PERSPECTIVE

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Household Income Growth since GE13: Implications for GE14

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EXECUTIVE SUMMARY

- The median household income in Malaysia has risen in all parliamentary constituencies since the 2013 general elections (GE13).

- Constituencies run by the ruling Barisan Nasional (BN) since GE13 in general have lower median income than non-BN constituencies.

- The widening median income gap between non-BN and BN constituencies is likely to further entrench urban support for non-BN parties. The GE14 frontline is likely to be non-urban constituencies with relatively lower median household income.

- BN's electoral strategies such as the re-delineation of electoral boundaries and increased cash payments will likely reduce the advantages enjoyed by non-BN political parties.

- The polling date for GE14—May 9, a Wednesday—is likely to further strengthen BN's advantages in non-urban constituencies.

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INTRODUCTION

An armoured vehicle factory owned by a DRM HICOM subsidiary is arguably one of the crown jewels in the Peramu Jaya Industrial Area. Its location in Pekan in the state of Pahang is no accident. Pekan has been Malaysian Prime Minister Najib Razak's parliamentary constituency since 1976. Besides being an automotive hub, Pekan is also an education hub featuring a few local colleges and universities such as Universiti Malaysia Pahang and DRB-Hicom University of Automotive Malaysia. Further south in Pagoh, Johor, sits another education hub that hosts four local universities. Similar to Pekan, Pagoh is the parliamentary constituency of another prominent politician, Muhyiddin Yassin who was, until recently, a senior UMNO stalwart. Such practices are not unusual in the world of politics. Known as "pork barrel politics" in political science literature, the distribution of projects is considered to be part of an elected politician's services to his/her constituency. Such projects are expected to lead to higher income for households located in the constituency. Improvements in household income is therefore potentially one reliable measure of the post-election performance of politicians and political parties.

This paper examines the changes in household income levels in the 222 parliamentary constituencies in Malaysia during the period 2014-2016. More specifically, evidence is sought on whether households in constituencies that have voted for political parties from the Barisan Nasional (BN) coalition in the 13th General Elections (GE13) have experienced higher income growth compared to those which have voted for other political parties. Another related question that is examined is whether or not a change in the ruling party at constituency level during the GE13 (e.g. from non-BN to BN, vice-versa) brought about improvements in household income.

HOUSEHOLD INCOME CHANGES AFTER GE13

There are currently 222 parliamentary constituencies in Malaysia, of which 133 were won by the ruling coalition, Barisan Nasional, in the thirteenth general elections (GE13) held in 2013. The district-level data from the Household Income Surveys (HISs) published by Malaysia's Department of Statistics (DOS) is used to analyse the changes in median monthly household gross income in these parliamentary constituencies after the GE13.[1] This is done by matching data at the district-level to the constituencies. The matching is not perfect as there are more parliamentary constituencies (222) than districts (144). As a result, some districts contain multiple and adjacent constituencies. Another limitation is that the household income level is only available for two years, namely 2014 and 2016.

Before delving into economic performance at the constituency level, it is perhaps useful to take a macro perspective by looking at real GDP per capita growth across the different states in Malaysia before and after the GE13. Overall, real GDP per capita has grown at a higher rate after 2013, with some states performing better than others (**Table 1**).

Table 1: Annual Growth Rate of Real GDP Per Capita by State, 2011-2016

State	2011	2012	2013	2014	2015	2016
Johor	5.1	5.2	3.9	3.9	4.1	4.5
Kedah	6.9	4.1	2.8	3.0	3.9	2.1
Kelantan	5.1	3.1	1.3	2.6	1.3	2.7
Melaka	4.2	5.8	0.8	5.8	3.4	3.1
Negeri Sembilan	4.1	5.0	1.5	2.3	3.5	2.5
Pahang	4.6	3.6	3.9	2.6	3.4	0.8
Pulau Pinang	3.8	3.1	2.6	7.0	4.2	4.4
Perak	5.9	6.3	4.4	4.1	5.6	3.4
Perlis	2.0	4.1	2.2	3.8	0.9	2.8
Selangor	3.6	5.3	2.2	4.2	3.6	2.9
Terengganu	1.0	1.9	2.4	3.5	1.5	1.1
Sabah	-0.5	0.6	-1.8	3.3	4.7	2.5
Sarawak	4.7	-0.2	1.5	3.5	2.4	0.9
FT Kuala Lumpur	7.5	6.4	5.5	7.6	2.7	5.4
FT Labuan	12.1	6.9	8.1	2.6	5.4	5.3
Malaysia	4.4	4.0	2.6	4.5	3.6	3.1

Note: GDP is at constant 2010 prices; Source: Department of Statistics Malaysia

States such as Johor, Melaka, Pulau Pinang, Perak, Selangor and Kuala Lumpur have experienced fairly robust growth measured in per capita income in the post-2013 period. The question to ask is, how do such growth rates in per capita income translate into constituency-level changes in monthly household income?
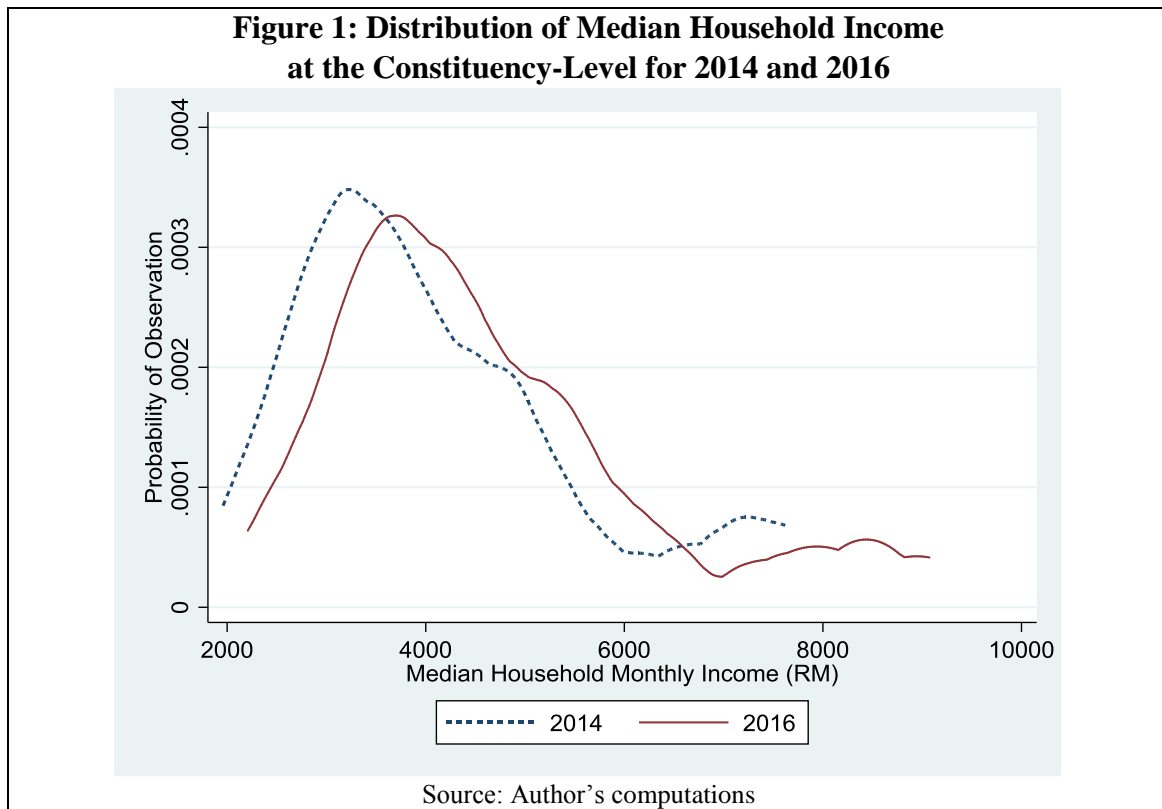
At the constituency level, the median household income has risen by around 13 percent (in nominal terms) during the 2014-2016 period (**Table 2**).[2] There are significant variations across the different constituencies with the highest median income being about four to five times above the lowest median income. The variations in changes in median income are even larger (Table 2).

Table 2: Household Income at Parliamentary Constituency-Level

Variable	Obs	Mean	Std. Dev.	Min	Max
Median monthly household gross income 2014 (RM)	222	4,122	1,445	1,959	7,620
Median monthly household gross income 2016 (RM)	222	4,679	1,678	2,208	9,073
Differences in Median Income (RM)	222	556	363	32	1,453

Source: Author's calculations based on data from Department of Statistics Malaysia

A density plot provides a more comprehensive comparison of income levels across the 222 constituencies (**Figure 1**). The rightward shift in the density plot indicates that there has been an overall increase in median household income during the 2014-2016 period.[3]

**Figure 1: Distribution of Median Household Income
at the Constituency-Level for 2014 and 2016**

Source: Author's computations

CHANGES IN MEDIAN INCOME IN BN VS. NON-BN CONSTITUENCIES

Whilst all parliamentary constituencies have experienced an increase in median household income during the 2014-2016 period, it remains to be seen whether BN-controlled constituencies have performed better than non-BN controlled constituencies. A cursory look at the median household income levels in the parliamentary constituencies of key leaders in BN and non-BN parties do not provide a conclusive answer (**Table 3**).[1]

A more comprehensive analysis involving all 222 constituencies shows that, overall, BN constituencies have lower median household income than non-BN constituencies (**Table 4**). This gap has increased from RM1,137 in 2014 to RM1,401 in 2016. The higher levels of median household income in non-BN controlled constituencies can be attributed to the fact that support for non-BN parties such as DAP and Parti Keadilan Rakyat (PKR) has come mainly from urban voters. This is reflected in the fact that the average population density of BN constituencies is lower than those in non-BN constituencies (**Table 4**).

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[1] The relatively large increases in the median household income in Marang (Terengganu) is likely to be due to tourism boom during this period. See "Tourism boom for Terengganu", New Straits Times, 7 June 2015.

Table 3: Median Household Income in Selected Parliamentary Constituencies

Constituency	State	Parliamentarian	Median Household Monthly Income (RM)*		
			2014	2016	Increase
Pekan	Pahang	Najib Razak (BN)	3,321	3,774	453
Bagan Datuk	Perak	Ahmad Zahid Hamidi (BN)	3,044	3,478	434
Sembrong	Johor	Hishamuddin Hussein Onn (BN)	3,832	3,935	102
Permatang P.	P.Pinang	Wan Azizah Wan Ismail (PKR)	4,508	5,172	664
Gombak	Selangor	Azmin Ali (PKR)	6,640	7,903	1,263
Bagan	P.Pinang	Lim Guan Eng (DAP)	4,259	4,753	494
Marang	Terengganu	Abdul Hadi Awang (PAS)	3,702	4,463	761
Betong	Sarawak	Douglas Uggah (BN)	2,343	2,624	280
Marudu	Sabah	Maximus Ongkili (BN)	2,080	2,208	128
National Average			4,122	4,679	557

Note: * Estimates based on district-level data

Source: Author's compilation based on data from Department of Statistics

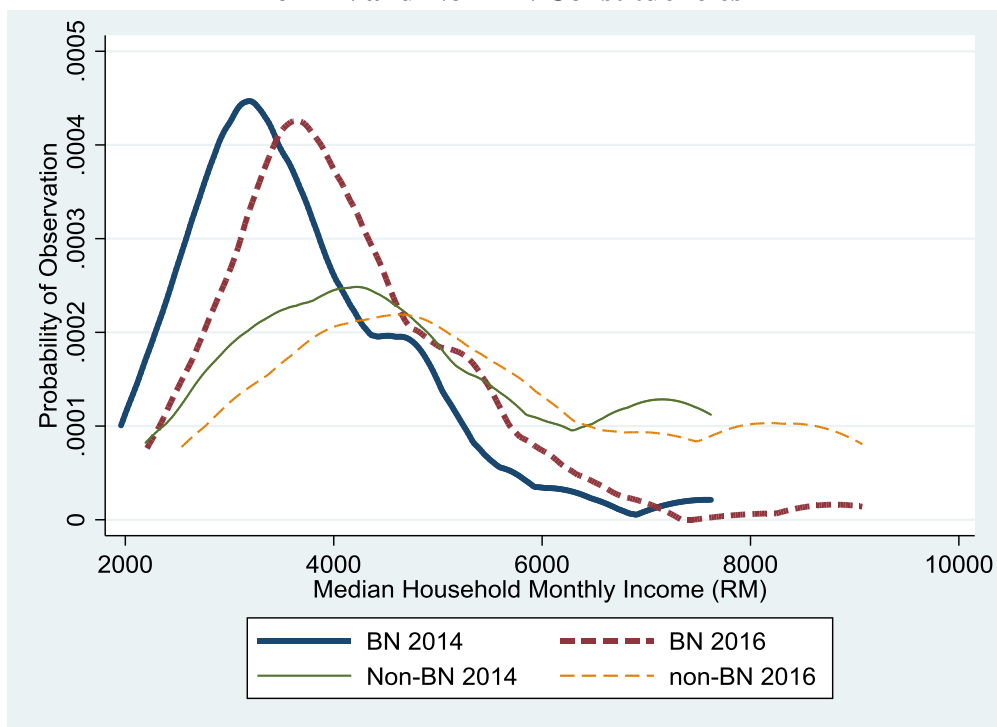**Table 4: Mean Household Income in BN and Non-BN Constituencies, 2014 and 2016**

Variable	BN / Non-BN	Obs	Mean
Median monthly household gross income 2014 (RM)	BN	134	3,672
Median monthly household gross income 2016 (RM)	BN	134	4,124
Median monthly household gross income 2014 (RM)	Non-BN	88	4,809
Median monthly household gross income 2016 (RM)	Non-BN	88	5,525
Population density in 2014 (persons per km2)	BN	134	330
Population density in 2014 (persons per km2)	Non-BN	88	1,805

Source: Author's calculations based on data from Department of Statistics Malaysia

A closer look at the distributions for median income in BN and non-BN constituencies reveal some interesting patterns (**Figure 2**). Though BN constituencies tend to have lower median income levels, most of these constituencies (i.e. those with median monthly income of less than RM7,000) have experienced improvements in income levels. A similar but lower threshold at RM6,500 can be observed for non-BN constituencies.
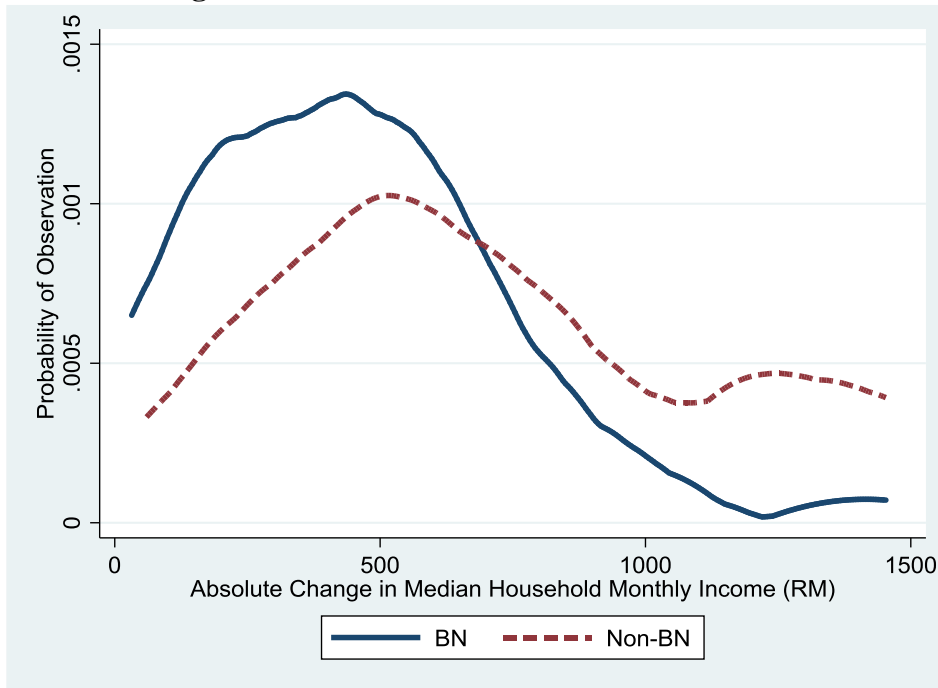
Figure 2: Distribution of Median Household Income in 2014 and 2016 for BN and Non-BN Constituencies
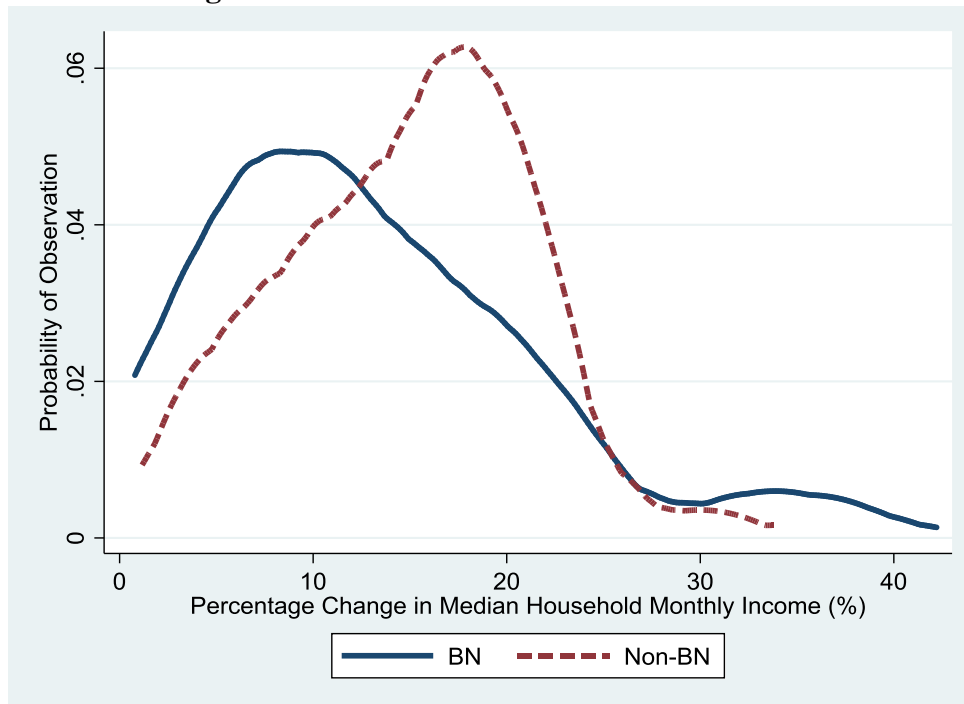
Source: Author's computations

Figure 3 plots the absolute change in median household income (in Ringgit terms) from 2014 to 2016 for BN and non-BN controlled constituencies. For changes in median household income up to about RM750, BN-constituencies dominate non-BN constituencies. Higher changes in household income (exceeding RM750) have occurred mostly in non-BN constituencies. This can also be seen in **Figure 4** which plots the distribution for the percentage change in median income for BN and non-BN constituencies. Thus, not only do non-BN constituencies have higher levels of median household income to begin with, these constituencies are also likely to have experienced higher growth in income. This "virtuous-cycle" in median household income growth will contribute to the further entrenchment of the support for non-BN parties in urban constituencies.

Figure 3: Distribution of Absolute Change in Median Household Income during 2014-2016 for BN and Non-BN Constituencies

Source: Author's computations

Figure 4: Distribution of Percentage Change in Median Household Income during 2014-2016 for BN and Non-BN Constituencies
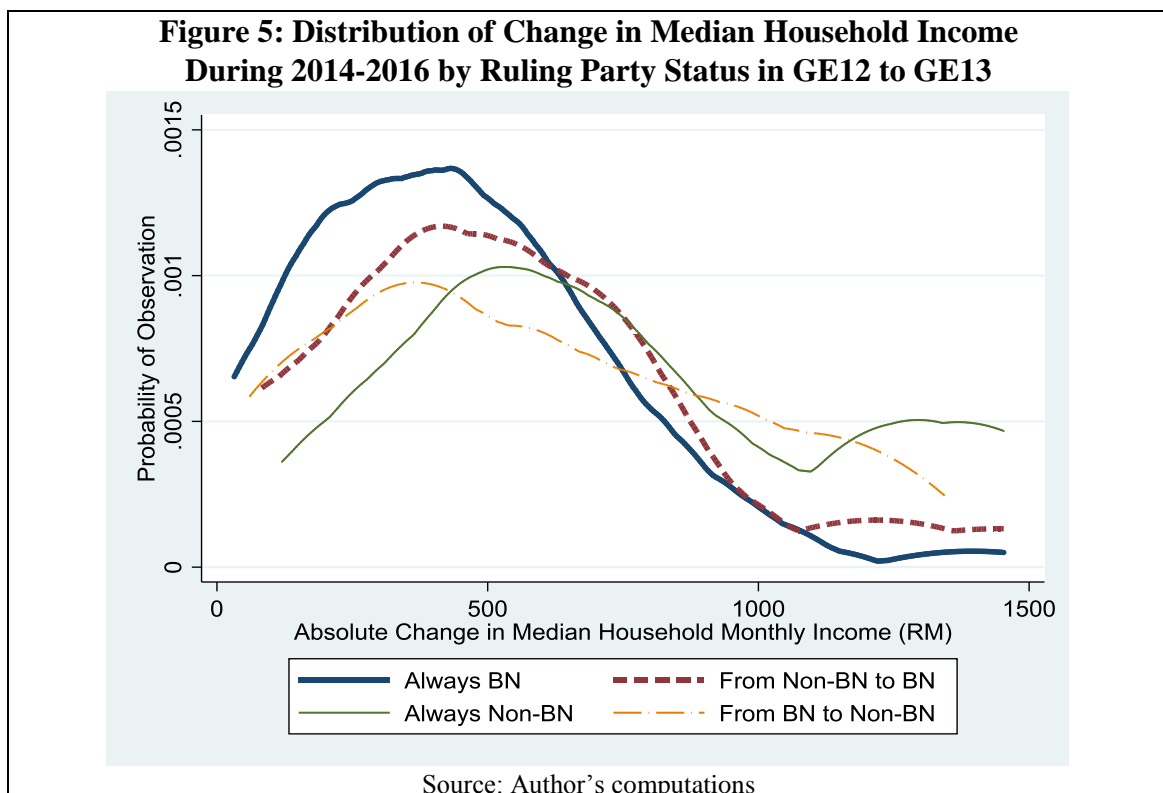

Source: Author's computations

Another interesting approach when comparing BN and non-BN constituencies is to examine the changes in median income in four types of constituencies:

1. Constituencies that remained under BN-control in GE12 and GE13
2. Constituencies that changed from non-BN in GE-12 to BN control in GE13
3. Constituencies that remained under non-BN control in GE12 and GE13
4. Constituencies that changed from BN in GE12 to non-BN control in GE13

In the GE13, 21 constituencies changed hands from BN parties to non-BN parties whilst 15 constituencies made the reverse change. In the same election, 119 constituencies continue to remain under BN control whilst the corresponding figure for non-BN was 67 constituencies. How have the four types of constituencies performed in terms of changes in median household income in the 2014-2016 period?

The distributions of changes in median household income for these four types of constituencies is depicted in **Figure 5**. Comparing constituencies that remained under BN rule in both GE12 and GE13 with those that switched from BN rule in GE12 to non-BN rule in GE13, the latter tend to experience a larger increase in median income. A similar comparison can also be made between constituencies that remained under non-BN rule in both GE12 and GE13 with those that switched from non-BN rule in GE12 to BN rule in GE13. Interestingly, constituencies in the latter group tend to experience smaller increase in median income. Comparing the two types of BN constituencies, new BN constituencies tend to experience higher increase in median income compared to incumbent BN constituencies. The reverse is true for new non-BN constituencies which tend to experience smaller increase in median income compared to incumbent non-BN constituencies.

Figure 5: Distribution of Change in Median Household Income During 2014-2016 by Ruling Party Status in GE12 to GE13

Source: Author's computations

What general conclusion can we draw from these comparisons? First, constituencies that switched from being non-BN seats to BN ones will not necessarily experience higher increase in median income compared to those that remained non-BN seats. Second, constituencies that opted the reverse – switching from BN to non-BN – tend to have experienced larger increase in median income compared to those that remained BN seats. This asymmetry between the two types of constituencies (i.e. Non-BN→BN, BN→Non-BN) is likely to be due to the fact that constituencies that switch to become non-BN seats tend to have higher median income than those that underwent the reverse change.

CONCLUSION

The median household income in Malaysia has increased in all parliamentary constituencies during the 2014-2016 period. On the whole, non-BN constituencies have higher median household income compared to BN constituencies. This gap is likely to have increased during the same period. This implies that support for non-BN parties in wealthier and urban constituencies are likely to be further entrenched. This lends support to the argument that the foci of the battle for GE14 votes will be in non-urban constituencies with relatively lower median household income. BN's electoral strategies are likely to dilute the effect of the urban advantages enjoyed by non-BN parties. First, the re-delineation of electoral boundaries will reduce the share of seats of more urban constituencies. Second, the lavish cash payments (e.g. BR1M) unveiled in BN's election manifesto is likely to have greater impact on constituencies with lower median income (**Table 5**). Finally, the recently announced polling date, May 9, a Wednesday, is likely to reduce the voter turnout in urban constituencies more than rural ones.

Table 5: BR1M Payment Scheme, 2012-2018

Year	Single Adult Above 21 Years Old	Household Monthly Income Below RM3,000	Household Monthly Income RM3,001-RM4,000	Household RM4,001-RM5,000
2012	RM500			
2013	RM500		RM250	
2014	RM650	RM450	RM300	
2015	RM950	RM750	RM350	
2016	RM1,000	RM800	RM400	
2017	RM1,200	RM900	RM450	
2018	RM1,200 revised to RM2,000	RM900 revised to RM1,500	RM450 revised to RM600	Revised (New) RM700

Source: https://www.imoney.my/articles/br1m, updated by author

Note: The 2018 BR1M was revised in April 2018 as part of BN's election manifesto

[1] Household income can be in cash or in kind. It comprises income from paid employment and self-employment, property and investment, and current transfers received (such as Bantuan Rakyat 1Malaysia - BR1M).

[2] Median income is the level of income that divides a density plot of income by half (50:50) such that 50% of the households have income below (above) it. Median is a better summary measure for skewed distributions such as income.

[3] Figure 2 shows that the probability of observing median income between RM4,000 and RM6,000 has increased during the 2014-2016 period.