CONSUMER SURVEY ON THE PURCHASE OF RETAIL PETROL IN SINGAPORE

JULY 2016

Prepared for:

Competition Commission of Singapore (CCS)



Table of Contents

Executive Summary	3
1. Introduction	7
1.1 Objectives	7
1.2 Methodology	8
1.2.1 Questionnaire Design	8
1.2.2 Fieldwork	9
1.2.3 Notes on Analysis	9
2. Profile of Respondents	10
3. Purchase of Particular Petrol Brand and Grade	20
3.1 Petrol Brand	20
3.2 Petrol Grade	31
4. Switching Behaviour in Relation to Petrol Brands and Grades	35
4.1 Petrol Brand	35
4.2 Petrol Grade	43
5. General Perceptions on Petrol Brands and Grades	45
6. Competition in the Petrol Market	47
7. General Awareness of Petrol Prices and Promotions	49
7.1 Petrol Prices	49
7.2 Petrol Promotions	53
8. Cross Analysis: By Profile of Respondents	57
8.1 Perception on Competition in the Petrol Market	58
8.2 Monitoring of Petrol Prices Across Brands	63
8.3 Usage of Petrol Discounts and Rebates	68
9. Conclusion	70
Appendix A: Survey Questionnaire	72

Executive Summary

- 1. The Competition Commission of Singapore (CCS) has commissioned Forbes Research to conduct a consumer survey on the purchase of retail petrol in Singapore.
- 2. The sample comprised of motorists who own a petrol-run car or motorcycle for personal use, made decision on petrol purchases and paid for them and also spent approximately \$60 or more on petrol every month after discounts. Systematic random sampling and screening questions were used to identify the sample. In total, 1200 face-to-face interviews were conducted between April and June 2016.

Purchase of Particular Petrol Brand

- 3. Among the respondents surveyed, the petrol brands most frequently purchased in the last five years were Esso (37.0%), followed by SPC (26.8%), Shell (26.4%) and Caltex (9.8%).
- 4. The top reasons provided for purchasing a particular brand were the convenience of station locations, attractiveness of credit/ debit card promotions, attractiveness of brand loyalty programmes, good fuel efficiency/ mileage and low listed petrol prices.
- 5. The top reasons were similar across each of the most purchased brands. They were the convenience of station locations, attractiveness of card promotions and brand loyalty programmes as well as good fuel efficiency/ mileage.
- 6. On the whole, a majority of respondents (90.8%) were satisfied or very satisfied with their most purchased petrol brand. There were no significant differences in satisfaction between the different brands.

Purchase of Particular Petrol Grade

- 7. Among the respondents interviewed, the petrol grade they purchased the most in the last five years was grade 95 (61.5%), followed by grade 98 (28.2%), grade 92 (6.3%) and special grade (Shell V-Power Nitro +) (4.1%).
- 8. The top reasons for choosing to purchase a petrol grade most often were good fuel efficiency/ mileage, low listed petrol prices and high power/ good pickup.
- 9. The majority of respondents (90.8%) were satisfied or very satisfied with their most purchased petrol grade. There were no significant differences in satisfaction between the petrol grades listed.

Switching Behaviour Between Petrol Brands

- 10. The respondents' brand switching behaviour was determined by the number of petrol brands that they had used over the past five years. Those who had purchased more than one brand over the period were identified as brand switchers.
- 11. Slightly more than half (57.8%) did not switch between brands over the last five years. Most (30.8%) who switched between brands used only one other brand.
- 12. The top reasons for not switching between brands were the convenience of station locations, satisfaction with current credit/ debit card promotions, satisfaction with current loyalty programmes, wide network hence ease of accessibility and protection of the vehicle's engine.
- 13.On the other hand, the top reasons for switching between brands were greater convenience of station locations, more attractive credit/ debit card promotions, lower listed petrol prices, wider network of stations and better fuel efficiency/ mileage.
- 14. Those who did not switch between brands were significantly more likely to be satisfied with their most purchased brand (93.4% satisfied) as compared those who switched between brands (87.4% satisfied).

Switching Behaviour Between Petrol Grades

- 15. The respondents' grade switching behaviour was determined by the number of petrol grades that they had used over the last five years. Those who had purchased more than one grade over the period were identified as grade switchers.
- 16. Almost three-quarters of respondents (73.9%) did not switch between grades in the last five years. For those who switched between grades, most (23.6%) used one other grade.
- 17. There were no significant differences in satisfaction with most purchased grade between those who switched between grades and those who did not.

General Perceptions on Petrol Brands and Grades

- 18. As a whole, the respondents thought petrol brands were similar for the same grade level with regards to fuel efficiency/ mileage, power/ pickup and prices after taking into account all the discounts offered.
- 19. On the other hand, the respondents were generally unsure about whether different petrol grades had the same fuel efficiency/ mileage.

20. They also largely disagreed on whether different petrol grades had the same power/pickup.

Competition in the Petrol Market

- 21. Three-fifths of all respondents (59.9%) reported that the petrol market in Singapore was competitive.
- 22. Those who reported that the petrol market was not competitive suggested increasing competition by lowering government fuel taxes (18.3%), increasing government regulation of petrol prices (16.6%), allowing more brands to enter the petrol market by the government (12.3%), increasing the discounts/ gifts/ freebies/ promotions by petrol companies (11.6%) and having greater flexibility by the government to allow petrol companies to make price adjustments (10.6%).

General Awareness of Petrol Prices

- 23. Only one-fifth of respondents (22.2%) monitored the prices of petrol across brands.
- 24. Two-thirds of the respondents who monitored prices (66.9%) did so for the purpose of getting the best possible deal. The other reasons were because price was the most important factor amongst respondents to choose between petrol brands (32.3%) and it was easy to monitor the prices (9.0%).
- 25. From the same group who indicated that they monitored prices, three-quarters of them monitored prices through displays at the petrol stations (75.6%). The other avenues such as petrol companies' websites (10.9%) and word-of-mouth (10.9%) were less used.
- 26. The main reasons for not monitoring the prices of petrol include minor fluctuations in petrol prices (35.9%), insignificant savings due to similarity of petrol prices between brands (23.0%) and the lack of time to monitor prices (22.9%).

General Awareness of Petrol Promotions

- 27. More than 90% of the respondents (93.2%) used petrol discounts and rebates on a regular basis.
- 28. For those who used discounts and rebates regularly, 75.8% enjoyed discounts/ rebates through loyalty programmes of petrol companies, 65.7% used credit/ debit card discounts and 48.1% received credit/ debit card rebates.
- 29. A majority of them (65.3%) enjoyed discounts of between 11% and 20%; the average discount enjoyed is 14.9%.

30. The top reasons for choosing to pay for petrol purchases using credit/ debit cards include the chance to enjoy discounts and rebates (74.6%), the ability to accumulate reward points (50.4%) and the convenience of not having to carry and pay with cash (46.9%).

Cross Analysis: By Profile of Respondents

- 31. Significant differences exist between certain profile groups in important areas:
 - a. Vehicle type: As compared to car owners, motorcycle owners were more likely to perceive the petrol market in Singapore as competitive. They were also more likely to monitor petrol prices. On the other hand, car owners were more likely to make use of petrol discounts and rebates on a regular basis.
 - b. Gender: Females were more likely to perceive the petrol market in Singapore as competitive. Separately, males were more likely to monitor petrol prices.
 - c. Age group: Respondents between 30 and 64 years old were less likely than the other age groups to perceive the petrol market in Singapore as competitive. Those between 20 and 29 years old were the most likely to monitor prices while those who were 60 years old and above were the least likely to monitor prices.
 - d. Education: Generally, the higher one's educational qualification, the less likely that he/ she will perceive the petrol market in Singapore as competitive.
 - e. First-time vehicle ownership within the last twelve months: First-time vehicle owners in the last twelve months were more likely to perceive the petrol market in Singapore as competitive than those who were not.
 - f. Household income: In general, those with higher household income were less likely to monitor petrol prices.
 - g. House type: On the whole, those who stayed in higher-priced house types were less likely to monitor petrol prices. Also, those who stayed in 1 or 2 rooms Housing and Development Board (HDB) flats were least likely to make use of petrol discounts and rebates as compared to those who stayed in other house types.

1. Introduction

1.1 Objectives

Competition Commission of Singapore (CCS) has commissioned Forbes Research to conduct a consumer survey on the purchase of retail petrol in Singapore.

This survey aims to understand the perceptions and behaviours of drivers who:

- 1. Currently own a petrol-run car or motorcycle for personal use;
- 2. Make decisions on petrol purchases and also pay for them; and
- 3. Spend approximately \$60 or more on petrol every month after discounts.

The purpose of the study is to obtain information on the following:

- Considerations when selecting retailer to purchase petrol from, including its price of petrol, location of petrol stations, quality of customer service, promotions and loyalty programmes;
- 2. The extent of switching between different petrol companies and different petrol grades;
- 3. Perceptions on the degree of competition between petrol companies; and
- 4. Level of general awareness on petrol prices and promotions.

1.2 Methodology

1.2.1 Questionnaire Design

The survey questionnaire was designed by Forbes Research and refined with input from the CCS and findings from a pilot test.

Single and multiple response questions were used in the survey and indicated as "SR" and "MR" in the figures of this report. The former allows respondents to select only one option from a list of given options while the latter allows respondents to select more than one option from the list where applicable.

MR questions can be further divided into unprompted MR and prompted MR questions. Unprompted MR questions are open-ended questions that uncover important concerns of respondents that they are able to list offhand. The responses collected were then organised under predetermined MR options. On the other hand, prompted MR questions require respondents to choose from a given set of options and can include concerns important to respondents which they may not be able to recall if unprompted. Unprompted questions are indicated as unprompted MR, while prompted questions are generally shown as MR.

In addition, responses of those who selected "others" options in SR or MR questions and open-ended questions were grouped for ease of understanding of the main themes and ideas raised.

1.2.2 Fieldwork

A pilot test was conducted with ten respondents in March 2016 to ensure that the questionnaire is clear, easy to follow, has sufficient range of answers and options and simple to administer.

Housing units from the Department of Statistics (DoS) sampling frame were selected for the survey. Within each unit, three screening questions were applied to identify eligible participants. Those who qualify have to own a petrol-run car or motorcycle for personal use, make decisions on petrol purchases and pay for them and also spend approximately \$60 or more on petrol every month (after discounts). 1200 face-to-face interviews were conducted between April to June 2016.

1.2.3 Notes on Analysis

Individuals who own more than one vehicle were asked to answer the survey based on the vehicle he/ she used most frequently (i.e. the vehicle which he/ she pumped the most petrol into).

It is important to note that interpretation of results should be made with caution for groups with small sample sizes of below 30.

Percentages as shown in the charts are rounded off to the nearest one decimal place. As such, the total percentage may not add up to 100%.

Comparisons made between selected groups were done at the significance level of 0.05. If significant differences exist between them, it will be denoted by p < 0.05, and if otherwise, it will be denoted as p > 0.05. Conducting the test at this level provides confidence that the probability of the presence of differences between the groups due to chance is less than 5%.

2. Profile of Respondents

This section shows the spread of respondents for this survey by profile categories:

- Vehicle type
- Approximate amount spent on petrol every month after discounts
- Residential status
- Gender
- Race
- Age group
- Highest educational qualification
- · Monthly household income
- Occupation
- House type
- First-time vehicle ownership within the last twelve months
- Car engine capacity
- Age of car
- Motorcycle engine capacity
- Age of motorcycle

Close to 9 in 10 of the respondents (88.9%) took the survey with reference to their car, and the remainder (11.1%) with reference to their motorcycle.

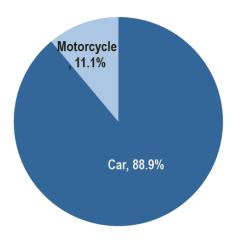


Figure 2.1: Vehicle type

^{*} Sample size consists of all respondents

^{*} Respondents who owned more than one vehicle were asked to answer the survey vis-àvis the vehicle that he/ she used most frequently (i.e. consumed the most petrol)

Close to half of the respondents (45.2%) spent between \$200 and \$349 on petrol every month after discounts. One-fifth (21.7%) spent below the lower range (below \$200) and 30% (33.2%) spent above the upper range (above \$350).

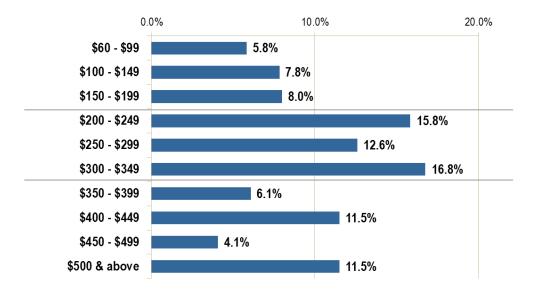
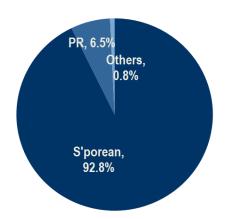


Figure 2.2: Approximate amount spent on petrol every month after discounts (in SGD) N = 1200

* Sample size consists of all respondents

More than 9 in 10 of the respondents (92.8%) were Singaporeans, while the rest were Permanent Residents (PRs) (6.5%) or of other residential statuses (0.8%).



Others	N	%
Student pass	4	0.3%
Employment pass	3	0.3%
Dependent pass	1	0.1%
Visiting pass	1	0.1%
Total	9	0.8%

Figure 2.3: Residential status

^{*} Sample size consists of all respondents

More than two-thirds (70.3%) of the respondents were males while slightly less than one-third (29.7%) of them were females.

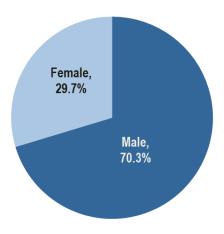
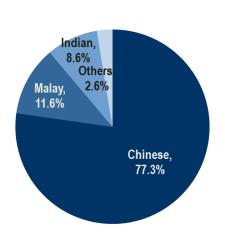


Figure 2.4: Gender

N = 1200

Most respondents were Chinese (77.3%), followed by Malay (11.6%), Indian (8.6%) and other races (2.6%).



Others	N	%
Filipino	6	0.5%
Sikh	6	0.5%
Russian	3	0.3%
Japanese	3	0.3%
Myanmar	2	0.2%
Arab	2	0.2%
Australian	1	0.1%
African	1	0.1%
Caucasian	1	0.1%
Vietnamese	1	0.1%
Italian	1	0.1%
Javanese	1	0.1%
Bangladeshi	1	0.1%
Pakistani	1	0.1%
Eurasian	1	0.1%
Total	31	2.6%

Figure 2.5: Race

^{*} Sample size consists of all respondents

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A majority of respondents (64.2%) were between the ages of 30 and 54 years old.

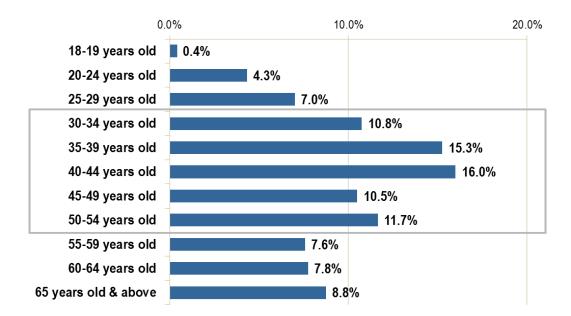


Figure 2.6: Age group N = 1200

^{*} Sample size consists of all respondents

About two-fifths (39.0%) of the respondents were highly educated, i.e. had a university degree (32.5%) or a post-graduate degree (6.5%). About one-third (33.9%) of them had received a moderate amount of education – GCE 'A' Level (4.6%), Institute of Technical Education Certificate (5.6%) and Polytechnic Diploma (23.8%). More than one-quarter (26.8%) had received a secondary school education or lower. This group of respondents had received no formal education (0.3%), an incomplete primary school education (1.4%), a Primary School Leaving Examination certificate (2.6%), an incomplete secondary school education (2.6%) or a secondary school leaving certificate (GCE 'N'/ 'O' Level) (19.8%).

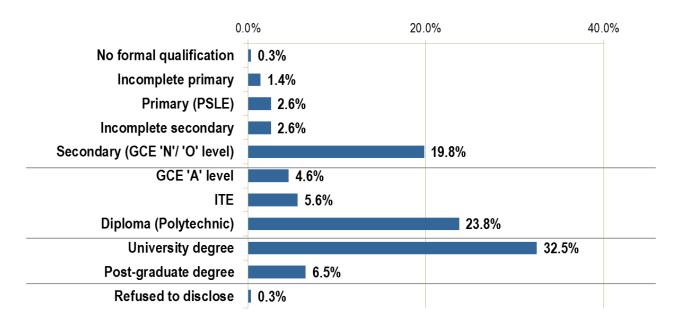


Figure 2.7: Highest educational qualification N = 1200

^{*} Sample size consists of all respondents

On monthly household income, 18.5% of respondents earned less than \$5,000, 26.7% earned between \$5,000 to less than \$10,000, 15.9% earned between \$10,000 to less than \$15,000 and 12.5% earned more than \$15,000.

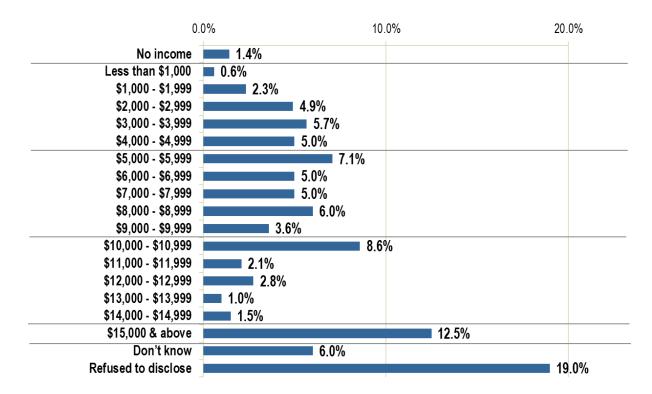


Figure 2.8: Monthly household income (in SGD) N = 1200

^{*} Sample size consists of all respondents

Most vehicle owners were professionals (20.7%), legislators, senior officials and managers (17.4%), associate professional and technician (13.7%), self-employed (11.8%) and housewife (7.6%).

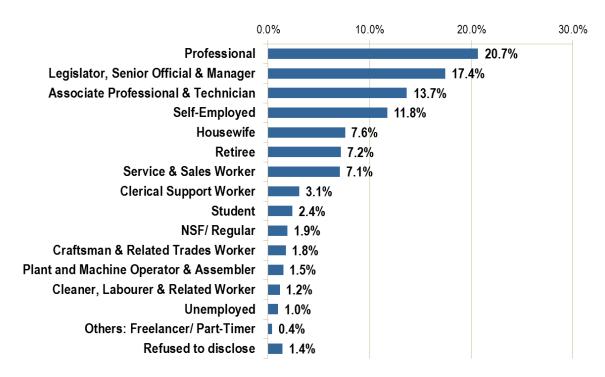


Figure 2.9: Occupation N = 1200

^{*} Sample size consists of all respondents

Close to 9 in 10 respondents (88.6%) stayed in HDB 4 rooms or higher-priced house types. Specifically, 3 in 10 (28.5%) stayed in HDB 4 rooms flats, 4 in 10 (35.9%) stayed in HDB 5 rooms/ executive flats, 1 in 10 (11.2%) stayed in private condominium apartments and another 1 in 10 (13.0%) in landed properties.

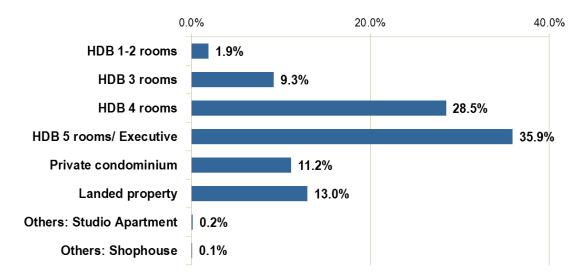


Figure 2.10: House type

N = 1200

Four-fifths of respondents (80.3%) were not first-time vehicle owners within the last twelve months.

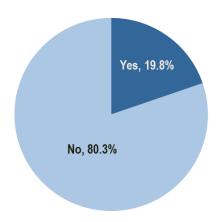


Figure 2.11: First-time vehicle ownership within the last twelve months

^{*} Sample size consists of all respondents

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A majority of car owners (94.6%) owned cars with engine capacities of between 1000 and 2499 cc.

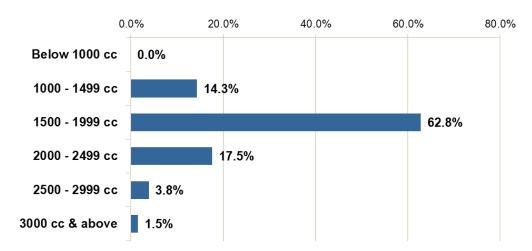


Figure 2.12: Car engine capacity (in "CC"s)

N = 1043

Their cars were mostly below ten years of age (87.5%).

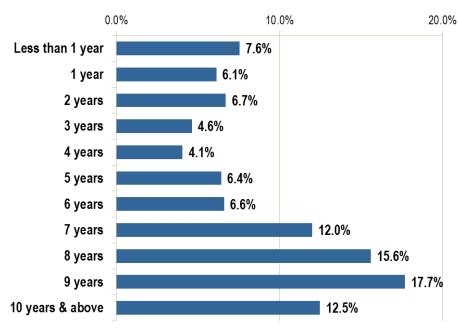


Figure 2.13: Age of car

^{*} Sample size consists only of respondents who indicated <u>car</u> as the main vehicle they use and who provided response

^{*} Sample size consists only of respondents who indicated <u>car</u> as the main vehicle they use and who provided response

Slightly more than half the motorcycle owners (58.6%) owned motorcycles with engine capacities of between 100 and 299 cc.

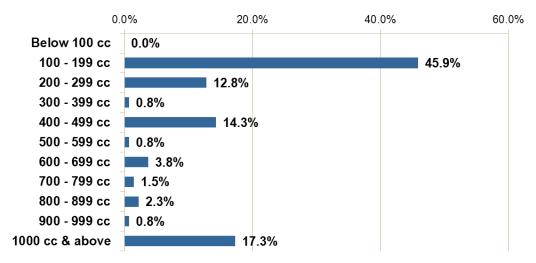


Figure 2.14: Motorcycle engine capacity (in "CC"s)

$$N = 133$$

* Sample size consists only of respondents who indicated <u>motorcycle</u> as the main vehicle they use

Three-fifths (63.2%) of motorcycles were below ten years of age while the rest were above ten years of age.

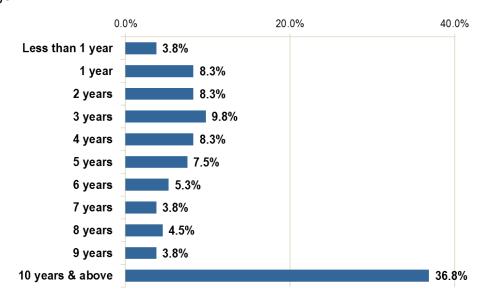


Figure 2.15: Age of motorcycle

$$N = 133$$

* Sample size consists only of respondents who indicated <u>motorcycle</u> as the main vehicle they use

3. Purchase of Particular Petrol Brand and Grade

3.1 Petrol Brand

This section shows the following:

- Types of petrol brands purchased in the last five years
- Most purchased petrol brand in the same period
- Reasons for purchasing petrol from a particular brand the most
- Overall satisfaction with most purchased petrol brand

In the last five years, majority of respondents had purchased petrol from Esso (51.2%), followed by Shell (49.3%), SPC (37.1%) and Caltex (21.4%).

In the last five years, which petrol brands have you purchased petrol from? [MR] (Q1)

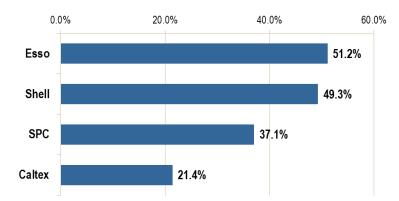


Figure 3.1.1: Types of petrol brands purchased in the last five years

N = 1200

Among the respondents interviewed, Esso (37.0%) was the most purchased petrol brand, followed by SPC (26.8%), Shell (26.4%) and Caltex (9.8%).

Which brand did you purchase the most petrol from? (Q2)

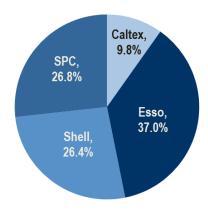


Figure 3.1.2: Most purchased petrol brand in the last five years N = 1200

The top purchasing reasons for any most bought petrol brand (unprompted) include:

- The convenience of station locations (45.4%)
- Attractiveness of credit/ debit card promotions (38.5%)
- Attractiveness of brand loyalty programmes (27.5%)
- Good fuel efficiency/ mileage (17.3%)
- Low listed petrol prices (17.0%)
- Why do you choose to purchase petrol from <X petrol brand> the most? [Unprompted MR] (Q3)
- Are there any other reasons for choosing to purchase petrol from <X petrol brand> the most? [Prompted MR]
 (Q4)

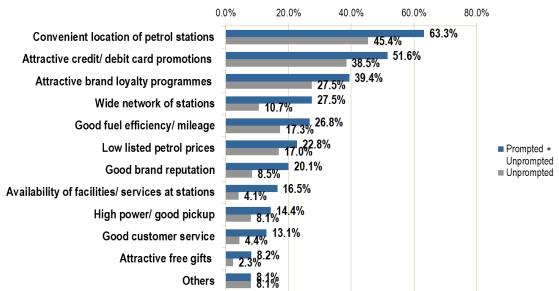


Figure 3.1.3: Reasons for purchasing from a particular petrol brand the most

N = 1200

Some of the other reasons mentioned were:

- Being used to petrol brand (2.7%)
- To be able to enjoy promotions offered by other memberships (2.3%)

Others	n	%
Used to petrol brand	32	2.7%
To enjoy promotions offered by other memberships (e.g. SAFRA)	28	2.3%
Petrol brand offers convenient mode of payment (e.g. speedpass payment system)	7	0.6%
Family/ friends recommended the brand	5	0.4%
Refused to disclose/ NA	25	2.1%
Total	97	8.1%

Figure 3.1.4: Reasons for purchasing from a particular petrol brand the most – others N = 1200

^{*} Sample size consists of all respondents

The following tables (Fig 3.1.5 to Fig 3.1.9) show the reasons for purchasing the most petrol from a particular petrol brand by rank. The sum of rank is an aggregated rank based on weighted computation, where weights assigned are 5 for Rank 1, 4 for Rank 2, 3 for Rank 3, 2 for Rank 4, and 1 for Rank 5.

The top five reasons for purchasing from any brand were (from most important to least important):

- The convenience of station locations
- Attractiveness of credit/ debit card promotions
- Attractiveness of brand loyalty programmes
- Good fuel efficiency/ mileage
- Low listed petrol prices

Please rank the top 5 reasons for choosing to purchase the most petrol from <X petrol brand>. (Q5)

Reasons	Proportion	on of respo as	Sum of	Rank			
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank %	
Convenient location of stations	29.8%	14.4%	10.9%	4.3%	2.6%	23.8%	1
Attractive credit/ debit card promotions	25.7%	15.8%	6.0%	1.9%	1.6%	20.4%	2
Attractive brand loyalty programmes	11.4%	14.7%	6.3%	4.6%	1.8%	13.8%	3
Good fuel efficiency/ mileage	7.5%	7.7%	5.5%	2.7%	2.3%	8.8%	4
Low listed petrol prices	9.4%	6.4%	2.3%	2.0%	1.9%	8.1%	5
Wide network of stations	3.3%	5.4%	8.3%	6.3%	3.3%	7.5%	6
Good brand reputation	2.7%	2.8%	4.7%	5.5%	3.9%	5.1%	7
High power/ good pickup	2.8%	3.6%	3.6%	2.1%	1.4%	4.2%	8
Availability of facilities/ services at stations	0.5%	2.0%	3.5%	4.8%	4.3%	3.3%	9
Good customer service	0.9%	1.5%	3.5%	3.5%	2.3%	2.9%	10
Attractive free gifts	1.0%	1.6%	1.8%	1.3%	1.7%	2.0%	11
Total						100.0%	

Figure 3.1.5: Ranking of reasons for purchasing from a particular petrol brand the most N = 1200

^{*} Sample size consists of all respondents

The top five reasons for purchasing from **Caltex** most often were (from most important to least important):

- The convenience of station locations
- Attractiveness of credit/ debit card promotions
- Good fuel efficiency/ mileage
- Attractiveness of brand loyalty programmes
- High power/ good pickup
- Please rank the top 5 reasons for choosing to purchase the most petrol from <u>Caltex</u>. (Q5)

Reasons	Proportion of respondents who ranked this reason as rank 1, 2, 3, etc					Sum of	Rank
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank %	
Convenient location of stations	36.4%	11.9%	6.8%	3.4%	0.0%	27.7%	1
Attractive credit/ debit card promotions	28.0%	11.9%	5.1%	3.4%	1.7%	22.8%	2
Good fuel efficiency/ mileage	9.3%	10.2%	6.8%	3.4%	0.8%	12.4%	3
Attractive brand loyalty programmes	8.5%	9.3%	4.2%	0.8%	0.8%	10.2%	4
High power/ good pickup	1.7%	5.9%	4.2%	1.7%	2.5%	5.5%	5
Low listed petrol prices	3.4%	3.4%	1.7%	0.8%	3.4%	4.4%	6
Good brand reputation	2.5%	2.5%	2.5%	3.4%	1.7%	4.2%	7
Wide network of stations	2.5%	1.7%	3.4%	2.5%	2.5%	4.0%	8
Availability of facilities/ services at stations	0.0%	3.4%	4.2%	4.2%	2.5%	4.0%	8
Good customer service	0.8%	2.5%	1.7%	2.5%	0.8%	2.7%	9
Attractive free gifts	1.7%	0.8%	0.8%	0.0%	4.2%	2.0%	10
Sum						100.0%	

Figure 3.1.6: Ranking of reasons for purchasing from <u>Caltex</u> the most N = 118

^{*} Sample size consists only of respondents who purchased from Caltex the most

The top five reasons for purchasing from **Esso** most often were (from most important to least important):

- The convenience of station locations
- Attractiveness of credit/ debit card promotions
- Attractiveness of brand loyalty programmes
- Wide network of stations
- Good fuel efficiency/ mileage
- Please rank the top 5 reasons for choosing to purchase the most petrol from Esso. (Q5)

Reasons	Proportion of respondents who ranked this reason as rank 1, 2, 3, etc					Sum of	Rank
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank %	
Convenient location of stations	31.5%	12.2%	12.6%	3.4%	4.3%	23.9%	1
Attractive credit/ debit card promotions	23.9%	18.0%	5.4%	2.0%	1.4%	19.9%	2
Attractive brand loyalty programmes	13.5%	15.5%	6.1%	5.0%	1.8%	14.9%	3
Wide network of stations	4.3%	7.0%	9.9%	8.1%	3.4%	9.2%	4
Good fuel efficiency/ mileage	7.9%	7.7%	5.6%	1.8%	2.0%	8.7%	5
Low listed petrol prices	7.0%	5.2%	2.0%	2.0%	2.0%	6.3%	6
Good brand reputation	2.3%	3.2%	4.5%	7.0%	4.1%	5.2%	7
High power/ good pickup	3.6%	2.7%	3.4%	1.4%	1.6%	4.0%	8
Availability of facilities/ services at stations	0.5%	1.6%	4.3%	6.5%	3.8%	3.6%	9
Good customer service	0.5%	1.8%	2.7%	2.7%	2.7%	2.4%	10
Attractive free gifts	0.7%	1.8%	1.4%	2.0%	1.1%	1.9%	11
Sum						100.0%	

Figure 3.1.7: Ranking of reasons for purchasing from <u>Esso</u> the most N = 444

^{*} Sample size consists only of respondents who purchased from Esso the most

The top five reasons for purchasing from **Shell** most often were (from most important to least important):

- The convenience of station locations
- Attractiveness of brand loyalty programmes
- Attractiveness of credit/ debit card promotions
- Good fuel efficiency/ mileage
- · Good reputation of petrol brand
- Please rank the top 5 reasons for choosing to purchase the most petrol from Shell. (Q5)

Reasons	Proportio	on of respo as ı	Sum of	Rank			
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank %	
Convenient location of stations	31.5%	14.8%	7.3%	5.4%	2.5%	23.9%	1
Attractive brand loyalty programmes	11.7%	14.2%	7.9%	5.4%	2.8%	14.5%	2
Attractive credit/ debit card promotions	14.8%	10.4%	5.7%	2.2%	1.9%	13.2%	3
Good fuel efficiency/ mileage	10.7%	10.7%	5.4%	3.8%	2.5%	11.7%	4
Good brand reputation	5.4%	4.1%	8.2%	6.6%	5.4%	8.2%	5
Wide network of stations	4.4%	5.0%	10.1%	4.1%	3.5%	8.0%	6
High power/ good pickup	3.8%	7.3%	5.0%	2.5%	0.9%	6.6%	7
Low listed petrol prices	6.0%	3.8%	2.2%	1.9%	0.9%	5.4%	8
Good customer service	1.9%	1.6%	3.5%	4.4%	2.5%	3.6%	9
Attractive free gifts	0.9%	2.8%	2.5%	0.9%	2.2%	2.6%	10
Availability of facilities/ services at stations	0.9%	1.6%	1.6%	2.8%	4.1%	2.4%	11
Sum						100.0%	

Figure 3.1.8: Ranking of reasons for purchasing from <u>Shell</u> the most N = 317

^{*} Sample size consists only of respondents who purchased from Shell the most

The top five reasons for purchasing from **SPC** most often were (from most important to least important):

- Attractiveness of credit/ debit card promotions
- The convenience of station locations
- · Low listed petrol prices
- Attractiveness of brand loyalty programmes
- Wide network of stations

Please rank the top 5 reasons for choosing to purchase the most petrol from <u>SPC</u>. (Q5)

Reasons	Proportion	on of respo as	Sum of	Rank			
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank %	
Attractive credit/ debit card promotions	38.0%	19.3%	7.5%	0.9%	1.6%	27.3%	1
Convenient location of stations	23.4%	18.1%	13.7%	4.7%	1.2%	22.4%	2
Low listed petrol prices	18.4%	11.8%	3.1%	2.5%	2.2%	14.5%	3
Attractive brand loyalty programmes	9.3%	15.9%	5.9%	4.7%	1.2%	12.9%	4
Wide network of stations	1.2%	5.0%	6.2%	7.5%	3.4%	5.9%	5
Good fuel efficiency/ mileage	3.1%	3.7%	5.0%	2.5%	2.8%	5.0%	6
Availability of facilities/ services at stations	0.3%	2.5%	4.0%	4.7%	5.6%	3.6%	7
Good customer service	0.6%	0.6%	5.3%	4.0%	2.2%	3.0%	8
Good brand reputation	0.6%	1.2%	2.2%	3.1%	3.1%	2.2%	9
High power/ good pickup	0.9%	0.3%	2.2%	2.8%	1.2%	1.8%	10
Attractive free gifts	1.2%	0.3%	1.9%	0.9%	0.9%	1.5%	11
Sum						100.0%	

Figure 3.1.9: Ranking of reasons for purchasing from <u>SPC</u> the most N = 321

^{*} Sample size consists only of respondents who purchased from SPC the most

The table below shows the ranking of reasons to purchase from a particular petrol brand the most. The top five reasons are shaded in blue. The top reasons for choosing to purchase the most petrol from a particular brand were similar across the four brands.

• Please rank the top 5 reasons for choosing to purchase the most petrol from <X petrol brand>. (Q5)

Reasons	Caltex	Esso	Shell	SPC	Overall
Convenient location of stations	1	1	1	2	1
Attractive credit/ debit card promotions	2	2	3	1	2
Attractive brand loyalty programmes	4	3	2	4	3
Good fuel efficiency/ mileage	3	5	4	6	4
Low listed petrol prices	6	6	8	3	5
Wide network of stations	8	4	6	5	6
Good brand reputation	7	7	5	9	7
High power/ good pickup	5	8	7	10	8
Availability of facilities/ services at stations	8	9	11	7	9
Good customer service	9	10	9	8	10
Attractive free gifts	10	11	10	11	11

Figure 3.1.10: Comparison in ranking of reasons for purchasing the most petrol across brands

^{*} Sample size consists of all respondents

In general, a majority (90.8%) of respondents were satisfied or very satisfied with their most purchased petrol brand. A comparison of the satisfaction proportions between each of the most purchased brand revealed that the differences in satisfaction between them are not significant (p > 0.05).

 On a scale of 1 to 5 (1=very dissatisfied; 5=very satisfied), how satisfied are you with the most purchased petrol brand? (Q6)

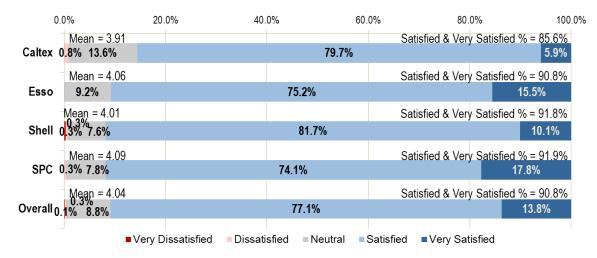


Figure 3.1.11: Overall satisfaction with most purchased petrol brand N = 118, 444, 317, 321, 1200

3.2 Petrol Grade

This section elaborates on the following:

- Types of petrol grades purchased in the last five years
- Most purchased petrol grade in the same period
- Top possible reasons for purchasing a particular grade most often
- Overall satisfaction with most purchased petrol grade

In the last five years, a majority of respondents had purchased grade 95 (69.8%), followed by grade 98 (39.0%), the special grade (Shell V-Power Nitro +) (10.3%) and grade 92 (9.8%).

In the last five years, which of the following petrol grades have you purchased? [MR] (Q13)

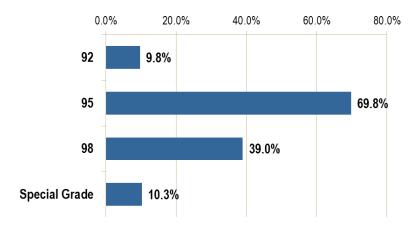


Figure 3.2.1: Types of petrol grades purchased in the last five years

$$N = 1200$$

^{*} Sample size consists of all respondents

^{*} Special grade refers to "Shell V-Power Nitro+"

Among the respondents interviewed, 9 in 10 (89.7%) respondents had either purchased grade 95 or grade 98 the most. Grade 95 (61.5%) was the most purchased petrol grade, followed by grade 98 (28.2%), grade 92 (6.3%) and the special grade (Shell V-Power Nitro +) (4.1%).

Which grade did you purchase the most? (Q14)

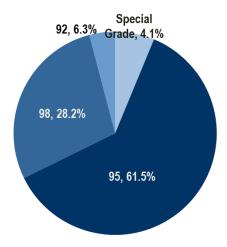


Figure 3.2.2: Most purchased petrol brand in the last five years N = 1200

^{*} Sample size consists of all respondents

^{*} Special grade refers to "Shell V-Power Nitro+"

The top reasons (unprompted) for choosing to purchase petrol of a particular grade most often include:

- Good fuel efficiency/ mileage (50.7%)
- Low listed petrol prices (49.1%)
- High power/ good pickup (23.3%)
 - What do you consider when choosing between petrol grades? [Unprompted MR] (Q15)

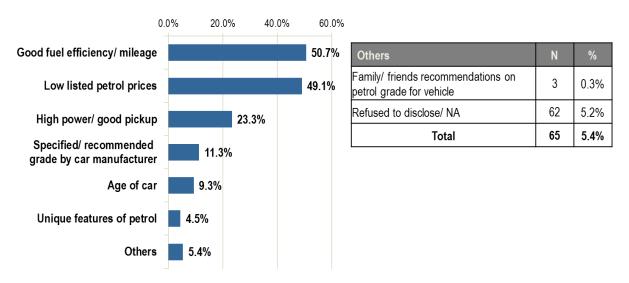


Figure 3.2.3: Top reasons for choosing to purchase petrol of a particular grade the most N = 1200

^{*} Sample size consists of all respondents

A majority (90.8%) of respondents were satisfied or very satisfied with their most purchased petrol grade. The differences in satisfaction proportions between each of the most purchased grades were determined to be not significant (p > 0.05).

 On a scale of 1 to 5 (1=very dissatisfied; 5=very satisfied), how satisfied are you with the most purchased petrol grade? (Q16)

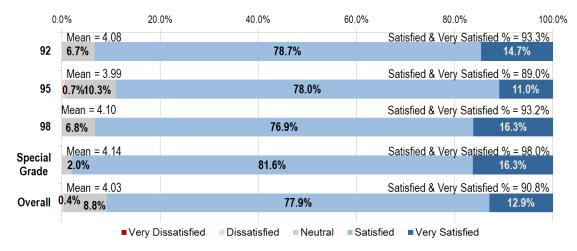


Figure 3.2.4: Overall satisfaction with most purchased petrol grade N = 75, 738, 338, 49, 1200

^{*} Sample size consists of all respondents

^{*} Special grade refers to "Shell V-Power Nitro+"

4. Switching Behaviour in Relation to Petrol Brands and Grades

4.1 Petrol Brand

This section seeks to understand motorists' switching behaviours and its implications:

- Degree of switching in the last five years
- Switching behaviour and most purchased petrol brand
- Reasons for switching or not switching
- Switching behaviour and overall satisfaction with most purchased petrol brand

The respondents' brand switching behaviour was determined by the number of petrol brands that they had used over the past five years. Those who had purchased more than one brand over the period were identified as brand switchers. The information was obtained from Q1 of the survey.

Slightly more than half (57.8%) did not switch between brands over the last five years. Most (30.8%) who switched between brands used only one other brand.

In the last five years, which petrol brands have you purchased petrol from? [MR] (Q1)

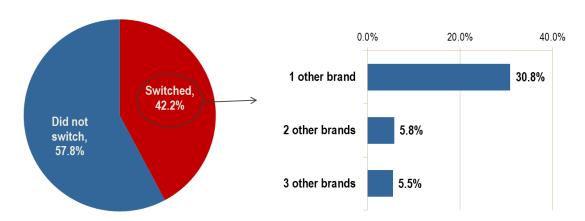


Figure 4.1.1: Brand switching behaviour in the last five years

^{*} Sample size consists of all respondents

The most mentioned reasons (unprompted) for not switching between brands include:

- The convenience of station locations (47.1%)
- Satisfaction with current credit/ debit card promotions (37.9%)
- Satisfaction with current loyalty programmes (33.1%)
- Wide network and hence ease of accessibility (20.5%)
- Protection of the vehicle's engine (6.5%)

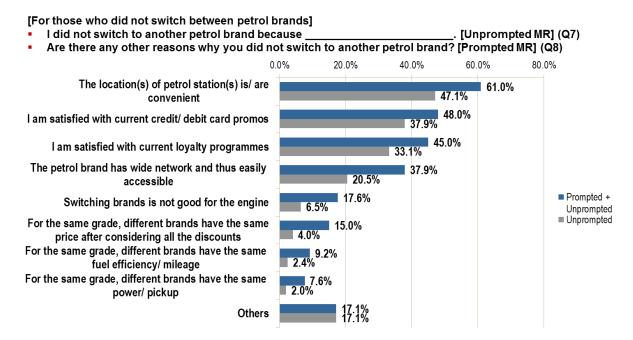


Figure 4.1.2: Reasons for not switching between petrol brands in the last five years N = 694

^{*} Sample size consists only of respondents who did not switch between petrol brands in the last five years

Other reasons for not switching between brands include:

- Being used to petrol brand (8.1%)
- Prices of other petrol brands are higher (2.6%)
- The chance to use promotions by other memberships (1.9%)
- The preferred brand gives high power/ good pickup/ good fuel efficiency (1.6%)

[For those who did not switch between petrol brands]

I did not switch to another petrol brand because ______. [Unprompted MR] (Q7)

Others	n	%
am used to this petrol brand	56	8.1%
Prices of other petrol brands are higher	18	2.6%
want to use promotions by other memberships (e.g. SAFRA)	13	1.9%
This brand gives high power/ good pickup/ good fuel efficiency	11	1.6%
Professionals recommend this brand	3	0.4%
Refused to disclose/ NA	18	2.6%
Total	119	17.1%

Figure 4.1.3: Reasons for not switching between petrol brands in the last five years — others

N = 694

^{*} Sample size consists only of respondents who did not switch between petrol brands in the last five years

The sum of rank is an aggregated rank based on weighted computation, where weights assigned are 5 for Rank 1, 4 for Rank 2, 3 for Rank 3, 2 for Rank 4, and 1 for Rank 5.

The top five reasons for not switching between brands are:

- The convenience of station locations
- Satisfaction with current credit/ debit card promotions
- Satisfaction with current loyalty programmes
- Wide network and hence ease of accessibility
- Protection of the vehicle's engine

[For those who did not switch between petrol brands]

Please rank the top 5 reasons why you did not switch to another petrol brand. (Q9)

Reasons	Proportion of respondents who ranked this reason as rank 1, 2, 3, etc				Sum of Rank %	Rank	
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Naiik /0	
Locations of stations are convenient for me	31.0%	15.4%	9.8%	2.7%	1.6%	28.3%	1
Satisfied with current credit/ debit card promotions	25.1%	14.3%	4.8%	2.2%	1.4%	22.6%	2
Satisfied with current loyalty programmes	15.4%	17.7%	8.5%	1.9%	0.9%	19.9%	3
Petrol brand has wide network and easily accessible	8.5%	10.4%	8.8%	7.3%	2.3%	14.2%	4
Switching brands is not good for the engine	4.3%	2.6%	4.0%	3.2%	2.6%	5.9%	5
For the same grade, different brands have the same price after considering all discounts offered	1.9%	2.0%	3.5%	3.7%	3.5%	4.3%	6
For the same grade, different brands have the same fuel efficiency	1.0%	1.3%	1.9%	2.0%	2.6%	2.5%	7
For the same grade, different brands have the same power/ pickup	0.9%	1.0%	1.9%	1.9%	1.6%	2.2%	8
Sum						100.0%	

Figure 4.1.4: Ranking of reasons for not switching between petrol brands in the last five years

N = 694

^{*} Sample size consists only of respondents who did not switch between petrol brands in the last five years

On the other hand, the most mentioned reasons (unprompted) for switching between brands include:

- Greater convenience of station locations (45.8%)
- More attractive credit/ debit card promotions (22.3%)
- Lower listed petrol prices (15.4%)
- More attractive brand loyalty programmes (14.0%)
- Wider network of stations (10.3%)
- Better fuel efficiency/ mileage (10.3%)

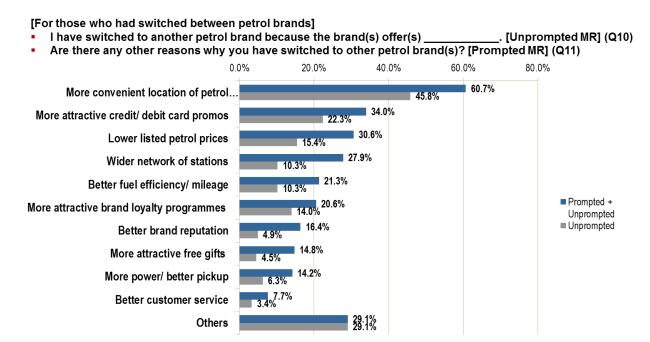


Figure 4.1.5: Reasons for switching between petrol brands in the last five years N = 506

^{*} Sample size consists only of respondents who had switched between petrol brands in the last five years

Other reasons for switching between brands include:

- Being pressed for time and needed to refuel quickly (22.7%)
- The chance to use promotions by other memberships (3.0%)

[For those who had switched between petrol brands]

I have switched to another petrol brand because ______. [Unprompted MR] (Q10)

Others	n	%
I was pressed for time and needed to refuel quickly	115	22.7%
I want to use promotions by other memberships (e.g. SAFRA)	15	3.0%
Of similar petrol prices	3	0.6%
Refused to disclose/ NA	14	2.8%
Total	147	29.1%

Figure 4.1.6: Reasons for switching between petrol brands in the last five years – others N = 506

^{*} Sample size consists only of respondents who had switched between petrol brands in the last five years

The top five reasons for switching between brands are:

- Greater convenience of station locations
- More attractive credit/ debit card promotions
- Lower listed petrol prices
- Wider network of stations
- Better fuel efficiency/ mileage

[For those who had switched between petrol brands]

Please rank the top 5 reasons for switching to other petrol brand(s). (Q12)

Reasons	Proportion of respondents who ranked this reason as rank 1, 2, 3, etc				Sum of Rank %	Rank	
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Ralik 70	
More convenient location of stations	30.2%	16.0%	8.1%	4.0%	1.8%	29.2%	1
More attractive credit/ debit card promotions	14.0%	10.9%	4.2%	1.8%	1.8%	15.4%	2
Lower listed petrol prices	9.3%	6.5%	5.1%	5.1%	3.4%	11.9%	3
Wider network of stations	3.6%	7.1%	7.9%	5.3%	3.6%	9.8%	4
Better fuel efficiency/ mileage	5.5%	5.9%	4.9%	2.6%	1.6%	8.5%	5
More attractive brand loyalty programmes	5.7%	4.5%	4.5%	3.4%	1.6%	8.0%	6
More power/ better pickup	3.2%	4.0%	2.6%	1.2%	2.0%	5.1%	7
Better brand reputation	2.2%	2.0%	4.2%	3.8%	3.8%	5.0%	8
More attractive free gifts	2.6%	3.4%	1.6%	3.4%	2.8%	4.7%	9
Better customer service	0.6%	1.6%	2.2%	1.0%	2.2%	2.3%	10
Sum						100.0%	

Figure 4.1.7: Ranking of reasons for switching between petrol brands in the last five years N = 506

^{*} Sample size consists only of respondents who had switched between petrol brands in the last five years

There were significant differences in satisfaction proportions on most purchased petrol brand between those who switched between brands and those who did not. Those who did not switch between brands were significantly more likely to be satisfied (p < 0.05).

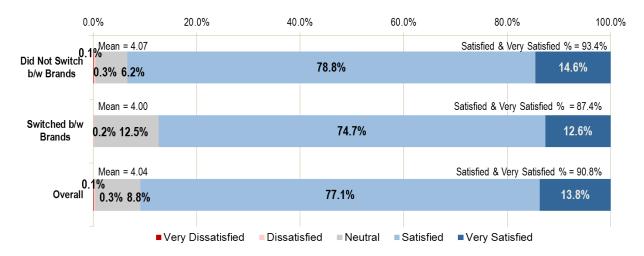


Figure 4.1.8: Overall satisfaction with most purchased petrol brand by switching behaviour N = 694, 506, 1200

^{*} Sample size consists of all respondents

4.2 Petrol Grade

This section illustrates the switching behaviour of respondents between petrol grades, in terms of:

- Degree of switching in the last five years
- Switching behaviour and most purchased petrol grade
- Switching behaviour and overall satisfaction with most purchased petrol grade

Respondents' grade switching behaviour was determined by the number of petrol grades that they had used over the last five years. Those who had purchased more than one grade of petrol over the period were identified as grade switchers. The information was obtained from Q13 of the survey.

Almost three-quarters of respondents (73.9%) did not switch between grades in the last five years. For those who switched between grades, most (23.6%) used only one other grade.

In the last five years, which of the following petrol grades have you purchased? [MR] (Q13)

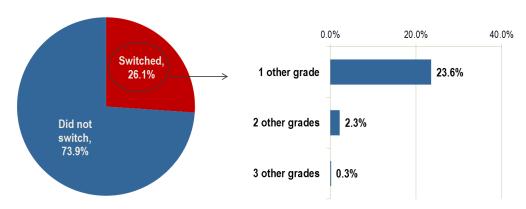


Figure 4.2.1: Grade switching behaviour in the last five years N = 1200

^{*} Sample size consists of all respondents

There were no significant differences in satisfaction proportions between those who switched between grades and those who did not (p > 0.05).

 On a scale of 1 to 5 (1=very dissatisfied; 5=very satisfied), how satisfied are you with the most purchased petrol grade? (Q16)

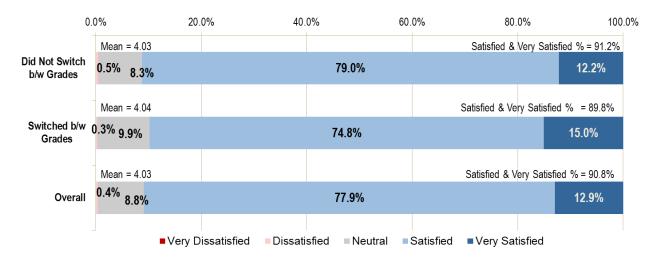


Figure 4.2.2: Overall satisfaction with most purchased petrol grade by switching behaviour N = 887, 313, 1200

^{*} Sample size consists of all respondents

5. General Perceptions on Petrol Brands and Grades

This section covers the perceptions of respondents on petrol brands and grades in general.

Between 40% and 50% of respondents agreed that for the same grade, all petrol brands were the same in terms of:

- Fuel efficiency/ mileage (51.8%)
- Power/ pickup (46.3%)
- Price after taking into account discounts offered (39.8%)

The mean scores for each of the three statements were significantly higher than the neutral score ("3") (p < 0.05). This means that respondents mostly perceived the brands to be similar in those areas.

[Comparisons across brands]

 On a scale of 1 to 5 (1=strongly disagree; 5=strongly agree), to what extent do you agree with the following statements.

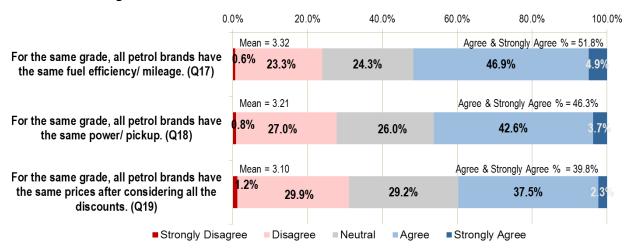


Figure 5.1: Perceptions of the same grade across brands N = 1133, 1128, 1121

^{*} Sample size consists of all respondents who provided response

Almost 4 in 10 respondents (39.6%) thought that different petrol grades had the same fuel efficiency/ mileage, whereas 3 in 10 respondents (30.7%) thought that different petrol grades had the same power/ pickup.

The mean score of the first statement was not significantly different from the neutral score ("3") (p > 0.05), while the mean score of the latter statement was significantly lower than the neutral score ("3") (p < 0.05). This means that the respondents were generally unsure of whether different petrol grades had the same fuel efficiency/ mileage but they largely disagreed on whether different petrol grades had the same power/ pickup.

[Comparisons across grades]

 On a scale of 1 to 5 (1=strongly disagree; 5=strongly agree), to what extent do you agree with the following statements.

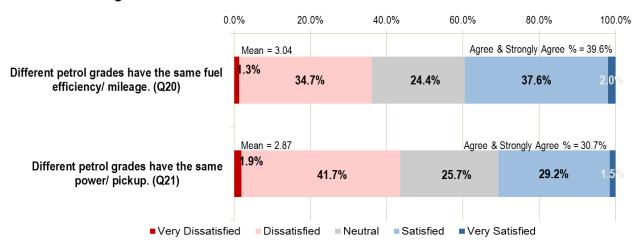


Figure 5.2: Perceptions across grades N = 1117, 1113

^{*} Sample size consists of all respondents who provided response

6. Competition in the Petrol Market

This section covers the respondents' opinion on competitiveness of Singapore's petrol market.

Three-fifths of all respondents (59.9%) thought that the petrol market in Singapore was competitive, while the remaining two-fifths (40.1%) thought it was not.

Do you think the petrol market in Singapore is competitive? (Q30)

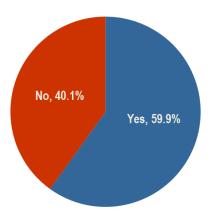


Figure 6.1: Perception on the competitiveness of petrol market in Singapore N = 1200

* Sample size consists of all respondents

The top suggestions to increase the competitiveness of petrol market include:

- Lowering of government fuel taxes (18.3%)
- Increasing government regulation of petrol prices (16.6%)
- Allowing more brands to enter the petrol market by the government (12.3%)
- Increasing the discounts/ gifts/ freebies/ promotions by petrol companies (11.6%)
- Having greater flexibility by the government to allow petrol companies to make price adjustments (10.6%)
- What do you think can be changed to make the petrol market in Singapore more competitive?
 [Open-ended] (Q31)

Others	N	%
Government to lower fuel taxes	88	18.3%
Government to increase regulation on petrol prices	80	16.6%
Government to allow more brands to enter the petrol market	59	12.3%
Petrol companies to provide more discounts/ gifts/ freebies/ promotions	56	11.6%
Government to allow petrol companies to adjust prices on their own	51	10.6%
Petrol companies to publish prices more clearly/ be more transparent about it	36	7.5%
Petrol companies to use a recognised benchmark for fuel prices	34	7.1%
Petrol companies to reduce operation overhead cost to lower petrol prices	8	1.7%
Refused to disclose/ NA	111	23.1%

Figure 6.2: Feedback on ways to make the petrol market in Singapore more competitive N = 481

^{*} Sample size consists of only of those who thought the petrol market in Singapore was not competitive

^{*} Some respondents provided more than one response

7. General Awareness of Petrol Prices and Promotions

7.1 Petrol Prices

This section gives information on general level of awareness of petrol prices through:

- Monitoring of petrol prices across petrol brands
- · Reasons for monitoring and not monitoring prices
- The avenues used to monitor prices

Only one-fifth of respondents (22.2%) monitored the prices of petrol across the petrol brands.

Do you monitor the prices of petrol across the petrol brands? (Q22)

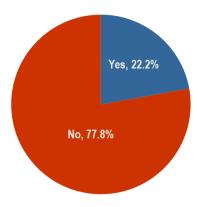


Figure 7.1.1: Monitoring of petrol prices across petrol brands

N = 1200

^{*} Sample size consists of all respondents

^{*} Prices refer to prices with or without discounts

Two-thirds of the respondents who monitored prices (66.9%) did so for the purpose of getting the best possible deal. The other reasons for monitoring prices were because price was the most important factor to choose between petrol brands (32.3%) and it was easy to monitor the prices (9.0%).

Why do you monitor the prices of petrol <u>across</u> the petrol brands? [MR] (Q23)

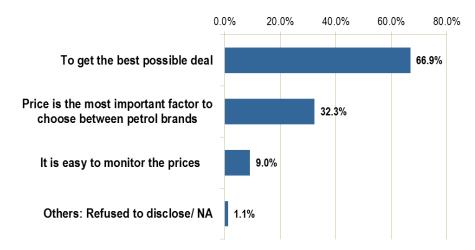


Figure 7.1.2: Reasons for monitoring petrol prices across petrol brands N = 266

^{*} Sample size consists only of respondents who monitored petrol prices across petrol brands

^{*} Prices refer to prices with or without discounts

For the same group who indicated that they monitored prices, the main way they did so was through the prices displayed at the petrol stations (75.6%). The other avenues used to monitor prices had much lower percentages:

- Petrol companies' websites (10.9%)
- Word-of-mouth (10.9%)
- Comparison websites (9.8%)
- How do you usually monitor the prices of petrol across the petrol brands? [MR] (Q24)

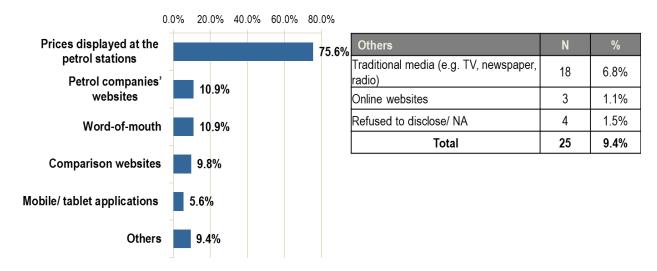


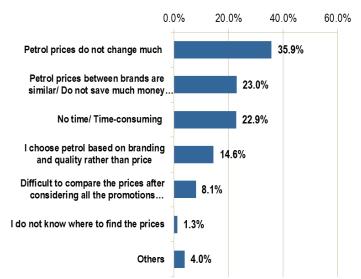
Figure 7.1.3: Avenues of monitoring petrol prices across petrol brands N = 266

^{*} Sample size consists only of respondents who monitored petrol prices across petrol brands

^{*} Prices refer to prices with or without discounts

As for those who did not monitor prices, the main reasons they mentioned include:

- Minor fluctuations in petrol prices (35.9%)
- Insignificant savings due to similarity of petrol prices between brands (23.0%)
- The lack of time to monitor prices (22.9%)
- Why do you not monitor the prices of petrol across the petrol brands? [MR] (Q25)



Others	N	%
Not interested in monitoring prices	12	1.3%
Refused to disclose/ NA	25	2.7%
Total	37	4.0%

Figure 7.1.4: Reasons for not monitoring petrol prices across petrol brands N = 934

^{*} Sample size consists only of respondents who did not monitor the petrol prices across petrol brands

^{*} Prices refer to prices with or without discounts

7.2 Petrol Promotions

This section gives information on the general level of awareness of petrol promotions through:

- Usage of petrol discounts and rebates
- Types of discounts and rebates used
- Approximate amount of discount enjoyed on petrol purchases
- Reasons for purchasing petrol using credit/ debit card

More than 9 in 10 respondents (93.2%) used petrol discounts and rebates on a regular basis.

Do you make use of petrol discounts and rebates on a regular basis? [SR] (Q26)

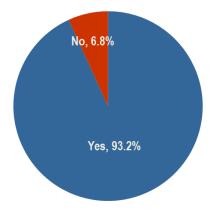


Figure 7.2.1: Usage of petrol discounts and rebates N = 1200

^{*} Sample size consists of all respondents

^{*} Discounts on petrol purchases only

For those who used petrol discounts and rebates on a regular basis:

- 75.8% enjoyed discounts/ rebates from loyalty programmes of petrol companies
- 65.7% used credit/ debit card discounts
- 48.1% received credit/ debit card rebates
- Which types of discounts and rebates do you make use of? [Unprompted MR] (Q27)

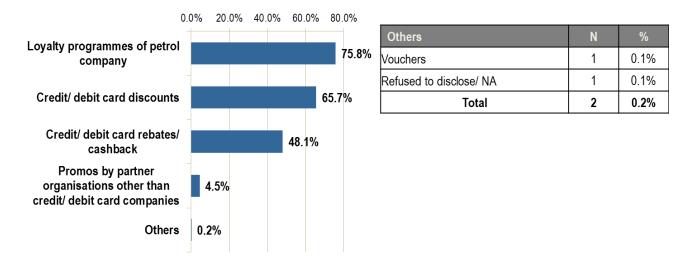


Figure 7.2.2: Types of discounts and rebates used

N = 1118

^{*} Sample size consists only of those who used petrol discounts and rebates on a regular basis

^{*} Discounts on petrol purchases only

A majority (65.3%) of them enjoyed discounts of between 11% and 20%. On average, they enjoyed a discount of 14.9% for petrol purchases.

Approximately how much discounts are you getting on your petrol purchases? (Q28)

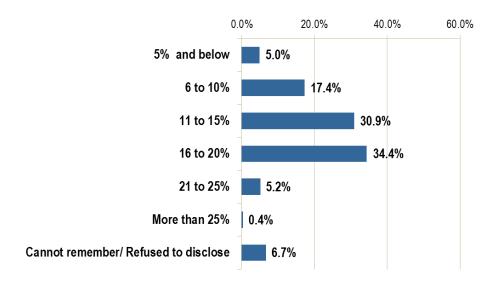


Figure 7.2.3: Approximate amount of discounts enjoyed on petrol purchases N = 1118

^{*} Sample size consists only of those who used petrol discounts and rebates on a regular basis

^{*} Discounts on petrol purchases only

The top reasons (unprompted) for choosing to pay for petrol purchases using credit/ debit cards include:

- The chance to enjoy discounts and rebates offered by the card(s) on petrol purchases (74.6%)
- The ability to accumulate reward points on the card(s) (50.4%)
- The convenience of not carrying and paying in cash (46.9%)
- Why do you pay for petrol purchases using card(s)? [Unprompted MR] (Q29)

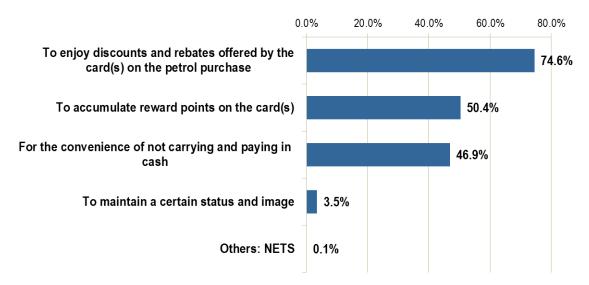


Figure 7.2.4: Reasons for choosing to pay for petrol purchases using card(s) N = 927

^{*} Sample size consists only of those who used credit/ debit card discounts/ rebates/ cashback

^{*} Discounts on petrol purchases only

8. Cross Analysis: By Profile of Respondents

This section breaks down key areas by profile of respondents. The key areas are:

- Perception on competition
- Monitoring of petrol prices
- Usage of petrol promotions

Profile groups that show significant differences within groups (p < 0.05) will be explained in detail below. Information on the differences in the perceptions and behaviours between groups provides insights on which groups could be targeted upon and shifted in the desired directions.

8.1 Perception on Competition in the Petrol Market

Motorcycle owners were more likely than car owners to perceive the petrol market in Singapore as competitive (p < 0.05).

Do you think the petrol market in Singapore is competitive? (Q30)

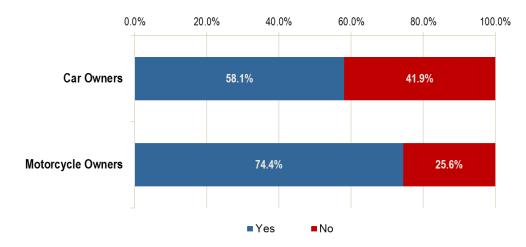


Figure 8.1.1: Perception on competitiveness of petrol market – by vehicle type N = 1067, 133

* Sample size consists of all respondents

Females were more likely than males to perceive the petrol market in Singapore as competitive (p < 0.05).

Do you think the petrol market in Singapore is competitive? (Q30)

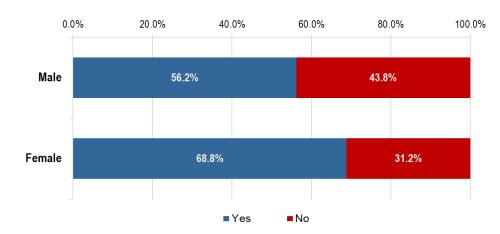


Figure 8.1.2: Perception on competitiveness of petrol market – by gender N = 844, 356

* Sample size consists of all respondents

Perceptions on competitiveness of the petrol market in Singapore differed by age group (p < 0.05). Those between 30 and 64 years old were less likely than the other age groups to perceive the petrol market in Singapore as competitive.

Do you think the petrol market in Singapore is competitive? (Q30)

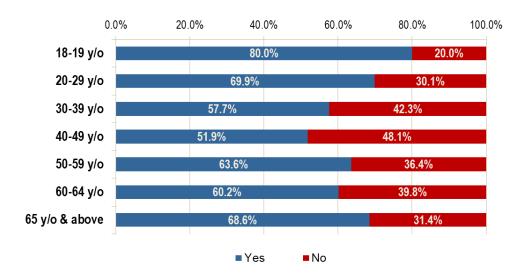


Figure 8.1.3: Perception on competitiveness of petrol market – by age group N = 5, 136, 312, 318, 231, 93, 105

* Sample size consists of all respondents

Perceptions on competitiveness of the petrol market in Singapore were different for each educational level group (p < 0.05). Generally, the higher one's educational qualification, the less likely that he/ she will perceive the petrol market in Singapore as competitive.

Do you think the petrol market in Singapore is competitive? (Q30)

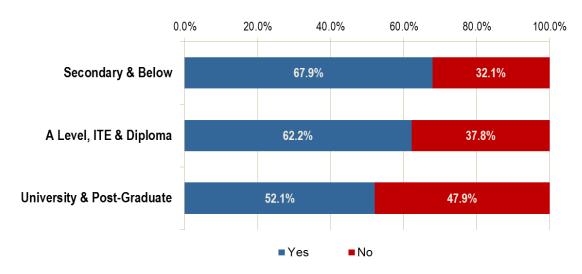


Figure 8.1.4: Perception on competitiveness of petrol market – by highest educational qualification

$$N = 321, 407, 468$$

^{*} Sample size consists of all respondents except for those who refused to disclose their highest educational qualification

First-time vehicle owners in the last twelve months were more likely to perceive the petrol market in Singapore as competitive than those who were not (p < 0.05).

Do you think the petrol market in Singapore is competitive? (Q30)

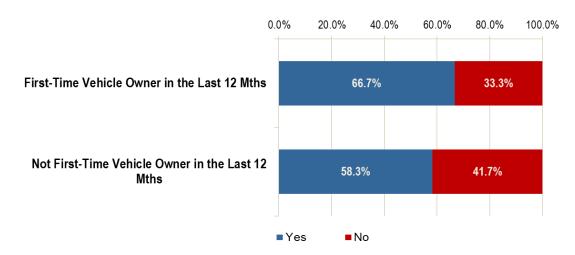


Figure 8.1.5: Perception on competitiveness of petrol market – by duration of vehicle ownership

N = 237, 963

* Sample size consists of all respondents

8.2 Monitoring of Petrol Prices Across Brands

Motorcycle owners were more likely to monitor petrol prices as compared to car owners (p < 0.05).

Do you monitor the prices of petrol across the petrol brands? (Q22)

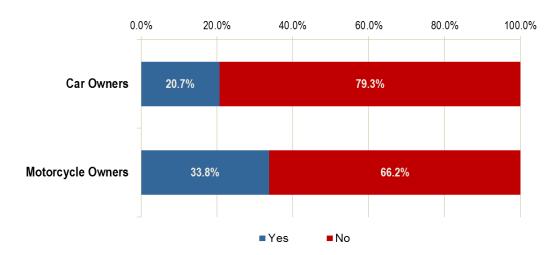


Figure 8.2.1: Monitoring of petrol prices – by vehicle type N = 1067, 133

^{*} Sample size consists of all respondents

^{*} Prices refer to prices with or without discounts

Males were more likely to monitor petrol prices as compared to females (p < 0.05).

Do you monitor the prices of petrol <u>across</u> the petrol brands? (Q22)

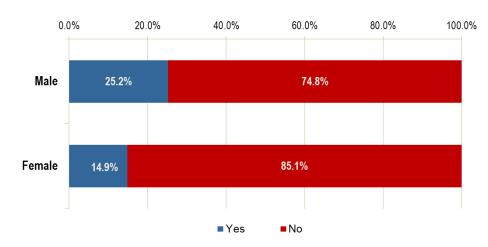


Figure 8.2.2: Monitoring of petrol prices – by gender N = 844, 356

^{*} Sample size consists of all respondents

^{*} Prices refer to prices with or without discounts

The behaviour of monitoring petrol prices was different across age groups (p < 0.05). Those between 20 and 29 years old were the most likely to monitor prices while those who were 60 years old and above were the least likely to monitor prices.

Do you monitor the prices of petrol across the petrol brands? (Q22)

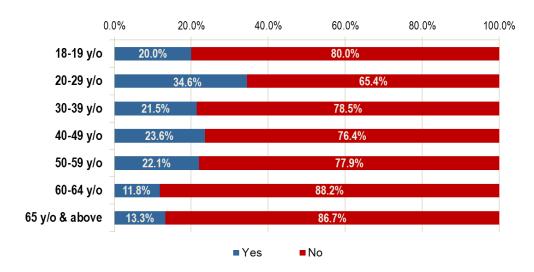


Figure 8.2.3: Monitoring of petrol prices – by age group N = 5, 136, 312, 318, 231, 93, 105

^{*} Sample size consists of all respondents

^{*} Prices refer to prices with or without discounts

The monitoring behaviour of petrol prices differed across household income (p < 0.05). In general, those with higher household income were less likely to monitor petrol prices.

Do you monitor the prices of petrol <u>across</u> the petrol brands? (Q22)

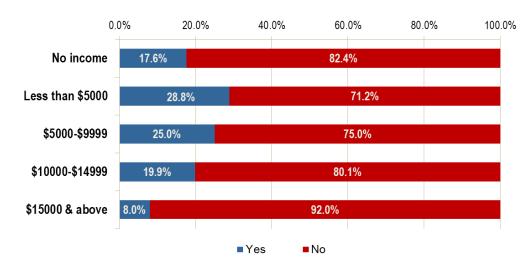


Figure 8.2.4: Monitoring of petrol prices – by household income N = 17, 222, 320, 191, 150

^{*} Sample size consists of all respondents who provided information on household income

* Prices refer to prices with or without discounts

Monitoring behaviour of petrol prices was different across house types (p < 0.05). On the whole, those who stayed in higher-priced house types were less likely to monitor petrol prices.

Do you monitor the prices of petrol across the petrol brands? (Q22)

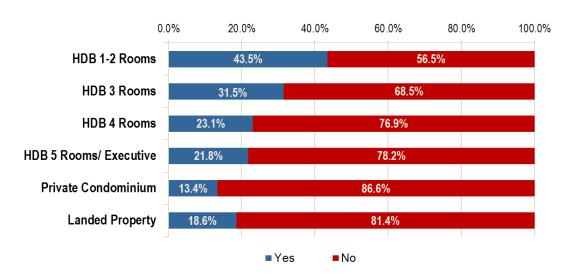


Figure 8.2.5: Monitoring of petrol prices – by house type N = 23, 111, 342, 431, 134, 156

^{*} Sample size consists of all respondents except for those who stayed in shop house and studio apartment

^{*} Prices refer to prices with or without discounts

8.3 Usage of Petrol Discounts and Rebates

Car owners were more likely than motorcycle owners to make use of petrol discounts and rebates on a regular basis (p < 0.05).

Do you make use of <u>petrol</u> discounts and rebates on a regular basis? (Q26)

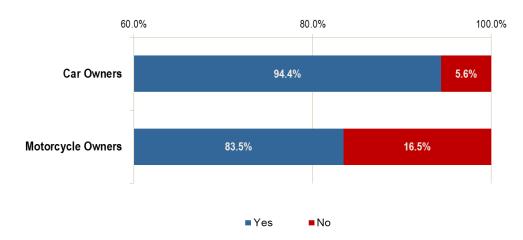


Figure 8.3.1: Usage of petrol discounts and rebates – by vehicle type N = 1067, 133* Sample size consists of all respondents

68

Usage patterns of petrol discounts and rebates were different across house types (p < 0.05). Those who stayed in 1 or 2 rooms HDB flats were the least likely to make use petrol discounts and rebates as compared to those who stayed in other house types.

Do you make use of <u>petrol</u> discounts and rebates on a regular basis? (Q26)

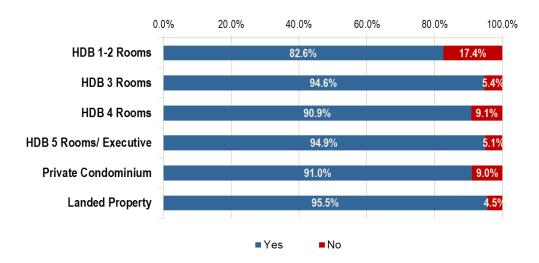


Figure 8.3.2: Usage of petrol discounts and rebates – by house type N = 23, 111, 342, 431, 134, 156

^{*} Sample size consists of all respondents except for those who stayed in shop house and studio apartment

9. Conclusion

Considerations for Purchasing Petrol Brand

The four petrol brands covered in the survey were Esso, Shell, SPC and Caltex. The top reasons respondents gave for their most purchased petrol brand were similar, such as the convenience of station locations, attractiveness of credit/ debit card promotions, attractiveness of brand loyalty programmes and good fuel efficiency/ mileage.

A majority of respondents were satisfied with their most purchased petrol brand. There were no significant differences in satisfaction between the different brands.

Switching in Relation to Petrol Companies and Grades

Slightly more than half the respondents did not switch between petrol brands over the last five years, whereas those who switched between brands have generally used one other brand.

The top reasons for not switching between brands were the convenience of station locations, satisfaction with current credit/ debit card promotions and loyalty programmes, accessibility of the brand's petrol stations across the country and protection of the vehicle's engine. On the other hand, the top reasons for switching between brands were greater convenience of station locations, more attractive credit/ debit card promotions, lower petrol prices, wider network of stations and better fuel efficiency/ mileage.

Those who did not switch between brands were significantly more likely to be satisfied with their most purchased brand as compared those who switched between brands.

Almost three-quarters of respondents reported that they did not switch between grades in the past five years; those who switched between grades usually used one other grade.

There were no significant differences in satisfaction with most purchased grade between those who switched between grades and those who did not.

Degree of Competition Between Petrol Companies

Three-fifths of all respondents thought that the petrol market in Singapore was competitive.

Those who thought that the petrol market was not competitive suggested increasing competition by lowering fuel taxes, increasing government regulation of petrol prices, allowing more brands to enter the petrol market, increasing the promotions by petrol companies and having greater flexibility to allow petrol companies to make price adjustments.

Level of General Awareness on Petrol Prices and Promotions

Only one-fifth of respondents monitored the prices of petrol across brands.

For those who monitored prices, two-thirds of them cited wanting to get the best possible deal as their reason for doing so. They generally monitored prices through displays at the petrol stations.

For the rest who did not monitor prices, the main reasons they mentioned were minor fluctuations in petrol prices, insignificant savings due to similarity of petrol prices between brands and the lack of time to monitor prices.

More than 9 in 10 respondents used petrol discounts and rebates on a regular basis. Loyalty programmes of petrol companies and credit/ debit card discounts and rebates were the more popular forms of promotions they used. About two-thirds enjoyed discounts of between 11% and 20%; the average discount enjoyed is 14.9%.

Besides using credit/ debit cards to enjoy discounts and rebates, respondents also cited the ability to accumulate reward points and cashless payment as reasons for choosing to use credit/ debit cards when paying for petrol purchases.

Appendix A: Survey Questionnaire

PETROL PURCHASE AND CONSUMPTION

"Good morning/afternoon/evening, I am,	an interviewer from Forbes Research Pte Ltd,
an independent market research company. We are currently	conducting a survey on motorists' perception
and behaviour towards petrol purchase and consumption. We v	vould appreciate it if you could spare about 15
minutes to answer some questions. Please be assured that yo	our response will be kept confidential and you
will not be identified. Thank you."	

SCREENING QUESTIONS

S1. Do you own a <u>petrol-run</u> vehicle for <u>personal use</u> ? If yes, how many? [MR]	
Personal use: Vehicle is used for own private or family use; not for commercial	purposes

1.	Yes, <u>car,</u> please indicate how many:	[Proceed to S2]
2.	Yes, motorcycle, please indicate how many:	[Proceed to S2]
3.	No	[Thank respondent & end survey]

Note to interviewer: If respondent indicates that he/ she owns >1 vehicle, ask respondent to continue the next questions using the vehicle he/ she use most frequently (i.e. pumps the most petrol).

S2. Do you make decision on petrol purchases and also pay for them? [SR]

- 1. Yes [Proceed to S3]
- 2. No [Thank respondent & end survey]

S3. Approximately how much do you spend on petrol every month after discounts? [SR]

1.	Less than \$60	[Thank respondent & end survey]
2.	\$60 to \$99	[Proceed to Q1]
3.	\$100 to \$149	[Proceed to Q1]
4.	\$150 to \$199	[Proceed to Q1]
5.	\$200 to \$249	[Proceed to Q1]
6.	\$250 to \$299	[Proceed to Q1]
7.	\$300 to \$349	[Proceed to Q1]
8.	\$350 to \$399	[Proceed to Q1]
9.	\$400 to \$449	[Proceed to Q1]
10.	\$450 to \$499	[Proceed to Q1]
11.	\$500 & above	[Proceed to Q1]

SECTION A: BRAND AND GRADE PREFERENCE

Note to interviewer: If respondent owns >1 vehicle, remind respondent to continue the survey using the vehicle he/ she use most frequently (i.e. pumps the most petrol).

- 1. In the last five years, which petrol <u>brands</u> have you purchased petrol from for this vehicle? [MR; Flash Showcard A]
- 2. Which brand did you purchase the most petrol from? [SR]

Petrol Brands	1. Purchased	2. Most Purchased
Caltex		
Esso		
Shell		
SPC		

3. Why do you choose to purchase petrol from <most purchased petrol brand in Q2> the most? [Unprompted MR]

Note to interviewer: After respondents provided some reasons, probe respondents for more reasons by asking "Any other reasons?" until they have no more.

4. Are there any other reasons for choosing to purchase petrol from <most purchased petrol brand in Q2> the most? [Prompted MR; Flash Showcard B]

Note to interviewer: Record responses in Q3 in this question.

5. Please rank the <u>top 5</u> reasons for choosing to purchase the most petrol from <most purchased petrol brand in Q2>. (1=most important; 5=least important).

Note to interviewer: To show respondents all the unprompted and prompted reasons they have selected (see Q4 selected reasons), and they will do ranking for these selected reasons only.

		3. All Reasons [Unprompted]	4. All Reasons [Prompted]	5. Rank [Up to 5 Reasons]
a.	Low listed petrol prices			
b.	Attractive credit/ debit card promotions			
C.	Attractive brand loyalty programmes			
d.	Attractive free gifts			
e.	Good fuel efficiency/ mileage			
f.	High power/ good pickup			
g.	Convenient location of petrol stations (e.g. near house, near workplace)			
h.	Wide network of stations			
i.	Good brand reputation			
j.	Good customer service			
k.	Availability of facilities/ services at the stations (e.g. ATMs, convenience stores, car wash)			
I.	Others, please specify:			

6. On a scale of 1 to 5 (1=very dissatisfied; 5=very satisfied), how satisfied are you with the petrol from <most purchased petrol brand in Q2>? [SR; Flash Showcard C]

	1 (VD)	2	3	4	5 (VS)
Overall Satisfaction					

[If purchased only one brand as indicated in Q1, proceed with Q7 to Q9]

7.	I did not s	switch to	another	petrol brar	nd because	 	[Unpr	ompted
	MR]			-				_

Note to interviewer: After respondents provided some reasons, probe respondents for more reasons by asking "Any other reasons?" until they have no more.

8. Are there any other reasons why you did not switch to another petrol brand? [Prompted MR; Flash Showcard D]

Note to interviewer: Record responses in Q7 in this question.

9. Please rank the <u>top 5</u> reasons why you did not switch to another petrol brand (1=most important; 5=least important).

Note to interviewer: To show respondents all the unprompted and prompted reasons they have selected (see Q8 selected reasons), and they will do ranking for these selected reasons only.

		7. All Reasons [Unprompted]	8. All Reasons [Prompted]	9. Rank [Up to 5 Reasons]
a.	I am satisfied with the current credit/ debit card promotions			
b.	I am satisfied with the current loyalty programmes			
C.	The location(s) of petrol station(s) is/ are convenient for me (e.g. near house, near workplace)			
d.	The petrol brand has wide network and thus easily accessible			
e.	For the same grade, different brands have the same price after taking into account all the discounts offered			
f.	For the same grade, different brands have the same fuel efficiency/ mileage			
g.	For the same grade, different brands have the same power/ pickup			
h.	Switching brands is not good for the engine			
i.	Others, please specify:			

[Proceed to Q13]

[If	purchased	more than	one brand a	s indicated in	Q1, procee	d with Q10 to	Q12]

10.	I have switched to another petrol brand because the brand(s) offer(s)	
	[Unprompted MR]	

Note to interviewer: After respondents provided some reasons, probe respondents for more reasons by asking "Any other reasons?" until they have no more.

11. Are there any other reasons why you have switched to other petrol brand(s)? [Prompted MR; Flash Showcard E]

Note to interviewer: Record responses in Q10 in this question.

12. Please rank the <u>top 5</u> reasons for switching to other petrol brand(s) (1=most important; 5=least important).

Note to interviewer: To show respondents all the unprompted and prompted reasons they have selected (see Q11 selected reasons), and they will do ranking for these selected reasons only.

		10. All Reasons [Unprompted]	11. All Reasons [Prompted]	12. Rank [Up to 5 Reasons]
a.	Lower listed petrol prices			
b.	More attractive credit/ debit card promotions			
C.	More attractive brand loyalty programmes			
d.	More attractive free gifts			
e.	Better fuel efficiency/ mileage			
f.	More power/ better pickup			
g.	More convenient location of petrol stations (e.g. near house, near workplace)			
h.	Wider network of stations			
i.	Better brand reputation			
j.	Better customer service			
k.	Others, please specify:			

- 13. In the last five years, which of the following petrol <u>grades</u> have you purchased? [MR; Flash Showcard F]
- 14. Which grade did you purchase the most? [SR]

Petrol Grades	13. Purchased	14. Most Purchased
Caltex		
Regular 92 with Techron		
Premium 95 with Techron		
Platinum 98 with Techron		
ESSO		
Synergy Regular (Synergy 2000)		
Synergy Extra (Synergy 5000)		
Synergy Supreme ⁺ (Synergy 8000)		
Shell		
Shell FuelSave 95		
Shell FuelSave 98		
Shell V-Power Nitro+		
SPC		
Levo92		
Levo95		
Levo98		

15. What do you consider when choosing between petrol grades? [Unprompted MR]

Note to interviewer: After respondents provided some considerations, probe respondents for more reasons by asking "Any other reasons?" until they have no more.

		15. All Considerations [Unprompted]
a.	Low listed petrol prices	
b.	Good fuel efficiency/ mileage	
C.	High power/ good pickup	
d.	Specified/ recommended grade by car manufacturer	
e.	Age of car	
f.	Unique features of petrol (e.g. special additives, cleaning technology)	
g.	Others, please specify:	

16. On a scale of 1 to 5 (1=very dissatisfied; 5=very satisfied), how satisfied are you with the <most purchased petrol grade in Q14>? [Flash Showcard C]

	1 (VD)	2	3	4	5 (VS)
Overall Satisfaction [SR]					

SECTION B: PERCEPTIONS AND ATTITUDES

On a scale of 1 to 5 (1=strongly disagree; 5=strongly agree), to what extent do you agree with the following statements. [Flash Showcard G; SR]

Statements	1 (SD)	2	3	4	5 (SA)	Don't Know
17. For the same grade, all petrol brands have the same fuel efficiency/ mileage.						
18. For the same grade, all petrol brands have the same power/ pickup.						
19. For the same grade, all petrol brands have the same prices after taking into account all the discounts offered.						
20. <u>Different petrol grades</u> have the same fuel efficiency/ mileage.						
21. <u>Different petrol grades</u> have the same power/ pickup.						

22. Do you monitor the prices of petrol across the petrol brands? [SR]

Note to interviewer: With or without discounts; of the same or across petrol grades

- 1. Yes [Proceed to Q23]
- 2. No [Proceed to Q25]

[If Q22 = Yes]

23. Why do you monitor the prices of petrol across the petrol brands? [MR]

- 1. Price is the most important factor to choose between petrol brands
- 2. To get the best possible deal
- 3. It is easy to monitor the prices
- 4. Others, please specify: _____

24. How do you usually monitor the prices of petrol across the petrol brands? [MR]

- 1. Prices displayed at the petrol stations
- 2. Petrol companies' websites
- 3. Comparison websites (e.g. www.moneysmart.sg)
- 4. Mobile/ tablet applications
- 5. Word-of-mouth (e.g. family and friends)
- 6. Others, please specify:

[Proceed to Q26]

[If Q22 = No]

25. Why do you not monitor the prices of petrol across the petrol brands? [MR]

- 1. The petrol prices do not change much
- 2. The petrol prices between brands are generally similar/ Do not save much money by switching
- 3. It is difficult to compare the prices after taking into account all the promotions offered (e.g. discounts, rebates, loyalty points and gifts)
- 4. I do not know where to find the prices
- 5. No time/ It is time-consuming to monitor the prices
- 6. I choose petrol based on branding and quality rather than price
- 7. Others, please specify: _____

26.	Do	you make	use of petro	<u>l</u> discounts	and rebates	on a regular	basis? [SR]
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Note to interviewer: Discounts on petrol purchases only.

- 1. Yes [Proceed to Q27]
- 2. No [Proceed to Q30]

[If Q26 = Yes]

27. Which types of discounts and rebates do you make use of? [Unprompted MR]

Note to interviewer: After respondents provided some considerations, probe respondents for more reasons by asking "Any other reasons?" until they have no more.

		27. All Types Used [Unprompted]
a. Credit/ debit card	discounts	
b. Credit/ debit card	rebate/ cashback	
c. Loyalty programr	ne of petrol company	
d. Promotions by pa companies	artner organizations other than credit/ debit card	
e. Others, please sp	ecify:	

28. Approximately how much discounts are you getting on your petrol purchases? [Ope

%				
/(

[If Q27a or Q27b = Used]

29. Why do you pay for petrol purchases using credit/ debit card(s)? [Unprompted MR]

Note to interviewer: After respondents provided some considerations, probe respondents for more reasons by asking "Any other reasons?" until they have no more.

		29. All Reasons [Unprompted]
a.	For the convenience of not carrying and paying in cash	
b.	To maintain a certain status and image	
C.	To accumulate reward points on the card(s)	
d.	To enjoy discounts and rebates offered by the card(s) on the petrol purchase	
e.	Others, please specify:	

30. Do you think the petrol market in Singapore is competitive? [SR]

- 1. Yes [Proceed to D1]
- 2. No [Proceed to Q31]

[If Q30 = 21

31. What do you think can be changed to make the petrol market in Singapore more competitive? [Open-ended]

DEMOGRAPHICS

D1. Residential Status

- 1. Singaporean
- 2. Permanent resident
- 3. Others, please specify pass type (e.g. long-term, employment pass, work permit):

D2. Gender

- 1. Male
- 2. Female

D3. Race

- 1. Chinese
- 2. Malay
- 3. Indian
- 4. Others, please specify: _____

D4. Age Group

- 1. 18-19 years old
- 2. 20-24 years old
- 3. 25-29 years old
- 4. 30-34 years old
- 5. 35-39 years old
- 6. 40-44 years old
- 7. 45-49 years old
- 8. 50-54 years old
- 9. 55-59 years old
- 10. 60-64 years old
- 11. 65 years old & above

D5. Highest Educational Qualification

- 1. No formal qualification
- 2. Incomplete primary
- 3. Primary (PSLE)
- 4. Incomplete secondary
- 5. Secondary (GCE 'N' & 'O' Level)
- 6. GCE 'A' Level
- 7. ITE
- 8. Diploma (Polytechnic, Mgmt/ Private Diploma)
- 9. University (Degree)
- 10. Postgraduate (Master's, PhD)
- 11. Others, please specify:
- 12. Refuse to disclose

D6. Monthly Household Income

- 1. No income
- 2. Less than S\$1,000
- 3. S\$1,000 S\$1,999
- 4. S\$2,000 S\$2,999
- 5. S\$3,000 S\$3,999
- 6. S\$4,000 S\$4,999
- 7. S\$5,000 S\$5,999
- 8. S\$6,000 S\$6,999
- 9. S\$7,000 S\$7,999
- 10. S\$8,000 S\$8,999
- 11. S\$9,000 S\$9,999
- 12. S\$10,000 S\$10,999
- 13. S\$11,000 S\$11,999
- 14. S\$12,000 S\$12,999
- 15. S\$13,000 S\$13,999
- 16. S\$14,000 S\$14,999
- 17. S\$15,000 & above
- 18. Don't know
- 19. Refuse to disclose

D7. Occupation

- 1. Legislator, senior official and manager
- 2. Professional (doctor, lawyer, dentist, etc)
- 3. Associate professional and technician
- 4. Clerical support worker
- 5. Service and sales worker
- 6. Craftsman and related trades worker
- 7. Plant and machine operator and assembler
- 8. Cleaner, laborer and related worker
- 9. Self-employed
- 10. Student
- 11. Housewife
- 12. NSF/ Regular
- 13. Retiree
- 14. Unemployed
- 15. Others, please specify: _____
- 16. Refuse to disclose

D8. House Type

- 1. HDB 1-2 rooms
- 2. HDB 3 rooms
- 3. HDB 4 rooms
- 4. HDB 5 or more rooms/ Executive
- 5. Private Condominium
- 6. Landed Property
- 7. Others, please specify: _____

D9. Did you become a first-time vehicle owner within the last 12 months?

- 1. Yes
- 2. No

D10. Please provide some details of your vehicle.

Note to interviewer: Record only vehicle considered for the main survey.

1.	Car CC:
2.	Make/ Model:
3	Age of Vehicle:

END OF SURVEY