paragraph 4.1.

The above analysis has not factored in the dimension of investment in the use of monthly household saving. If the investment gives rise to a positive return, it can help families grow its wealth before meeting outlays in the future. However, with a very low interest rate and a highly volatile financial market after global financial crisis in 2008, it appears that the general public with limited financial knowledge may not be able to gain much from investment. For details, see The Economist (2016).

It is cautioned that the above analysis has not factored in the aspiration of local families for home ownership yet, both for social mobility and protection against retirement. With average prices for a small flat surging to about HK\$5 million in 2015, the down-payment could amount to some HK\$2 million. While this lump sum payment may not pose a big problem for existing flat owners who can trade up by selling their existing property, it could be a daunting task for young and first-time buyers. As the down-payment is equivalent to seven years of accumulated saving of a better-off household in the ninth decile (or 20 years of saving for a household in the sixth decile), the financial challenges faced by these prospective home buyers would be even greater.

## 6. Household debt in Hong Kong

- In face of a generally tight household finance, some families resort to borrowing to tide over financial difficulties, resulting in surging household debt in recent years. Based on statistics compiled by the Hong Kong Monetary Authority ("HKMA"), outstanding balance of household loans has gone up by a cumulative 108% during the past decade to HK\$1,594 billion by end-2015. As it outpaced the respective growth in Gross Domestic Product ("GDP"), there was a noticeable leap in the ratio of household debt to GDP over the past decade, from 54% to 67%.
- On average, each local household bore a debt of HK\$646,100 at end-2015, almost twice the respective debt level of HK\$349,100 in 2005. Analysed by type, major developments of household debt can be summarized below:
  - (a) **Mortgage loans**: Mortgage loans are the largest item in household debt, taking up 70% of the total outstanding value. In parallel with sharp escalation in property prices and despite seven rounds of tightening in mortgage lending by HKMA since October 2009, local families still borrowed heavily for home purchases. While the credit risks appear to be manageable amidst a low interest rate environment at this moment, there are concerns over enlarged burden of mortgage repayment in the event that the interest rate in the

Average flat prices increased by a total of 223% during the period 2005-2015. The escalated property value could then be used for protection against retirement under the reverse mortgage arrangement offered by the Hong Kong Mortgage Corporation.

Small-sized flat refers to Class A flat under the classification of Rating and Valuation Department, with an average area of 40 square meters. The average price of such flats in Hong Kong was about HK\$5 million in 2015. With a 40% down-payment ratio, the down payment amounted to HK\$2 million.

They cover only household loans extended by authorized institutions of HKMA, and do not include personal loans obtained from other sources (e.g. relatives, friends or other intermediaries).

See Hong Kong Monetary Authority (2015).

United States ("US") reverts to the upward cycle in the imminent future.<sup>25</sup>

- (b) Advances of credit cards: There are some 18.8 million of credit cards in circulation in Hong Kong, implying that each adult person possesses about three credit cards on average. By end-2015, each local household bore an average credit card debt of HK\$47,700, up by 69% over a decade earlier.
- (c) Other personal loans: Other personal loans (e.g. tax loans or personal instalment loans) experienced the most rapid growth of 264% over the past decade, resulting in a noticeable lift of its share in overall household debt from 13% to 22%. On average, each local household bore a personal debt of HK\$144,800 at end-2015, more than twice the level at end-2005 (Figure 8).

End-2005 End-2010 End-2015 HK\$144,800 (22.4%)HK\$70,900 HK\$44,700 (15.8%)(12.8%)HK\$47,700 HK\$28.200 -6 HK\$34,500 (7.4%)(8.1%)(7.7%)Total: Total: HK\$646,100 Total: HK\$448,000 HK\$349,100 HK\$276,200 HK\$342,600 HK\$453,600 (76.5%)(79.1%)(70.2%)Credit cards advances Personal loans and others Mortgage loans

Figure 8 – Average debt borne by each household by type, 2005-2015

Data source: Hong Kong Monetary Authority.

According to HKMA, mortgage repayment as a ratio of household income averaged at 62.9% in the second quarter of 2016, far above the long-term average figure of 50%. See Hong Kong Monetary Authority (2016a).

6.3 The sharp rise in household debt has been a cause for concerns in Hong Kong in recent years. For example, as interest rates for credit card advances and certain personal loans could exceed double-digit level, some of the borrowers may eventually find it hard to meet debt repayment. Moreover, the uptrend in household debt poses a potential risk to the wider economy, in anticipation of an imminent rise in US interest rate which may trigger a correction in local property market.

#### 7. Observations

- 7.1 The following observations can be made from the above analysis:
  - (a) **Negative saving for grassroots families**: Local households usually strive to save some of their income not only for buffer against unemployment or sickness, but also for long-term family planning. However, many grassroots families in the lower deciles may not be able to do so and need to rely on past saving, loans or government assistance to finance their monthly expenditure.
  - (b) Saving depleted by hidden household outlays: Netting out the financial support to parents and additional education expense for children engaging in full-time study, monthly saving of lower to middle income households could be much reduced to the break-even level or even to the negative territory.
  - (c) **Need for sizable retirement saving**: Average monthly expenditure of a retired couple household ranged from HK\$6,600 in the bottom quartile to HK\$38,300 in the top quartile in 2015, including imputed rents of owner-occupied housing. While drawdown of MPF assets and family contribution can render partial support to retirees, elderly persons still need to accumulate substantial savings before retirement if they wish to live in a self-reliant manner.

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According to an earlier study conducted by HKMA, average annualised interest rate for personal loans of six major banks in Hong Kong ranged between 3% and 20% in 2008. For credit card advances, the respective interest rate could hit as high as 28%-38%. See Hong Kong Monetary Authority (2009).

(d) **Rising household debts**: In face of tighter household finance, more families resort to household loans to tide over financial difficulties. On average, each household in Hong Kong bore a non-mortgage debt of HK\$192,500 at end-2015, more than twice the respective debt level of HK\$72,900 in 2005. This represents latent risks in the longer term, especially after the reversal of US interest rate cycle in the near future.

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