RENTAL SURVEY IN MALE' *March 2019 - April 2020*A PANEL DATA ANALYSIS



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Introduction

Housing demand in the capital Male' is high due to the high rates of internal migration from the other islands and from international migrants, mostly comprising of foreign workers. Most recent household survey in the country "Household Income and Expenditure Survey" of 2016 revealed that 63 percent of households in Male' were living in rented accommodation. Furthermore, these households spend a quarter (23 percent) of their household expenditure on housing rent.

This rent survey was initiated as part of the methodological improvement of the Consumer Price Index, during the review and rebasing exercise of CPI in 2019. The rent survey sample has been divided into six, equally representative, panels of more than 50 units each. Each month prices are collected from one panel. These monthly data are used for the compilation of rental index in the CPI.

Rental data is collected from all the six wards of Male'; namely Maafannu, Mahchangolhi, Galolhu, Henveiru, Villimale' and Hulhumale'. The purpose of this report is to analyse the changes in the rental prices of Greater Male'.

The data used in this study has been initially collected in September 2019 for the period of March 2019 and September 2019 via face-to-face interview for CPI rebasing purpose. Due to COVID-19 pandemic the rent survey was repeated for all the six panels in April 2020 to study the changes in rents for apartments. This was done over the phone as face-to face enumeration could not be undertaken due to lockdown.

This panel data study analyses the changes in rent prices in March 2019 to September 2019 and April 2020 to assess the impact on real estate sector due to Covid-19. This report also provides some insights of the changes in rents paid by consumers as observed from the monthly CPI. The data collection in September 2019 has been carried out using face-to-face interviews by NBS staff: Ms. Aishath Hassan, Ms. Mariyam Shadeena, Ms. Sajida Ahmed, Ms. Azmeela Hassan, Mr. Shahuleen Moosa, Mr. Nujoom Hassan, Ms. Firsha Ahmed, Ms. Aishath Sobaha and Ms. Aminath Musfiqa Ibrahim. The data collection and entry for April 2020 is done using phone interviews by Ms. Firsha Ahmed, Mr. Nujoom Hassan and Mr. Shahuleen Moosa.

I would like to thank all those who worked tirelessly to make this study a reality, including all the households that provide data for this survey .I also acknowledge support from IMF, Mr. Brain Graf who assisted NBS in the design and initiation of the rent survey, as part of his consultancy support in improving the CPI.

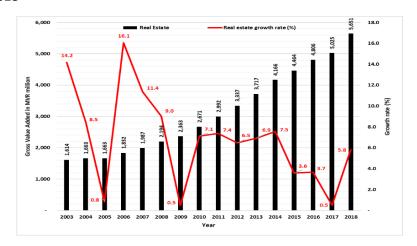
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Real Estate Sector

The real estate sector in National Accounts includes selling, buying or renting real estate (building of land) and imputed services for owner occupied dwellings. Although the industry includes two sub-sectors; real estate and owner-occupied dwellings, for this analysis, only renting of properties are included. This sector is related to the construction sector growth as part of the completed residential and non-residential dwellings are rented out as a means of recovering the cost of construction.

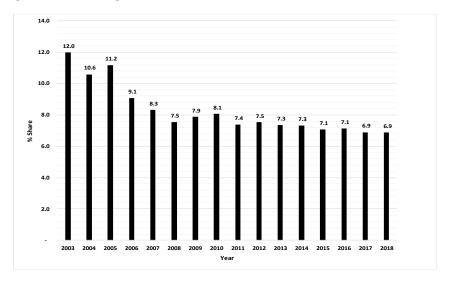
Figure 1: Gross Value Added and growth rate of real estate sector, 2003-2018



As seen in Figure 1, over the past few years, the sector has increased over three folds with double-digit growths for a couple of years. The growth rate of the sector is very much affected post Indian-Ocean Tsunami and also during the Asian Financial Crisis. The value added of the sector in 2018 was MVR 5,651 million.

Although the sector had a significant increase in the value added, the percentage share of the sector has a declining trend though-out the period. This is mainly because of the high growth rates of construction and tourism sector due to expansion of tourism industry.

Figure 2: Percentage share of real estate sector, 2003-2018



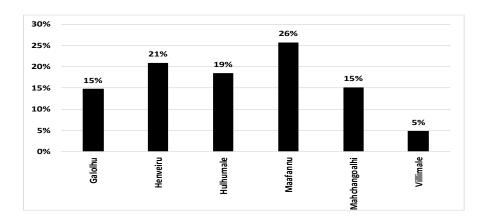
Sampling and Survey Methodology

Data from 454 households are collected in this rent survey. For the selection of households, a two-stage sampling technique was adopted.

At the first stage, the number of rented households selected in ward was proportional to the number of rented households in Census 2014 for each ward. Thus, a total of households selected are 454 of which 117 from Maafannu, 95 from Henveiru, 84 from Hulhumale', 69 from Mahchangoalhi, 67 from Galolhu and 22 from Villimale'.

As shown below in Figure 1, the proportion of sample selected depends on the number of households of each ward. As seen in the Figure 2 below, 26% of all households included in the sample are in Maafannu, 21% from Henveiru, followed by 19%, for Hulhumale, 15%, each from Mahchangolhi, Galolhu and 5% from Villimale.

Figure 1: Percentage of sample by ward

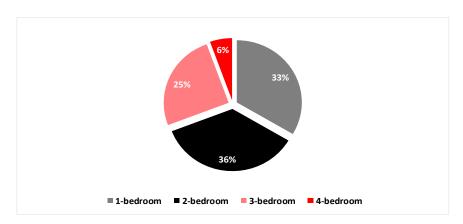


At the second stage, the sample is selected based on the proportion of each type of apartment in terms of number of bedrooms.

Table 1: Number of rented apartments selected by ward and type

Ward	Type of apartment				
vvalu	1-bedroom	2-bedroom	3-bedroom	4-bedroom	Total
Galolhu	26	24	15	2	67
Henveiru	34	31	25	5	95
Hulhumale	16	26	37	5	84
Maafannu	38	47	26	6	117
Mahchangoalhi	28	26	10	5	69
Villimale	10	8	2	2	22
All	152	162	115	25	454

Figure 2: Proportion of sample selected by type of apartment



As shown in the figure above, 33% of households are 1 bedroom, 36% have 2 bedrooms, 25% have 3 bedrooms and 6% of households have 4 bedrooms. As there are very few households with more than 4 bedrooms in Male', this category was excluded in this study.

Price collection for the new rent survey began in September 2019. During the first round of price collection, each sampled unit was asked to report rent paid in the current month and the rent paid six months ago. For those tenants that did not occupy the unit six months earlier, the landlord or owner was contacted to collect the previous rent paid.

A sample of approximately 340 rental units have been selected for price collection in the updated CPI. The sample has been divided into six, equally representative, panels of more than 50 units each. Each month, prices are collected from one panel. Given the nature of rental contracts in Maldives, it is not necessary to collect prices from all sampled units each month. Each panel is visited twice per year. The price collected is compared to the price for that unit reported six months earlier. For example, in January rent is

collected from panel 1 and the collected prices are compared to those reported by the same units for July of the previous year. This results in the calculation of a six-month change, which must be converted into a one month change by taking the 6th root of the six-month change.

Beginning in 2021, 20 or 25 percent of the sample will be rotated out and replaced by new rental units. This not only contributes to minimizing respondent burden, but also allows for the sample to include new construction and new areas. On-going land reclamation and construction on the islands around Male' have increased the housing stock. A rotation policy will ensure these newly built areas are included in the rent sample in a timelier manner.

Table 2: Raising factors

Ward		Type of apartment					
vvaru	1-bedroom	2-bedroom	3-bedroom	4-bedroom			
Galolhu	38.3	38.0	29.0	61.5			
Henveiru	36.4	37.7	19.8	17.4			
Hulhumale	36.8	30.0	33.1	18.6			
Maafannu	38.8	32.2	28.0	24.7			
Mahchangoalhi	35.5	40.2	40.2	14.8			
Villimale	42.9	37.3	46.5	14.0			

The Table 2 shows computed raising factors using Census 2014 data and the sample selected. In order to make the results of this survey representative to Male', it was raised using these raising factors.

Number of rented apartments

In Male', 60 percent of households lived in rented accommodation compared with only 31 percent of the households that resided in a dwelling unit that is owned by a member of that household.

The data from rent survey was raised using Census 2014 data. Of the 15,371, Maafannu has the highest population density and has the most number of rented apartments 3,864 followed by Henveiru 2,988;, Hulhumale' 2,687; Mahchangolhi 2,517 and Galolhu 2,467. Villimale has the least number of rented apartments 848.

Figure 5: Number of rented apartments by ward

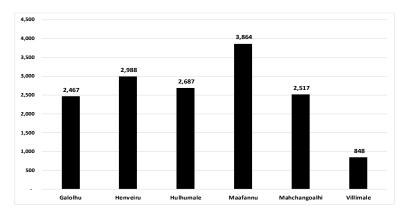
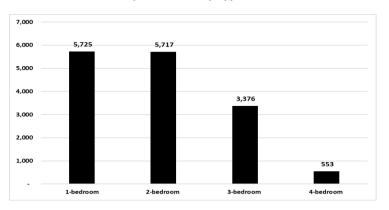


Figure 6 depicts the number of rented apartments by type. Due to the densely population in Male', people live in smaller apartments. Most, approximately 5,725 or 37% of rented households are 1-bedroom apartments. The number of households living in rented dwellings. Closely followed are the number of 2-bedroom apartments at 5,717 (37%) while the number of 3-bedroom apartments are 3,376.

Figure 6: Number rented apartments by type



As seen in the Table 3 below, 10% of all households included in the sample are 2-bedroom apartments in Maafannu, followed by 1-bedroom apartments in Maafannu and 3-bedroom apartments in Hulhumale.

Table 3: Proportion of apartments by ward and type of apartments

Ward	Type of apartment					
vvaiu	1-bedroom	2-bedroom	3-bedroom	4-bedroom	Total	
Galolhu	6%	6%	3%	1%	16%	
Henveiru	8%	7%	3%	1%	19%	
Hulhumale	4%	5%	7%	1%	17%	
Maafannu	10%	10%	5%	1%	26%	
Mahchangoalhi	6%	7%	3%	0%	16%	
Villimale	3%	2%	1%	0%	6%	
All	37%	37%	22%	4%	100%	

Furnishing

Among the sample selected, 280 (62%) were unfurnished, 161 (35%) were semi-furnished and 13 (3%) were fully-furnished apartments.

Table 5: Number of household and percentage by type of furnishing

Type of furnishing	No of rented apartments	Percentage (%)
Fully furnished	435	3%
Semi-furnished	5,216	34%
Unfurnished	9,719	63%
All	15,371	100%

As shown in Table 6, among all the type of apartments, most of the households selected was unfurnished. 78% of 1-bedroom, 58% of 2-bedrooms, 47% of 3-bedrooms and 65% of 4-bedroom apartments included in the sample are unfurnished.

Only 1% of the 1-bedroom, 1% of the 2-bedroom and 9% of the 3-bedroom apartments included in the sample were fully furnished. Of the 25 households selected among the 4-bedroom, not were fully furnished. However, 21% of the 1-bedroom, 40% of the 2-bedroom, 45% of the 3-bedroom and 35% of the 4-bedroom apartments were semi-furnished.

Table 6: Number and percentage of households by no. of bedrooms and type of furnishing

Type of Furnishing	No of households	Percentage (%) among type	Percentage (%) of all types
1-bedroom	5,725	100%	37%
Fully furnished	73	1%	0%
Semi-furnished	1,207	21%	8%
Unfurnished	4,445	78%	29%
2-bedroom	5,717	100%	37%
Fully furnished	72	1%	0%
Semi-furnished	2,307	40%	15%
Unfurnished	3,337	58%	22%
3-bedroom	3,376	100%	22%
Fully furnished	290	9%	2%
Semi-furnished	1,509	45%	10%
Unfurnished	1,577	47%	10%
4-bedroom	553	100%	4%
Semi-furnished	193	35%	1%
Unfurnished	360	65%	2%
All	15,371	100%	100%

Table 7: Average rent by number of bedrooms

Type of apartment	A	Average rent				
	Mar-19	Sep-19	Apr-20			
1-bedroom	8,742	8,764	8,616			
2-bedroom	14,463	14,472	14,217			
3-bedroom	19,263	19,263	19,109			
4-bedroom	26,359	26,359	26,127			
All	13,814	13,826	13,634			

The Table 7 above shows that, according to the panel study done, the average rent of a 1-bedroom apartment is MVR 8,742 in March 2019, while in September 2019 the average rent has increased to MVR 8,764. However, in April 2020 the average rent has declined to MVR 8,616. This is a decline of 1.7% compared to the rent in September 2019.

While the average rent of a 2-bedroom apartment is MVR 14,463 in March 2019, while in September 2019 the average rent has increased to MVR 14,472. However, in April 2020 the average rent has declined to MVR 14,217. As illustrated in the Figure 1 below, this is a decline of 1.8% compared to the rent in September 2019.

The average rent of a 3-bedroom apartment is MVR 5,721 more than that of a 2-bedroom apartment, MVR 19,356 in March 2019, while in September 2019 the average rent remained constant. However, in April 2020 the average rent has declined to MVR 19,109. This is a decline of 0.8% compared to the rent in September 2019.

The average rent of a 4-bedroom apartment is MVR 7,096 more than that of a 3-bedroom apartment, which is MVR 26,359 in March 2019, while in September 2019 the average rent remained constant. However, in April 2020 the average rent has declined to MVR 26,127. This is a decline of 0.9% compared to the rent in September 2019.

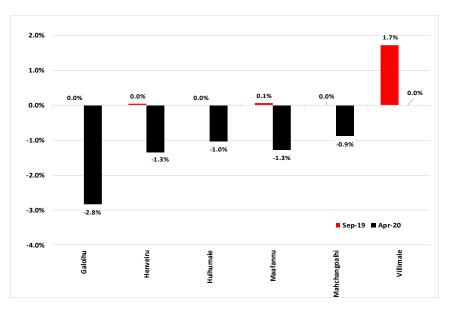
Table 8: Average rent by ward

Ward	Average rent				
vvalu	Mar-19	Sep-19	Apr-20		
Galolhu	13,953	13,953	13,558		
Henveiru	14,496	14,502	14,307		
Hulhumale	13,446	13,446	13,306		
Maafannu	14,593	14,602	14,416		
Mahchangoalhi	13,764	13,764	13,642		
Villimale	8,776	8,928	8,928		
All	13,814	13,826	13,634		

An analysis was done to see whether there is a difference in rent based on the ward it is located in. According to the panel study, the average rent is very much lower if the apartment is located in Villimale. The average rent of an apartment in Villimale in March 2019 is MVR 8,776 and this has increased to MVR 8,928 by September 2019. However, the rent remained unchanged in April 2020 despite the changes in rent in Male' due to Covid-19.

Followed by Villimale, the rent in Hulhumale is slightly lower than that of the remaining 4 wards of Male'. The main reason for this decline could be due to the lower rent the households has to pay as most of the flats in Hulhumale' are provided by the government under housing schemes at a lower rate than the rental market rate. The average rent of an apartment in Hulhumale in March 2019 is MVR 13,764 and this remained constant throughout September 2019. However, the average rent declined to MVR 13,642 in April 2020 due to Covid-19. This is a decline of 1% compared to September 2019.

Figure 8: Growth rate of average rent by ward in Sep 2019 and April 2020



The average rent in Galolhu in March 2019 is MVR 13,953 and in Mahchangoalhi it was MVR 13,764. The average rent was highest in Maafannu MVR 14,593 followed by in Henveiru MVR 14,496. Even though the average rent in Galolhu and Mahchangoalhi remain unchanged thoughout March 2019 to September 2019, the average rent in these two wards fall by 2.8% and 0.9% respectively in April 2020 due to Covid-19 as showin in Figure 8 above. However, the average rent in wards Henveiru and Maafannu increased throughout March 2019 to Spetember 2019. The average rent in these two wards also declined by 1.3% in April 2020 due to Covid-19.

Table 9: Average rent by type of furnishing

Type of furnishing	Mar-19	Sep-19	Apr-20
Fully furnished	21,826	21,826	21,658
Semi-furnished	17,099	17,099	16,730
Unfurnished	11,693	11,711	11,612
All	13,814	13,826	13,634

The panel data analysis also shows that the average rent of an apartment varies depending on the type of furnishing. In March 2019, the average rent of an unfurnished apartment is MVR 12,026 while semi-furnished apartment is rented for MVR 17,861. Thus, average rent of a semi-furnished apartment is MVR 5,835 more than that of an unfurnished apartment. However, average rent of a fully furnished apartment is only MVR 3,841 more than that of a semi-furnished apartment.

The panel data analysis provides evidence on the increase in the average rent of unfurnished apartments throughout March 2019 to September 2019, while average rent of semi-furnished and fully furnished apartments remained unchanged. It also shows the decline of average rent in apartments as an impact of Covid-19 in April irrespective of the type of furnishing. However, as depicted in the Figure 3 below, the decrease average rent of fully furnished apartment and unfurnished apartment 0.7% and 0.8%, respectively, while the average rent of semi-furnished apartments fell by approximately 2%.

Figure 9: Growth rate of average rent by type of furnishing in Sep 2019 and April 2020

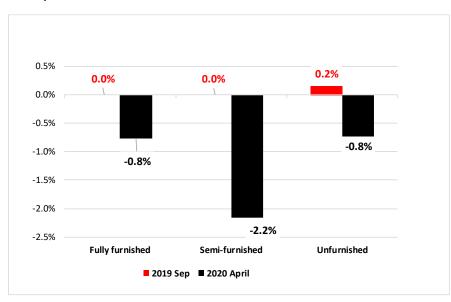


Table 10: Average rent by type of apartment and furnishing

Time of anastroput / Francishing	Average rent				
Type of apartment / Furnishing	Mar-19	Sep-19	Apr-20		
1-bedroom	8,742	8,764	8,616		
Fully furnished	12,995	12,995	12,000		
Semi-furnished	10,589	10,589	10,244		
Unfurnished	8,170	8,199	8,118		
2-bedroom	14,463	14,472	14,217		
Fully furnished	19,961	19,961	19,961		
Semi-furnished	16,666	16,666	16,213		
Unfurnished	12,821	12,836	12,712		
3-bedroom	19,263	19,263	19,109		
Fully furnished	24,526	24,526	24,526		
Semi-furnished	21,209	21,209	20,922		
Unfurnished	16,434	16,434	16,380		
4-bedroom	26,359	26,359	26,127		
Semi-furnished	30,852	30,852	30,699		
Unfurnished	23,951	23,951	23,677		
All	13,814	13,826	13,634		

According to the panel study done, irrespective of the type of apartment (no of bedrooms) the rent of an apartment varies depending on the type of furnishing. For a 1-bedroom apartment, the average rent is MVR 8,750. However, the average rent of a fully furnished 1-bedroom apartment in March 2019 is MVR 13,000 while it is MVR 2,391 less than that for a semi-furnished apartment. The average rent of an unfurnished apartment is MVR 8,174 in March 2019.

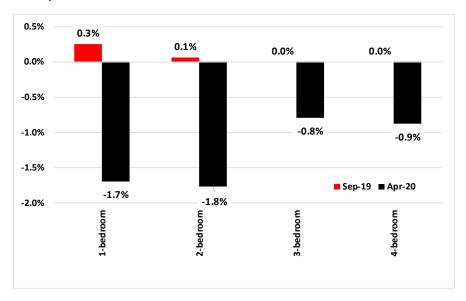
For a 2-bedroom apartment, the average rent in March 2019 is MVR 14,396. However, the average rent of a fully furnished 2-bedroom apartment is MVR 19,565 while it is MVR 3,973 less for a semi-furnished apartment. The average rent of an unfurnished 2-bedroom apartment is MVR 12,744 in March 2019.

For a 3-bedroom apartment, the average rent in March 2019 is MVR 19,356. However, the average rent of a fully furnished 3-bedroom apartment is MVR 24,111 while it is MVR 21,192 for a semi-furnished

apartment. The average rent of an unfurnished 3-bedroom apartment is MVR 16,796 in March 2019.

Unfortunately, fully furnished 4-bedroom apartment was no included sample. The average rent in March 2019 for a 4-bedroom apartment is MVR 25,471. The average rent of a semi-furnished 4-bedroom apartment is MVR 30,818 in March 2019 while it was MVR 21,269 for an unfurnished 4-bedroom apartment.

Figure 10: Growth rate of average rent by type of apartment in Sep 2019 and April 2020



The average rent remained unchanged during the period from March 2019 to September 2019 for fully furnished and semi-furnished apartments irrespective of the number of bedrooms it has. However, the average rent of semi-furnished and unfurnished apartments fell in April 2020

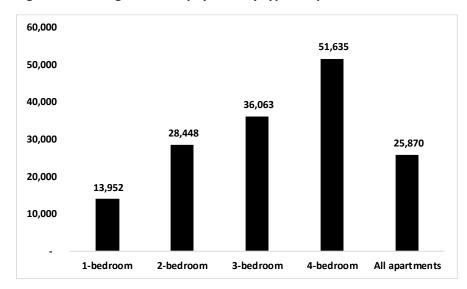
irrespective of the number of bedrooms it has. However, the rent of fully furnished apartments remained unchanged except for 1-bedroom apartments. For 1-bedroom apartments, the rent declined by 7.7% or MVR 1000.

Advance payment

An advance payment, or simply an advance, is the part of a contractually due sum that is paid in advance while renting the apartment. Usually the advance is paid back to the tenant upon evacuating the apartment or sometimes deducted from the monthly rent upon completion of contract period. This is usually taken as a proactive measure to protect leaser from unforeseen damage to the property rented.

The Figure 11 shows that on average, MVR 25,870 is taken as an advance payment by the leaser. However, the amount taken as an advance payment differs by the type of the apartment rented. The bigger the apartment, the higher is the advance payment.

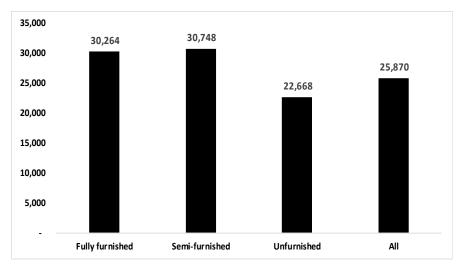
Figure 11: Average advance payment by type of apartment



On average, the advance payment of a one-bedroom apartment is MVR 13,952. The amounts approximately doubles for a two-bedroom apartment. For a three-bedroom apartment, the average advance payment is MVR 36,063 and for a four-bedroom apartment the average advance payment is MVR 51,635.

The advance payment also varies depending on the type of furnishing done at the time renting the apartment. While the average advance payment is MVR 22,668 for an unfurnished apartment, the advance payment for a fully-furnished apartment is MVR 30,264. The reason for having a lower average advance payment for fully-furnished apartment compared to the semi-furnished apartments is because most of the fully-furnished apartments are located in Hulhumale where the rent and advance payment is fixed by the Hulhumale Development Corporation (HDC) for social housing units.

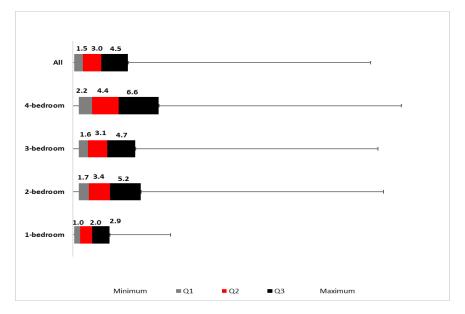
Figure 12: Average advance payment by type of furnishing



Contract period

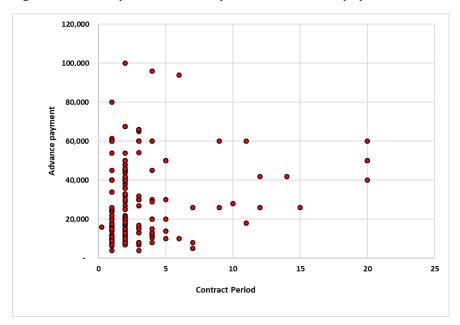
The contract period varies for the apartments under the panel study. Some of the apartments do not really have a formal contract while some have a maximum period of 20 years.

Figure 13: Box plot on average contract period by type of apartment



The Figure 13 illustrates data of contract period on a box-and-whiskers plot. The outliers have been omitted in computing the median. The mean contract period of all rented apartments are 3 years, while the mean for a one-bedroom apartment, it is lower (2 years). The mean contract period is higher for a four-bedroom apartment (4.4 years) compared to the other types of apartments.

Figure 14: Scatterplot on contract period and advance payment



The above scatter plot shows the relationship between the contract period and advance payment. It illustrates a positive correlation of 0.255 or 25.5% between the two.

Consumer Price Index (CPI) – Rent Index

The National Bureau of Statistics completed the latest review of the CPI and updated the market basket to using expenditure data collected from households during the 2016 Household Income and Expenditure Survey (HIES). The HIES expenditure estimates were classified according to the United Nations Classification of Individual Consumption by Purpose (COICOP). In the COICOP classification used for CPI compilation, rentals for housing falls under the broad group "Housing, water, electricity, gas and other fuels".

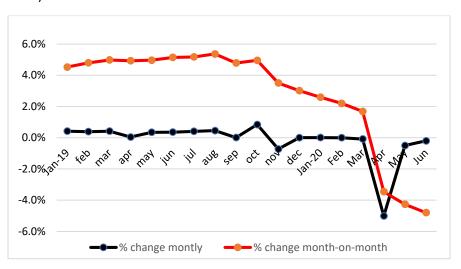
Along with updating the basket, the NBS has implemented the (COICOP) 2018 and improved the rent survey. The index reference period is August 2019. This new (2019) CPI was published in October 2019. The new index has been linked to the old data series to create a continuous time series of data. ¹

TABLE 1: CPI GROUP AND SUB- GROUP, MALE'				Contribu		Change in
	Index nu	mbers (a)	Percentag e change	total CP groups CP poin	PI index	points contributio
			May 2019			May 2019
Groups, sub group and expenditure class	May-20	Jun-20	Jun 2020	May-20	Jun-20	Jun 2020
All group CPI	95.37	95.24	-0.14	95.37	95.24	-0.14
HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	88.30	88.16	-0.16	28.16	28.11	-0.05
ACTUAL RENTALS FOR HOUSING	94.57	94.38	-0.20	22.34	22.30	-0.04
Actual rentals paid by tenants for main residence (S)	94.57	94.38	-0.20	22.34	22.30	-0.04

 $^{^{1}}$ For a more detailed description of compilation methods, please see CPI guide 2019 at

In CPI of April 2020, one-bedroom apartment rent decreased by (-9.40%), two-bedroom apartment rent (-3.62%), three-bedroom apartment rent (-2.47%) and four-bedroom rent (-2.35%), compared to March 2020. This reduction is due to COVID-19 with reductions and deferrals observed in apartment rents in Male' area.

Figure 15: Percentage change in rent index of CPI, Male' (Jan 2019-June 2020)



http://statisticsmaldives.gov.mv/nbs/wpcontent/uploads/2019/10/GuideToCPI_Maldives2019-Publication.pdf

Conclusion

Considering the high proportion of households living in rented accommodation in the capital Male', and the high share of household consumption spent on accommodation, it is importance to collect reliable and up-to-date data on the rental prices.

Housing is a basic need and as such housing affordability is important. It is related to other needs and have deep connections with human health and wellbeing as well. During COVID-19 with loss of jobs and incomes, people living in rented accommodation faced additional hardships.

Providing affordable housing, especially social housing for the needy people is high on the Government agenda. Flats are being constructed in Greater Male' area as well in the islands, to meet the hosing need of the population.

Data on rents and housing are important for evidence-based decisions by the government, private real estate providers, financing agencies as well as the consumers and public at large.