Response from Bank Negara Malaysia (BNM) to IDEAS' paper titled "Payment Card Reform Framework (PCRF): A Policy Evaluation Study" 1 June 2018

Strengthening Efficiency and Competition in the Payment Card Industry: An Evaluation of the Payment Card Reform Framework

Executive summary

The Payment Card Reform Framework (PCRF) was introduced by Bank Negara Malaysia (BNM) in 2015 to foster an efficient, transparent and competitive payment card industry. It is a unique framework that takes into account lessons drawn from other jurisdictions, and caters for the specific circumstances of Malaysia's payment card market. Specifically, the PCRF aims to curb indiscriminate hikes in interchange fees (IF)¹ in order to pre-empt any system-wide increase in Merchant Discount Rates (MDR)² which may potentially lead to higher prices of goods and services. In addition, the PCRF aims to address the prevailing market distortions and anti-competitive practices in the payment card industry in order to foster an enabling environment for the wider deployment of point-of-sale (POS) terminals and greater usage and acceptance of the more cost-effective payment cards (i.e. debit card).

The PCRF has largely been successful in meeting its objectives.

- (i) The introduction of IF ceilings, which are determined based on an objective cost-based methodology, has curbed indiscriminate IF hikes;
- (ii) The measures introduced to address market distortions³ and anti-competitive practices⁴ have also strengthened efficiency and competition in the payment card industry;
- (iii) A level playing field, coupled with the more competitive acquiring landscape and a Market Development Fund (MDF) established by the industry, has spurred the annual growth of POS terminals which tripled from an average of 6.8% per annum from 2011 to 2014 (pre-PCRF) to an average of 20.4% per annum from 2015 to 2017 (post-PCRF);
- (iv) With the expansion in the POS terminal network and the completion of the PIN and Pay initiative on 1 July 2017, which enhanced the security and efficiency

¹ IF is a fee which is typically payable by the acquirer (i.e. the party who provides the facility for a merchant to accept card payments) to the issuer (i.e. the party who issues payment cards to cardholders) to compensate the issuer for certain costs incurred in facilitating the payment card transactions.

² MDR is a fee paid by a merchant to an acquirer for the facility provided to enable the merchant to accept card payments. IF is priced into the MDR by the acquirer and typically constitutes the largest cost component of the MDR.

³These include measures that require acquirers to charge differentiated MDR for credit and debit cards, and to disclose the MDR and IF rates in the merchant statements.

⁴ These include a measure that requires the logo of all competing payment card networks to be displayed prominently on the face of co-badged debit cards and a measure that empowers merchants to route debit card transactions via their preferred debit card network.

of debit card transactions via the adoption of PIN and contactless payment capabilities, debit card transaction volume had grown at a higher rate of 50.9% in 2017 compared to an average growth of 34.6% per annum from 2011 to 2016.

This paper is organised as follows:

- (i) Part 1 outlines the rationale for the introduction of the PCRF;
- (ii) Part 2 sets out the key measures introduced under the PCRF including the considerations taken into account in formulating the specific measures;
- (iii) Part 3 outlines the impact of the PCRF thus far and discusses the likely impact to the industry had BNM not intervened by issuing the PCRF;
- (iv) Part 4 outlines BNM's specific response to the paper commissioned by the Institute for Democracy and Economic Affairs (IDEAS) on 'Payment Card Reform Framework (PCRF): A Policy Evaluation Study'.

Part 1: Rationale for the introduction of the PCRF

1. Lack of competition and efficiency in Malaysia's payment card industry prior to regulatory intervention

- 1.1 Credit cards were first introduced in Malaysia in the mid-1970s. Debit cards were introduced in 2003 alongside the industry-wide migration from magnetic stripe to the chip standard. Despite the high penetration of debit cards (40.1 million ATM cards that doubled up as debit cards as compared to 8.0 million credit cards, for a 22.9-million adult population⁵ in 2014), about 90% of total payment card transactions were made using credit cards. Debit cards, on the other hand, were mostly used to withdraw cash due potentially to the lack of awareness that ATM cards also double up as debit cards.
- 1.2 Prior to May 2013, Malaysia's payment card industry had been characterised by stable interchange fees (IF) that had remained largely unchanged at 1.1% and 1.2% respectively for the two major international payment card networks that accounted for 90% of the total payment card volume. Any increase in IF rates would have a substantive impact in the MDR, given that IF accounted for about 40% to 70% of the MDR at the time.
- 1.3 Despite differing cost structures, the IF rates for debit card and credit card were the same and not unbundled. Consequently, acquirers charged merchants the

⁵ Individuals aged 15 years old and above

same MDR for both debit card and credit card, making debit card payments just as costly for merchants to accept as credit card payments.

- 1.4 The average MDR of between 1.5% to 2.5% had priced out smaller merchants in Malaysia. Between 2011 and 2014, the annual growth of POS terminals had slowed down from 15.4% in 2011 to 6.2% in 2012, 3.1% in 2013 and 2.7% in 2014, indicating a potential saturation of POS terminal deployment at larger merchants who were able to afford paying the higher MDR. This is consistent with the findings made by the International Monetary Fund (IMF) and the World Bank⁶ which found that the higher MDR rates had inhibited payment card acceptance among smaller merchants.
- 1.5 Certain scheme rules introduced by the major international payment card networks also inhibited competition in ways that hindered the wider acceptance of cost-effective payment card or network in Malaysia. For instance, issuers were prohibited from displaying competing card brands on the front of a cobadged debit card¹, thereby reducing the prominence of the domestic-brand debit network vis-à-vis the international-brand debit network. In addition, merchants were also prohibited from steering cardholders to use the less costly payment card or network. This constrained the merchants' ability to control their payment card acceptance cost, thus causing the country to incur a higher retail payment cost than is otherwise necessary.

2. Risk of inflationary pressure induced by indiscriminate IF hikes

- 2.1 Instead of bringing about lower cost to the benefit of the society, competition between the two major international payment card networks had led to the perverse outcome of increasing cost to merchants and ultimately to the public through a generalised increase in prices of goods and services.
- 2.2 To entice issuers to issue payment cards under the brand of their own payment card network instead of their competitors', the two major international payment card networks had engaged in a series of IF hikes over a period of 14 months between May 2013 and June 2014, as illustrated in the table below:

⁶ Technical Note on 'Sustainable Adoption of Innovative Channels for Financial Inclusion' published in

January 2013 which forms part of the Financial Sector Assessment Programme on Malaysia ⁷ A co-badged debit card is a debit card with two debit card network applications, i.e. a domestic-brand debit network (MyDebit) and an international-brand debit network (e.g. Visa, Mastercard, UnionPay).

Type of		Card Network A		Card Network B	
card	Before May 2013	Effective 1 May 2013	Effective 14 Jun 2014	Before 1 Mar 2014	Effective 1 Mar 2014
Credit card	1.1%	1.32% - 1.80%	1.32% - 1.85%*	1.2%	1.2% - 1.8%
Debit card	1.1%	1.1%	0.99% - 1.45%*	1.2%	0.9% - 1.1%

Table 1: IF rates imposed by two major internationalpayment card networks

* Upon BNM's engagement, Card Network A had unwound its plans.

- 2.3 Pursuant to the IF hikes, about 46,300 merchants were impacted with an increase in MDR ranging from 0.05% to 1.76%. If left unchecked, this would lead to a system-wide increase in MDR and consequently, merchants would be pressured to pass on the higher MDR cost to their customers by increasing the price of goods and services. This was mainly due to the high proportion of MDR attributable to IF costs, which was further reinforced by rules imposed by the international payment card networks that prevented merchants from steering cardholders to use the less costly payment card network.
- 2.4 Apart from increasing the IF rates, the two major international payment card networks had also introduced a step-up IF structure where higher IF rates were payable for premium cards as compared to standard cards. Consequently, some issuers had capitalised on this development by lowering their minimum income requirement for premium credit cards in order to maximise their IF revenue. If left unchecked, an industry-wide lowering of the minimum income requirement would lead to indiscriminate issuance of premium credit cards to more individuals. This would also put further pressure on the MDR, with the higher costs ultimately passed on to consumers through even higher prices of goods and services. Of note, the main differentiating factor between standard cards and premium cards is the level of rewards provided to the cardholders. The payment and security features of these two types of cards are broadly similar.

	Minimum annual income requirement (selected issuers)		
Credit Card Type	Before introduction of step-up IF structure	After introduction of step- up IF structure	
Platinum	RM60,000	RM 24,000	
Super Premium 1	RM100,000	RM 36,000	
Super Premium 2	RM150,000	RM 120,000	

 Table 2: Minimum income requirement for premium credit cards

- 2.5 Efforts to encourage a more transparent and objective framework for the setting of IF rates were frustrated by continued actions by one of the major international payment card networks, which embarked on a further round of IF hikes in June 2014. This saw a further increase in the IF rate for premium credit cards as well as an introduction of a new super premium debit card category with an IF rate of 1.45%, which is even higher than the IF rate of a platinum credit card at 1.32%.
- 2.6 Taking into account the developments in Malaysia and drawing lessons from relevant interventions in other markets which had experienced similar challenges, BNM introduced the Payment Card Reform Framework (PCRF) under the Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA) to curb indiscriminate IF hikes and address other market distortions in the payment card industry.

Part 2: Key measures under the PCRF

3. Objective cost-based IF ceilings

- 3.1 Globally, there is no 'one-size-fits-all' IF model. Most four-party payment card networks globally including those operating in Malaysia⁸ adopt a 'positive IF model' where IF is payable by the acquirer to the issuer in order to compensate the issuer for some of the costs incurred by the issuer in facilitating the payment card transactions. There are also other domestic payment card networks such as Interac in Canada and Bank-Axept in Norway that adopt a 'zero IF model' where the IF rate is set at zero. In addition, eftpos Australia, the domestic payment card network in Australia used to adopt a 'negative IF model' where IF was payable by the issuer to the acquirer in order to compensate the acquirer for the costs incurred in expanding the network of POS terminals. Despite adopting a zero or negative IF model, debit card usage in these markets is among the highest globally at 138.6 transactions per capita for Canada, 334.6 transactions per capita for Norway and 161.0 transactions per capita in Australia.
- 3.2 In establishing an objective framework for the setting of IF rates, BNM had conducted a series of consultation with relevant stakeholders. In addition, BNM had also carried out a cost study of the payment card business of issuers and acquirers, which cumulatively represent 84% and 91% of the total domestic credit card and debit card transactions in 2013, respectively.
- 3.3 Upon consultation with the stakeholders, BNM decided to maintain the current positive IF model to avoid disrupting a longstanding arrangement in the payment

⁸Visa, Mastercard, UnionPay and MyDebit

card industry. In setting the IF ceiling, BNM adopts a cost-based methodology, where IF ceilings are set based on a set of eligible costs, as illustrated in the table below:

No.	Cost categories	Eligible costs
1	Cost incurred for processing a card transaction	Authorisation, transaction processing and dispute management costs
2	Cost incurred for reducing risk in card transactions	Fraud management costs and fraud losses
3	Cost incurred that are directly beneficial to merchants but are not recoverable from cardholders	Interest-free period funding cost (for credit card only)

Table 3: Eligible costs to determine the IF ceilings

- 3.4 BNM had received industry representations to maintain the IF rates at the levels prior to May 2013 (before the series of indiscriminate IF hikes) subject to an undertaking by the industry to commit about RM1.1 billion over 6 years (2015 to 2020) for infrastructure development:
 - to enhance the security, efficiency and interoperability of the payment card infrastructure through the migration from signature to PIN verification and the adoption of the Europay-Mastercard-Visa (EMV) standard and contactless functionality for the domestic debit cards (such three-pronged enhancement is collectively referred to as the 'PIN and Pay' initiative); and
 - (ii) to expand the network of POS terminals from 233,248 terminals (8 terminals per 1,000 inhabitants) in 2014 to 800,000 terminals (25 terminals per 1,000 inhabitants) by 2020.

In addition, the industry also provided BNM with an undertaking to increase the annual debit card transaction volume from 68.7 million (2.2 transactions per capita) in 2014 to 1 billion (30 transactions per capita) by 2020.

- 3.5 Such targeted industry undertakings, if sustained on an industry-wide basis, offer greater prospects for delivering the desired outcomes of wider network of POS terminals and increased usage of debit cards, as compared to the experience prior to the introduction of the PCRF which was based solely on market forces. Consequently, BNM had designed the PCRF with the following unique features that distinguish it from other IF regulation in other jurisdictions:
 - (i) The IF ceilings for debit card are set at the eligible cost level of 0.15% or 50 sen + 0.01% (whichever is lower) for the domestic-brand debit network and

0.21% or 70 sen + 0.01% (whichever is lower) for the international-brand debit network which reflect their eligible costs respectively;

- (ii) The IF ceiling for credit card is set at an interim level of 1.10% (pre-May 2013 level) from 1 July 2015 to 31 December 2020, to allow the industry to channel the excess IF revenue (over and above the eligible cost level of 0.48%) for infrastructure development subject to the following conditions:
 - (a) The industry commits to a set of yearly KPIs to increase the number of POS terminals to 800,000 by 2020, and the annual debit card transaction volume to 1 billion by 2020. Any non-achievement of the yearly KPIs would result in a proportionate reduction in the interim IF ceiling for credit card. This would in turn lower the payment card acceptance cost and make it more affordable for more merchants to accept payment cards. Consequently, a wider network of POS terminals would spur greater usage of debit cards;
 - (b) The relevant credit card networks establish a Market Development Fund (MDF) to set aside a portion of the IF revenue (about 0.10% of credit card transaction value or an estimated RM455 million from July 2015 to December 2020) to fund the expansion of POS terminals to 800,000 terminals by 2020. The IF ceiling is set at 1.10% for credit card networks that decided to establish an MDF (i.e. Visa and Mastercard) and 1.00% for those that decided not to do so (i.e. Amex and UnionPay); and
- (iii) The IF ceiling will be lowered to the eligible cost level of 0.48% effective 1 January 2021 onwards.⁹
- 3.6 The breakdown of the industry's estimated IF revenue is as follows:

⁹The IF ceilings in the PCRF will be reviewed every three years.

Table 4: Breakdown of the industry's estimated IF revenue(July 2015 to December 2020)

Breakdown of IF revenue	Percentage of IF (based on a ceiling of 1.10%)	Amount of IF revenue (RM billion)	Remarks
Eligible costs	0.48%	2.2	Direct costs relevant to authorisation, transaction processing, dispute management, fraud management, fraud losses, and interest-free funding period
Excess IF revenue	0.62%	2.9	Sufficient to fund the RM1.1 billion infrastructure development cost
Total	1.1%	5.1	N/A

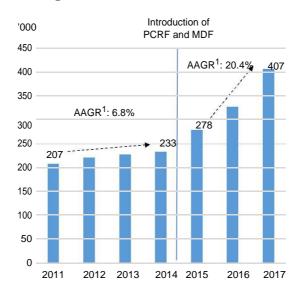
4. Measures to address market distortions and anti-competitive rules

4.1 The PCRF also introduced the following measures to improve price signals to merchants to promote the acceptance of cost-effective payment cards, and to level the playing field to foster a more competitive payment card landscape.

No	Measures	Policy objectives
(i)	Unbundling the MDR by payment cards	To ensure the MDR reflects the actual cost structure of different payment cards
(ii)	Equal branding for competing debit card networks on a co- badged debit card	To strengthen competition among debit card networks
(iii)	Allowing merchants to steer customers to use the more cost- effective payment card/ network	To enable merchants to accept the lower cost card/ network and strengthen competition among debit
(iv)	Empowering merchants to process debit card transactions via their preferred network	card networks
(v)	Disclosure of MDR and IF rates in merchant statements	To enhance transparency of different payment card/ network to merchants
(vi)	The word 'Debit' to be imprinted on the face of debit cards	To facilitate merchants and cardholders to distinguish a debit card from other payment cards

Part 3: Impact of the PCRF

5. To date, the impact of the PCRF has been positive and encouraging. The lower MDR levels, coupled with the more competitive acquiring landscape and the MDF, have spurred the annual growth of POS terminals which tripled from an average of 6.8% per annum from 2011 to 2014 (pre-PCRF) to an average of 20.4% per annum from 2015 to 2017 (post-PCRF). Consequently, the network of POS terminals has nearly doubled from 233,248 terminals in 2014 to 407,111 terminals in 2017.





- 5.1 With the expansion in the POS terminal network and the completion of the PIN and Pay initiative on 1 July 2017, which enhanced the security and efficiency of debit card transactions through the adoption of PIN and contactless payment capabilities, debit card transaction volume had grown at a higher rate of 50.9% in 2017 compared to an average growth of 34.6% per annum from 2011 to 2016. The annual growth of ATM cash withdrawal transaction value had also moderated from 9.4% in 2014 to 1.9% in 2017, potentially indicating that debit cards are being used to displace cash.
- 5.2 Had BNM not intervened by issuing the PCRF to curb the indiscriminate IF hikes, competition between the two major international payment card networks is likely to result in a system-wide increase in MDR, which would ultimately bring about an inflationary pressure on the prices of goods and services. BNM's study in 2014 found that a majority of the excess IF revenue (after accounting for eligible costs) are used to fund issuers' cardholder rewards and loyalty programs which are primarily enjoyed by premium cardholders. Consequently, consumers who do not have a payment card or a premium payment card would end up subsidising the rewards and loyalty points enjoyed by premium cardholders by paying higher prices of goods and services.

5.3 The implementation of the PCRF may result in a dampening in the cardholder rewards. Issuers however can maintain the same level of cardholder rewards by charging higher fees on premium cards. This would be more equitable compared to funding cardholder reward programs through higher IF rates, which would translate into higher MDR and in turn, a generalised increase in prices for all cardholders and the general public. With more affordable payment card acceptance cost, merchants will be less pressured to pass on such cost to consumers through higher prices of goods and services. In addition, more merchants would be able to afford the acceptance of payment cards, in particular the debit card. This would provide consumers with the convenience of using their payment cards widely at more merchant outlets.

Part 4: BNM's Response to the IDEAS' Paper on 'Payment Card Reform Framework (PCRF): A Policy Evaluation Study' by Dr. Teo Wing Leong, Associate Professor, University of Nottingham Malaysia

- 6.1 The paper presents a one-sided account of the impact of the PCRF arguing solely from the free market perspective, without taking into account the characteristics and actual developments in the Malaysia's payment card market. The paper, amongst others, does not provide an account of the market distortions prevailing in Malaysia to which the PCRF was designed to address, such as the inflationary pressure induced by indiscriminate IF hikes, the anti-competitive card scheme rules which inhibited competition and market practices which distorted price signals.
- 6.2 BNM's response to the key arguments in the paper is as follows:

6.2.1 Author's argument: Allowing market forces to determine the IF levels would lead to socially optimal IF levels

BNM's response:

Allowing payment card networks to determine their own IF levels had led to sub-optimal outcomes in Malaysia.

- Prior to May 2013, the IF level of 1.1% to 1.2% for the two major international payment card networks had priced out smaller merchants. It had also led to a slowdown in the annual growth of POS terminals from 15.4% in 2011 to 6.2% in 2012, 3.1% in 2013 and 2.7% in 2014, indicating a potential saturation of POS terminals at larger merchants who were able to afford paying the higher MDR.
- Competition between the two major international payment card networks had led to the perverse outcome of increasing the cost to

merchants and ultimately to the public through higher prices of goods and services. This is further reinforced by the market dominance of the international payment card networks, where acquirers and merchants have little bargaining power to negotiate for lower IF rates.

- Between May 2013 and June 2014, the two major international payment card networks had engaged in a series of IF hikes in order to out-do each other in attracting issuers to issue their payment cards as illustrated in Table 1 above.
- Due to the IF hikes, about 46,300 merchants were impacted with higher MDR. If left unchecked, this would lead to a system-wide increase in MDR and consequently, merchants would be pressured to pass on the higher MDR cost to their customers by increasing the prices of goods and services. In the United States, allegations of improper fixing of IF has resulted in class action lawsuits by merchants against international payment card networks. In this regard, a settlement deal of \$5.7 billion was overturned in 2016 and the lawsuit is still ongoing.¹⁰
- The IF hikes are also likely to widen socioeconomic disparity, as those that do not have a payment card or a premium card are made to subsidise the cost of the cardholder rewards enjoyed mainly by those with premium cards. Since IF is priced into the MDR, the cost of such cardholder rewards programs is borne by merchants who are likely to in turn pass it on to their customers, including those that do not have a payment card or a premium card, through higher prices of goods and services.

6.2.2 Author's argument: IF regulation such as the PCRF would increase cost to account holders (e.g. increased fees or reduced services) and reduce innovation in the payment market

BNM's response:

- Under the PCRF, issuers are required to provide cardholders with an option to obtain a basic payment card with nominal fees; and
- Investment in payment innovation may be required not only on the issuers' side but also on the acquirers' side (e.g. investment in contactless payments). The capping of IF levels under the PCRF may increase the funds available for acquirers to invest in payment innovation. Conversely, as established in BNM's study conducted

¹⁰ "U.S. top court rejects bid to revive \$7.25 billion credit card settlement", reported by Reuters on 27 March 2017.

in 2014, high IF levels do not directly lead to higher investments in payment innovation as the majority of the excess IF revenue (after accounting for eligible cost) is used by the issuers to fund cardholders' rewards programs.

6.2.3 Author's argument: The targets in the PCRF are too ambitious and the industry has fallen significantly behind the targets

BNM's response:

- The PCRF targets to expand the number of POS terminals and increase the number of debit card transactions were set based on the e-payment targets in BNM's Financial Sector Blueprint 2011-2020 (FSBP). These targets were socialised with the industry during the consultation period of the PCRF, with the industry committing to comply with the PCRF targets, provided that the credit card IF ceiling is set at an interim level of 1.10% (for Visa and Mastercard) and 1.00% (for Amex and UnionPay) for the period between 2015 to 2020, instead of being lowered to the eligible cost level of 0.48%.
- The PCRF has a self-correcting mechanism to ensure that the PCRF objectives of fostering wider deployment of POS terminals and greater usage of debit cards are achieved.
 - In the event that yearly PCRF targets are not met, the credit card IF ceiling would be ratcheted down proportionately, thus making payment card acceptance more affordable to smaller merchants. This would encourage wider deployment and acceptance of POS terminals and consequently, greater usage of debit card due to the expanded POS terminal network.
 - Under the MDF established by the industry, the industry players have to set aside a portion of their IF revenue amounting to 0.10% of any credit card transaction to fund POS terminal deployment. In the event of non-achievement of their yearly POS terminal targets, the non-achieving industry players will be required to contribute a portion of their IF revenue set aside into the MDF proportionate to their level of non-achievement. Other industry players that exceeded their yearly targets would be eligible to draw funds from the MDF.
- The industry has already made significant progress towards meeting the targets.

- Since the implementation of the PCRF, the annual growth rate of POS terminals had tripled to 20.4% from 2015 to 2017, compared to just 6.8% from 2011 to 2014. For 1Q, 2018, the annual growth rate had increased further to 31.7%.
- For debit card transactions, the lower average annual growth 0 rate of 25.2% in the first two years of the implementation of PCRF (2015 to 2016) is mainly attributable to the lack of awareness among cardholders that their ATM cards can be used as debit cards, as well as, the issues experienced by cardholders when using their debit cards due to the requirement to select debit card network and account type which had contributed to a higher rate of abandoned transactions. Nonetheless, the PIN and Pay initiative that was completed on 1 July 2017 had enhanced awareness among cardholders that their ATM card also doubles up as a debit card (all ATM cards now have the word 'Debit' displayed prominently on the face of the card). In addition, the PIN and Pay initiative had also made the debit card transaction process more seamless as the choice of the debit card network and account type had already been determined

upfront by the merchant and the cardholders, respectively. This had contributed to an increase in the annual growth rate of debit card transactions which doubled to 50.9% in 2017 and increased further to 63.2% in 1Q, 2018.

 At the current growth rate, the POS terminal and debit card targets are likely to be achieved in 2021 and 2024, respectively. Importantly, these targets are part of BNM's broader objective of accelerating Malaysia's migration to e-payments. In addition to debit cards, mobile payments are expected to also play a key role in driving greater adoption of e-payments.

6.2.4 Other arguments by the author

No.	Author's arguments	The Bank's response
1	The author argues that in determining the IF level, consideration should be given to the value delivered to each participant in the payment card ecosystem for the costs they incur accounting for the benefits of e-commerce. (Page 4, item 1)	The IF ceilings in the PCRF is computed taking into consideration the eligible costs for both card-present and card-not-present (CNP) transactions, and not confined only to CNP transactions (e.g. e-commerce).

No.	Author's arguments	The Bank's response
2	The author proposes for BNM to consider adopting a weighted average IF ceiling similar to that adopted in Australia to allow for increased product differentiation. (Page 4, item 5)	 Weighted average IF ceilings have drawbacks as illustrated by the experience in Australia¹¹: The actual average IF rates tended to be higher than the IF ceiling over time, thus allowing card schemes to circumvent the IF ceiling.¹² Smaller merchants tended to pay higher IF rates compared to large/strategic merchants. According to RBA's estimates, the average IF paid by smaller merchants is 55 basis points higher than the average IF paid by large/strategic merchants in Q3, 2015.¹³ The widening of the range of IF rates has reduced the transparency of costs for merchants. Prior to RBA's IF regulations: For credit cards, the number of categories of interchange fees has increased from 3 to 19 for Mastercard and from 5 to 23 for Visa. For debit cards, the number of interchange categories has increased to from 1 to 15 for Visa.¹⁴
3	The author claims that in Malaysia, a study of the industry done in 2012 found that the cost of the guarantee, funding and limited processing was about 2.13% for credit	 The source of the study quoted in the IDEAS paper is not referenced, hence cannot be verified. A recent cost study conducted by BNM in 2014 found that the eligible

¹¹ Reserve Bank of Australia, Review of Card Payments Regulation, Consultation Paper (December 2015) and Conclusion Paper (May 2016)

¹² This is caused by the relatively higher IF rates (above the weighted average ceiling) set by the payment card networks for some transaction categories coupled with the 3-year compliance cycle where the IF rates are assessed against the weighted-average ceiling benchmark.

¹³ Pre-IF regulation in Australia, the range of credit card IF is between 0.8-1.2% for Visa and Mastercard. This has increased to a range of 0.2-2.0% in the period post-IF regulation in Australia.

¹⁴ Reserve Bank of Australia, Review of Card Payments Regulation, Issues Paper (March 2015)

No.	Author's arguments	The Bank's response
	cards, above the then effective interchange fee rate of 1.06%.	costs incurred by an issuer for a credit card transaction is 0.48%.
	(Page 5, paragraph 3)	 The eligible cost comprises the cost of payment guarantee (i.e. authorisation, fraud prevention, and fraud losses), cost of interest-free funding period & transaction processing cost.
		 The cost of credit losses is not included as part of the eligible costs given that issuers can recover such cost directly from their cardholders via the finance charges of between 15% and 18%.
4	The author claims that the IF ceiling for debit card of 21 basis points (0.21%) in the PCRF is substantially lower than other comparable studies in other countries. (Page 4, paragraph 3)	 The IF ceiling in the PCRF of 0.21% for international brand debit cards is comparable with the IF ceilings adopted in the European Union (EU) and Australia: EU: 0.20% or 5 cents (whichever is lower) Australia: 0.20% (ad valorem individual IF cap)
5	The author argues that the PCRF which lowers the IF ceiling for credit card in the event of non-achievement of the industry's yearly targets of debit card transaction volume and number of POS terminals, are unlikely to be successful and are counterproductive in that issuers are not the primary vehicle for POS terminal deployment. (Page 8, item 4)	16 out of 20 credit card issuers in Malaysia are also acquirers. Two out of four issuers that are not acquirers have partnered with non-bank acquirers to meet their POS terminal targets.
6	The author argues that the PCRF which empowers merchants to make the routing decision for transactions made using co-badged debit cards, creates a conflict between the	• Empowering merchants to make the routing decision for co-badged debit cards promotes efficiency as merchants are more likely to choose the less costly debit network.

No.	Author's arguments	The Bank's response	
	merchant and the cardholder. The author further states that it is not clear that such provision will assist with the attainment of the PCRF objectives. (Page 8, item 5)	 This strengthens competition among the debit card networks and has prompted the international debit card networks to reduce their scheme fees in 2016 to compete with the domestic debit card network. As a result, the payment card industry benefits from greater cost efficiency in the processing of debit card transactions. 	
7	The author argues that setting a zero IF for debit card transactions made at government agencies is inconsistent with the economic savings that such agencies derive from debit card acceptance and puts unneeded pressure on small businesses and consumers to make up the revenue shortfall or the required cost reduction for the acquirers. (Page 8, item 7)	 Setting a zero IF rate for transactions at government agencies for an interim period from 1 July 2015 to 31 December 2020 is intended to incentivise and accelerate payment card acceptance at government agencies. Both individuals and businesses would benefit from the convenience of making card payments at government agencies, thus reducing their cost of handling cash and cheques. 	s d t d
8	The author argues that higher IF rates for premium cards are consistent with the increased value these products bring to both merchants and consumers. The imposition of flat IF ceilings does not allow for sufficient product differentiation and ignores the fact that investments made in the payments innovation and new products vary in terms of enhanced security features and new payment forms. (Page 9, paragraph 2)	 The increased value brought by premium cards to merchants (e.g. increased customer's spending power) is debatable as experience in Malaysia shows that issuers tend to lower the income eligibility of premium cards in order to maximise their IF revenue. The argument that product differentiation in premium cards allows for better security features and new payment forms is also debatable. The experience in Malaysia shows that both standard cards and premium cards have broadly similar security and payment features. The only key difference is the higher rewards offered to customers of premium cards. 	t 5 5 1

No.	Author's arguments	The Bank's response
		 Additionally, the PCRF does not restrict product differentiation by card issuers. For example, issuers are not prohibited from charging fees to cardholders commensurate with the level of rewards and other value-added benefits offered to cardholders.
9	The author claims that the decline in average MDRs is much smaller than the decline in IF rates, especially for international brand debit cards, which suggests that the pass through from IF rates reduction to MDRs have not taken place. The author argues that this is consistent with other countries where IF reductions are not reflected in either declines in MDR or in product price. As a result, the author argues that consumers are likely to be paying more post-IF regulation than before. (Page 9, paragraph 3)	 Between 2015 and 2017, the savings arising from the IF reduction for MyDebit (25 basis points) under the PCRF had been passed on to merchants in the form of lower MDR, i.e. a decline in average MDR of 30 basis points for MyDebit. Between 2015 and 2017, for international brand debit cards, about 63% of the savings arising from the IF reduction (about 79 basis points) had been passed on to the merchants in the form of lower MDR, i.e. a decline in the average MDR of 50 basis points. BNM will continue to engage with the merchant community to raise their awareness of the PCRF, to facilitate them in shopping around for competitive MDR rates.
10	The author argues that the reduction of IF rates may adversely impact SMEs through reduction of credit availability as lower IF reduces issuers' ability to take credit risk (Mastercard Australia, 2016) (Page 12, paragraph 3)	 It is unclear how a reduction in IF would reduce the issuers' ability to take credit risk, given that the issuer is able to price in such credit risks through the financing rates charged to the SMEs. This argument by the author is an over generalisation which may not apply to SMEs in Malaysia. In Australia, Mastercard's formal response to the FSI Final Report and Recommendations in Australia noted that many SMEs in Australia are cardholders who rely on their credit cards as an important source

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		 of credit to cover current expenses (e.g. to purchase inventories). For Malaysia, SMEs have a variety of avenues to obtain financing from financial institutions such as term loans, credit cards and micro financing schemes. Term loans are the main source of financing¹⁵ for SMEs in Malaysia. The approval rate for SME financing applications was also high at 74.8% in 2017, compared to 62.7% for all other customers.

BNM would like to recommend for the author to take into consideration the following areas:

- (i) The author should take into account the prevailing market conditions in Malaysia prior to the PCRF and the public policy objectives that the PCRF is designed to achieve; and
- (ii) The author should ensure that any argument made in the paper are referenced to reliable and verifiable sources, and assessed in the context of Malaysia.

Bank Negara Malaysia 1 June 2018

¹⁵ From 2013 to 2017, term loans accounted for 70.3% of total SME financing, while credit cards only accounted for less than 0.05% of total SME financing in Malaysia.