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GST Rate and Input Tax Credit Scenarios in An Asset-Light Vehicle Rental Business

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Abstract : *A case study of the effect of Goods and Services Tax (GST) and input tax credit (ITC) for an asset-light business-to-business (B2B) vehicle hire company in India. This case study utilised financial data from the proprietorship company SS Global Services. It had total income of ₹15,04,680 and hire revenue of ₹7,98,916 in the year ended 2024/25. An exploratory single case study was undertaken. Data were analysed from previous years; tax calculations were performed and a short survey of employees was used. Although this yielded qualitative data regarding staff's perceptions of the accuracy of their invoices and expenditure oversight, it did not provide quantitative data about the company's GST and ITC compliance.*

Previous year financial data has been analysed and it can be seen how the various GST rates could affect the case study company. These were purely for analytical purposes and there were no GST returns or GSTR-2B reconciliations, nor were there any supplier or client tax invoices, supplier ledgers or client payment schedules. Consequently, it was not possible to precisely calculate net GST liability, assess whether a reverse charge would arise or to analyse any relationship between a company's GST and performance.

Vehicle hire accounted for around 53.1% of total income. Thus, the definition, rate and whether ITC can be claimed for vehicle hire is extremely significant for the asset-light company. This paper has produced a decision-making framework. It requires analysis of the nature of both the supplier and client, the type of supply, whether fuel is provided and the GST rate that is charged. Furthermore, analysis is needed into whether ITC can be claimed and also when cash flows will take place. These findings are relevant to the case study only..

Keywords: Goods and Services Tax, input tax credit, vehicle hire, asset light business model, GST rates, working capital, India

I. INTRODUCTION

1.1 GST and services

India follows a 'place of consumption' value-added tax regime. Sellers charge output tax and then claim input tax credits for those goods and services that are eligible for them. Registered companies may claim tax credits for tax that has been legitimately paid on their business inputs [1-4]. Overall, the value of this will depend on the type of supply, the GST rate, the eligibility of the client and the associated evidence.

An organisation's GST and economic costs can be affected by GST. Economic costs encompass irrecoverable input tax, untransferable tax and the financial cost. Although the tax paid is the sum that is actually sent to the government following claims for input tax credits, these other costs also contribute to the economic cost.

1.2 B2B vehicle hire – asset light business model

Vehicle hire companies deliver services to corporate bodies. Companies may either maintain their own vehicle fleet or obtain vehicles and related services from external fleet owners. Consequently, businesses depend greatly upon the margin between client charges and supplier payments. Furthermore, they will depend on business overheads such as

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organisation and administration. Suppliers are also an integral part of the business as many functions are sub-contracted out [30, 83].

From the information for SS Global Services for 2024/25, it is evident that it has had a gross income of ₹15,04,680. Hire income was ₹7,98,916, which represents around 53.10% of the gross income. Therefore, it can be seen that a high cost for this company is for the services that it procures from suppliers. However, there is uncertainty regarding how each supplier invoice will be defined, whether fuel has been taken into account and who will be liable to pay the tax.

1.3 Problem definition

The primary aspect of this problem is to investigate how an asset-light vehicle hire business may analyse varying GST rates and assess the implications of ITC. As previously highlighted, the main expenditure for this company is for vehicle hire from suppliers. Consequently, analysing only the 5% and 18% GST rates will not yield sufficient data. Further, the outcome can depend on a variety of variables such as the nature of the supply, whether the vehicle is hired along with the business and whether fuel is provided. Also, it is key whether the supplier and client are both body corporates and the GST rate that has been charged. Likewise, it is important to ascertain whether input tax can be claimed.

Unfortunately, there is no information regarding GST returns, GSTR-2B, supplier tax invoices, purchase ledger or client billing and collections. Thus, it has not been possible to analyse the true effectiveness of GST compliance, the actual ITC that has been obtained and the real net GST liability. However, a framework has been formulated and calculations have been generated from the financial statement data to facilitate this analysis.

1.4 Research gap and contribution

Previous work has investigated aspects including the VAT/GST invoicing and credit process, the compliance costs for small businesses and the influence of working capital management on profitability [1, 15, 16, 22-24]. The principal input for a small, asset-light, B2B car hire company is likely to be another car hire or conveyancing service. Consequently, alongside analysing the supply and client characteristics, it is also essential to analyse the tax consequences of this input.

Whilst this paper does not seek to establish a broad link between GST compliance and financial performance, a decision-making framework has been developed which will enable some understanding of the factual, legal and hypothetical data, together with cash flow details to inform a choice of GST rate.

1.5 Objectives

- To analyse the financial profile of SS Global Services in 2024/25 and particularly the car hire revenue.
- To recognise the transactional information that is required to define the nature of the car hire supplies and assess any tax and ITC ramifications.
- To devise hypothetical scenarios for differing GST rates and ITC entitlements, using the income and car hire revenue data.
- To construct a monthly cash flow model showing the timing of tax payments, the loss of ITC and when client and supplier payments occur.
- To identify the documentation that should be retained and offer some tentative guidance for management.

1.6 Research questions

- What transactional information is required to assess how the car hire services that are supplied and acquired by a low-asset B2B company will be taxed?
- How do differing output tax rates and supplier tax provisions influence hypothetical tax outcomes?
- What additional information will be required to evaluate the economic and cash flow consequences of each alternative?

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- What documentation should a low-asset car hire company retain?

II. INDUSTRY AND REGULATORY CONTEXT

2.1 Distinguishing between conveyancing and vehicle hire

According to CBIC Circular No. 177/09/2022-GST, conveyancing (code 9964) and vehicle hire/motor vehicle rental (code 9966) are distinct categories. There may be a situation whereby a body corporate is supplied with a vehicle and allowed to use it for a set period of time. This will then constitute a vehicle hire. Conversely, if a client acquires conveyancing for a particular trip, it could be argued that this should fall under the conveyancing category. Factors such as the nature of the contract, the duty sheet, and control and operation of the vehicle will all be relevant [CBIC, 2022].

Whilst the case file does highlight the provision of services to corporate bodies, we do not have access to the client contract, duty sheet or complete supplier agreement. Consequently, we will need to confirm the appropriate way to define transactions.

2.2 Rates and date

Previously, the rate for motor vehicle hire for conveyancing purposes, including fuel, was split into two groups. The first group was for a reduced rate, which also allowed for restricted ITC entitlement. The second group was for an increased rate and greater ITC availability. The 56 th GST council rate modifications became effective on 22 nd September 2025. According to the government summary, the rate for vehicle hire for conveyancing will be either 5% with the same line of business input service credit or 18% with ITC entitlement [PIB, 2025]. We must ensure that we are analysing data according to the correct section of the notification for the supply date.

As the financial statements relate to the year ending 2024/25, this is prior to the new rates becoming effective from 22 nd September 2025. The forthcoming scenarios are therefore hypothetical and reflect situations that would exist post September 2025. Moreover, it is also important to recognise that alterations may be introduced in future.

2.3 ITC and same line of business

At the reduced rate, there will not be full ITC entitlement. Limited ITC will be permitted on both your inputs and input services. Nevertheless, within the same line of business there is a defined quantity of ITC that can be claimed for input services. CBIC have confirmed that conveyancing and motor vehicle hire with an operator constitute the same line of business. In contrast, motor vehicle leasing without an operator will not be classed as such [CBIC, 2023]. Equally, if an invoice does not specify that it is for vehicle hire, we cannot presumptuously infer that it constitutes an input service from the same line of business. Again, supply and supplier agreement data will be important in this instance.

Despite the increased rate, automatic ITC entitlement will not be granted. Clients must adhere to general ITC requirements. These include having proper tax documentation, receiving the service, the supplier must report the service and statutory conditions should also be fulfilled. Furthermore, the inward supply cannot be disallowed or non-entitled [32]. Even if there is a figure for tax shown in your expenditure estimate, this does not necessarily mean that ITC can be claimed.

2.4 Reverse charge (conditional)

There are several considerations in ascertaining whether a reverse charge should be incurred. These include: the nature of the supply; whether fuel is included; the legal structure of both the supplier and client and whether or not tax was charged (as detailed in the relevant notification). Additionally, there is a difference between renting a vehicle for a defined period and offering conveyancing for a specific trip as indicated in CBIC Circular No. 177/09/2022-GST [CBIC, 2022]. Likewise, the reverse charge notification has been amended and it is crucial that the correct version is referenced for the supply date.

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Below is a matrix which can be used as an aid for conducting due diligence. Unfortunately, the documentation does not indicate the legal status of all suppliers and clients. Thus it is not feasible to populate the matrix using the information contained within the case study due to the absence of contracts and invoices.

Check at transaction level	Evidence required	Why it matters
Supplier constitution	Vendor GST registration and constitution documents	The reverse-charge entry differentiates suppliers by legal status.
Recipient constitution	Customer GSTIN and legal constitution	The relevant entry may be restricted to a body-corporate recipient.
Nature of service	Agreement, duty sheet, vehicle deployment and control terms	Distinguishes renting of a vehicle from passenger transport for a journey.
Fuel inclusion	Contract, invoice and commercial price build-up	The relevant rate/RCM entry may require fuel cost to be included.
Tax charged and rate	Vendor tax invoice and applicable notification for supply date	Determines whether the supplier has charged the rate specified in the forward-charge exception.
Credit eligibility	Invoice, GSTR-2B, receipt evidence, payment record and ITC review	Determines whether tax paid can be claimed as ITC.
Time period	Invoice date and notification version effective on that date	Prevents applying later amendments to earlier supplies.

2.5 Regulatory decision matrix for the case study

Possible transaction pattern	Initial classification question	Tax/credit question	Current evidence status
Case firm supplies vehicle with driver for a fixed monthly period	Is the vehicle placed at the corporate client's disposal, or is it passenger transport for specified trips?	Check Heading 9966 vs 9964 and applicable rate entry.	Contract and duty sheets not available in the supplied case file.
Case firm procures vehicle service from a fleet vendor	Does the vendor supply renting with operator, passenger transport, or vehicle without operator?	Only qualifying same-line input services may fall within the concessional credit permission; otherwise, credit restrictions apply.	Vendor agreements and invoices not available.
Non-body-corporate vendor supplies vehicle rental to a body corporate	Does the service meet the fuel-included and renting conditions, and what rate was charged?	Test the reverse-charge notification as in force on the supply date.	Supplier/customer status and tax invoices not verified.
Vendor supplies vehicle without operator	Is the supply leasing/renting without operator under the relevant classification?	Do not automatically treat as same-line input service under the concessional option.	Not established from case records.

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Details have been sourced from CBIC Circulars No. 177/09/2022-GST (on rental and passenger conveyance) and Circular No. 206/18/2023-GST (guidance on like-kind or parallel service input), alongside relevant notifications on rates and on reverse charge (amended). These should be reviewed by taxpayers, in compiled form, with their tax professional to assist in return completion and/or business-related matters. [CBIC Circular No.177/09/2022-GST, Circular No.206/18/2023-GST, Notifications 11/2017-CT(R) and 13/2017-CT(R) (amended)]

III. LITERATURE REVIEW

3.1 Invoice Credit

A credit note is an important element in relation to taxation. If appropriate, it can provide a method for input tax to be credited and so limit tax pyramiding [1-3]. Credit notes can also act as motivation for customers to ensure that their invoices are valid. Examination of secondary sources and studies relating to tax compliance has highlighted that credit note sequences can be used to support compliance. However, risk exists if suppliers do not accurately report information [18, 20].

3.2 Compliance costs

There are various costs that relate to compliance. Companies will incur costs for record keeping, classifying goods/services, software and expert guidance. As well as this, companies will experience additional costs in rectifying errors. Literature has suggested that rigid compliance procedures can in fact increase pressure on smaller companies [15, 16]. Furthermore, where a company operates with few physical assets and numerous suppliers, further effort may be needed to co-ordinate suppliers' compliance related activity.

3.3 Constraints on ITC

Constraints can exist so that not all input tax can be claimed. Consequently, the VAT/GST system can become non-neutral. This is based on the proportion of inputs for which ITC can be obtained, the tax rate and the degree to which a company can transfer these costs to customers [1, 2]. Within a vehicle rental supply chain, one of the biggest inputs is likely to be a service received from another vehicle rental company. Therefore, accurate classification of this is vital.

3.4 Working capital

Commonly, literature has shown that a company's cash conversion cycle can influence its performance [22-24]. Trade credit literature also demonstrates that differing payment terms can result in varying financial needs [37]. Under GST, companies may be required to pay output tax even though they have not yet received payment for goods or services from customers. Despite output tax being counterbalanced with reclaimable ITC, this situation could therefore result in a need for working capital. Factors such as invoicing, statutory payment deadlines, customer payment behaviour, supplier payment behaviour, access to trade credit and refund/redress, could all play a part in determining this.

3.5 Summary

This literature is highly relevant for analysing the potential interplay between credit note acceptability, compliance and working capital. Unfortunately, however, it is not possible to test this against case data. Although this will inform the development of research questions and decision model, this literature does not establish that GST compliance will demonstrably affect profitability.

IV. ANALYTICAL FRAMEWORK AND RESEARCH QUESTIONS

4.1 Analysis

Four analytical elements exist. Firstly, classify both outputs and inputs. Secondly, determine the tax rate and recognise whether the charge is forward or reverse. Thirdly, assess whether input tax can be claimed and quantify un-reclaimable input tax. Finally, ascertain when tax is due and analyse this in relation to customer and supplier payment dates. This will enable a business to evaluate the volume of tax that must be paid and the economic cost incurred by each alternative.

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Supply classification → Tax rate and charge type → Reclaimable and non-reclaimable input tax → Monthly analysis of Cash Flow and economic cost

4.2 Research Questions

Whilst no hypotheses are being developed, the output data is not independent as it is influenced by the assumptions and numerical data within the study. Research will be conducted in accordance with the 4 research questions identified in section 1.5. Reference will not be made to acceptance or rejection of hypotheses.

4.3 Glossary

- Output tax – tax levied on the taxable consideration of goods and/or services supplied.
- Tax Paid – output tax less allowable Input Tax Credits and other modifications. This recognises how the forward or reverse charge has been utilised to meet a company's tax obligation.
- Non-reclaimable input tax – input tax which cannot be recovered because of a limitation, for example a block credit, absence of documentation or other legal conditions.
- Economic cost – un-reclaimable tax plus any economic cost which cannot be transferred to customers. This also includes time related costs.
- Cash Flow – The funds necessary to meet the tax payment obligations on particular dates. This incorporates income received, payments to suppliers, credits and initial cash. Note that for a limited period, this will differ to output tax on days for which billing occurs.

V. RESEARCH METHODOLOGY

5.1 Research approach

An in-depth case study has been adopted for SS Global Services. This is appropriate for developing an in-depth decision-making structure but does not permit statistical extrapolation to the whole vehicle rental sector [25, 26, 28, 29]. Quantitative research comprised ratio data together with GST working examples. Additionally, a limited number of staff undertook questionnaires as part of the descriptive research.

5.2 Case and sampling

SS Global Services was deliberately chosen because the available financial and background information suggested that it was a vehicle servicing company which charged high levels of hire. A total of 20 staff responded to the questionnaire (draft research record). This represented a convenience sample. As it was not a replication sample, it was not statistically representative for the industry as a whole.

5.3 Data sources and evidence boundaries

Evidence category	Available information used	Not available / not verified
Historical financial data	FY 2024–25 profit and loss account and balance sheet figures reproduced in this paper.	Underlying ledgers and transaction-level reconciliation were not supplied for independent audit.
Income-tax information	Income-tax computation for AY 2025–26 as described in the draft.	Not used to infer GST compliance.
Staff questionnaire	Draft reports 20 participants; mean scores of 3.85 for billing accuracy and 3.75 for expense monitoring.	Item-wise valid response counts and raw response file were not supplied for re-tabulation.
GST records	No verified GST data used.	GSTR-1, GSTR-3B, GSTR-2B, tax invoices, vendor purchase ledger, ITC register, challans and GST payment records.

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Commercial records	Reported gross income and hire charges.	Contracts, vendor-wise tax rates, fuel inclusion, customer-wise tax treatment, collection dates and vendor payment dates.

Because GST records were unavailable, no actual GST liability, actual ITC claim, actual reverse-charge payment or actual GST funding gap is reported. The scenarios are illustrative and should not be used for tax return preparation.

5.4 Financial measures

Measure	Formula	Interpretation
Hire-charge ratio	Hire charges ÷ gross income	Share of reported income represented by vehicle hire charges.
Vendor spread	Gross income − hire charges	Difference before other expenses; not the same as net profit.
Vendor spread ratio	Vendor spread ÷ gross income	Share remaining after reported hire charges.
Net profit margin	Net profit ÷ gross income	Reported accounting margin for FY 2024–25.
Cash-to-assets ratio	Cash and bank ÷ total assets	Share of reported assets held as cash/bank at year-end.

5.5 Scenario

Various assumptions have been drawn from real data for the 2024/25 year. For instance, it has been assumed that output tax is 5% (rather than 18%) and that vendors charge 5% and 18% input tax. Not all vendors have been assumed to qualify for input tax credits. Further, there remains uncertainty surrounding: line item limitation; whether fuel is included in costs; the legality of vendors; the correct tax rate; tax invoice provision; GSTR-2B and statutory ITC.
Previously, it had been assumed that 18% ITC applied to costs of rent, professional services, banking and print. However, as no information was given about the detail of invoices and the GST rate applicable to each, it cannot be assumed that these costs carry tax. No ITC will therefore be assumed for overhead expenditure.

5.6 Survey

Twenty individuals undertook the survey. An average rating of 3.85 was given for billing accuracy and 3.75 for cost control. There were no GST-related questions. Although this information is descriptive, it does not enable us to determine whether or not the company abided by GST legislation or utilised input tax credits. Furthermore, it does not demonstrate that the ratings were obtained on a suitable scale. As the initial data file was not accessible for further tabulation and information regarding the number of respondents for each survey question was not available, it would be favourable to cross-reference this data with the original survey so that its accuracy can be verified prior to publication.

5.7 Ethics

This research was undertaken on a voluntary and confidential basis. Company financial data was analysed for educational reasons. Prior to publicly publishing this research, it would be favourable to verify that permission had been granted to identify SS Global Services. In addition, it would be favourable to ensure that customer and vendor data and/or confidential business data had not been revealed.

VI. RESULTS AND SCENARIO ANALYSIS

6.1 Historical Financial Information (FY 2024-25)

The company achieved gross income of ₹15,04,680. Total expenditure was ₹9,19,045, meaning that net profit stood at ₹5,85,635. Vehicle hire costs formed an important part of the company's expenditure, amounting to ₹7,98,916. This

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represented 53.10% of gross income. Gross income less vehicle hire costs totalled ₹7,05,764. This reflects the margin on the vendor invoices and should not be described as contribution margin until all variable costs have been identified.

Item	Amount (₹)	Ratio/note
Gross income	15,04,680	100.00%
Vehicle hire charges	7,98,916	53.10% of gross income
Rent	72,000	4.79% of gross income
Depreciation	24,550	1.63% of gross income
Total expenses	9,19,045	61.08% of gross income
Net profit	5,85,635	38.92% of gross income
Total assets	4,43,600	100.00% of assets
Net fixed assets	84,157	18.97% of assets
Gold investment	3,45,612	77.91% of assets
Cash and bank balance	13,831	3.12% of assets

The calculations have been checked to ensure they are consistent. (15,04,680 minus 9,19,045 gives 5,85,635). However, there has been no check to ensure the breakdown of the costs has been correctly calculated. The cash and bank figure is not an average for the months; it is just the balance at the end of the year.

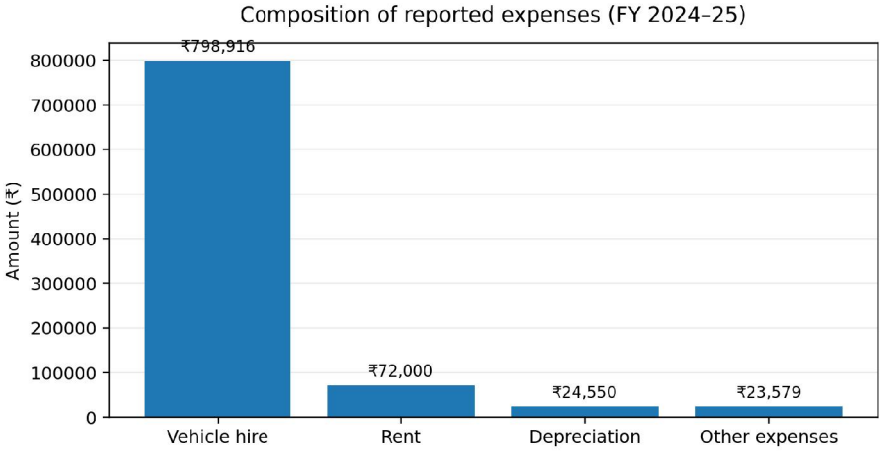


Figure 2. Composition of reported expenses, FY 2024–25.

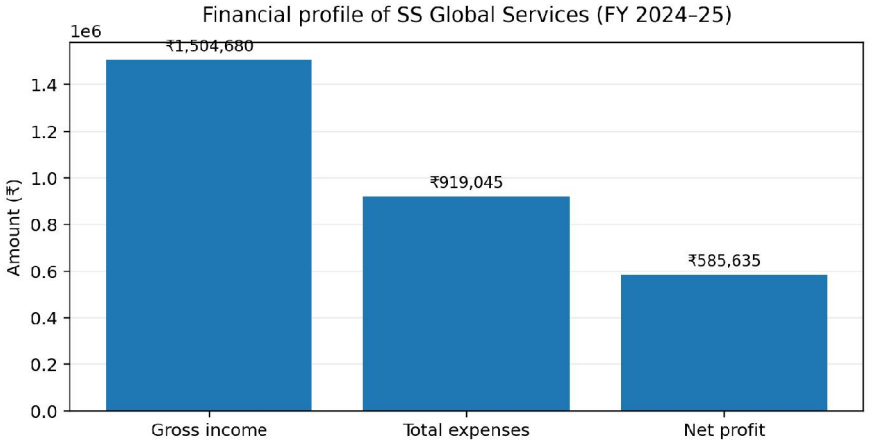


Figure 1. Financial profile of SS Global Services, FY 2024–25.

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6.2 Staff survey

The mean of the answers was 3.85 and 3.75, meaning that staff had generally positive perceptions. However, there was no access to the data file with the raw data and how many valid responses there were for each question. Therefore, we need to note that these are descriptive means and need to be checked before submitting. We cannot make any inferences about how well they are complying with GST or how much ITC they could recover.

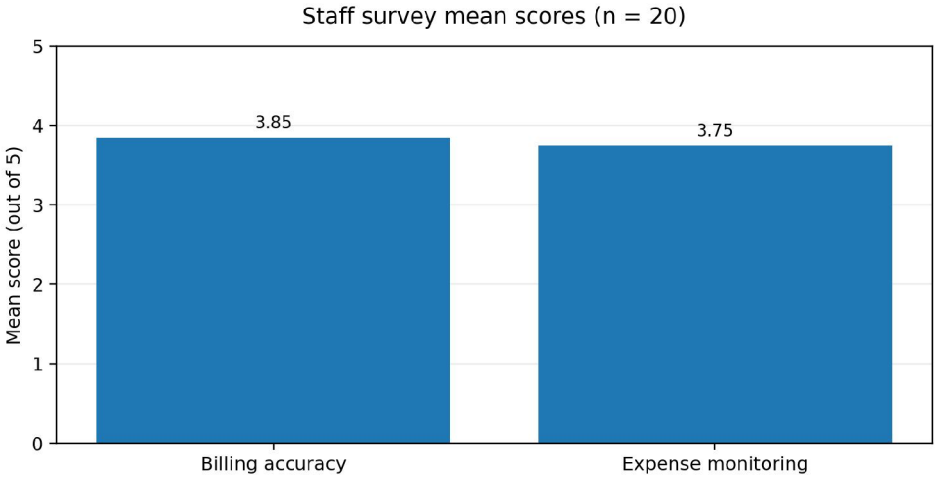


Figure 4. Staff surveys mean scores.

6.3 Supplier margin

This has been calculated by subtracting 7,98,916 from 15,04,680 to give 7,05,764. This represents 46.90% of gross turnover. Net profit is approximately 82.98% of this. At the end of the year, there is just 13,831 in the company bank account. However, this fails to demonstrate that they suffer from cash flow issues in relation to GST, as there was no information provided regarding when invoices were raised, received, suppliers paid and when GST was paid.

Gold has been invested in the sum of 3,45,612. Again, this is neither operational nor free cash. Further, the penalty rate for income tax has also not been analysed within the central part of the research as it is a separate taxation area and so cannot be used to assess their degree of GST compliance.

6.4 Illustration of GST rates

The calculations have been detailed in Table 6 so that they can be applied to the data provided. There has not been a calculation made for the final net GST due. Output tax has been determined by multiplying the rate by the gross turnover. This has been carried out solely for illustrative purposes and it has been assumed that the turnover figure does not include any GST. The supplier's input tax has been automatically calculated based upon the hire rate. However, this does not suggest that the supplier applied this rate or that the case firm is allowed to recover this value as ITC.

Illustrative calculation	5% output-rate case	18% output-rate case
Reported gross income used as assumed taxable value	₹15,04,680	₹15,04,680
Illustrative output tax	₹75,234	₹2,70,842
Reported vehicle hire charges used as assumed taxable input base	₹7,98,916	₹7,98,916
Illustrative vendor tax if vendor rate were 5%	₹39,946	₹39,946
Illustrative vendor tax if vendor rate were 18%	Not assumed in this column	₹1,43,805
Net GST payable/final ITC	Not calculated	Not calculated

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Important Note: This does not mean that output will always be at 5%. Whether the case firm will have access to this option depends on the contract, type of service provided by the vendor, whether fuel is included, constitution of supplier and receiver, invoice tax rate and statutory ITC requirements. If the income being reported is GST inclusive, then the output tax calculations will be different.

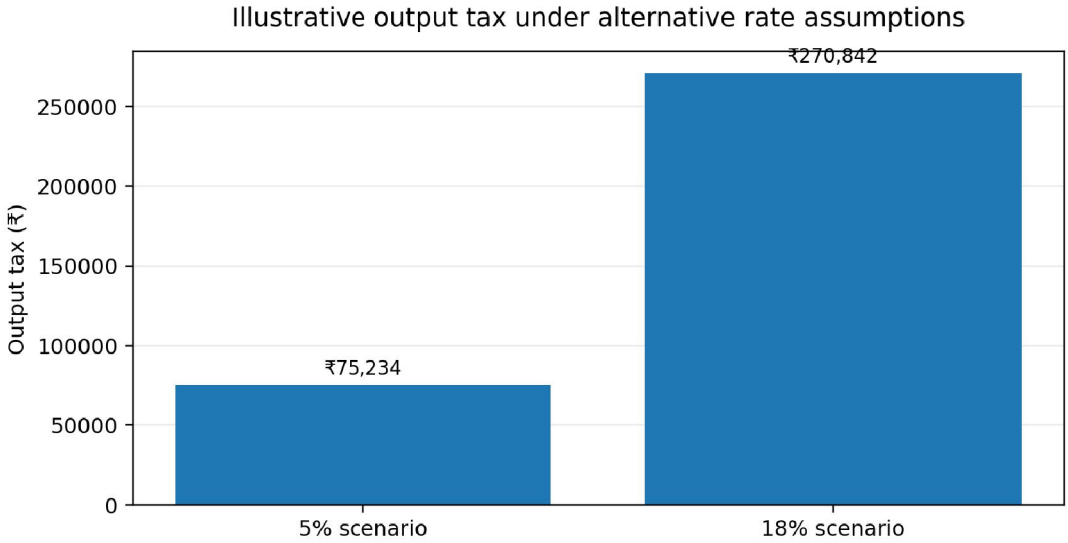


Figure 3. Illustrative output tax at 5% and 18%.

6.5 Output Tax & Economic Cost

Whilst there is likely to be a reduction in the output tax payable, the lack of credit could lead to increased economic costs. Further, there may also be irrecoverable input tax. Although there may be an increase in the input tax payable as a result of the increased tax rate, this may in turn lead to higher output tax. There could also be an impact on customer prices. An analysis should be provided, including at least these 3 areas:

(a) output tax payable,

(b) irrecoverable input tax and

(c) financial costs arising from different points in time.

If you are applying GST to the price which you change your customers (GST exclusive), then the total price charged will be affected by the tax rate and by the contractual arrangement. In addition, the customer's credit entitlement will affect this. Should the customer price be GST inclusive, then we need to deduct the GST so that we can identify how much is taxable. Therefore, as the tax rate increases, there may be less money retained by the supplier. It is not evident from the case file whether customer prices are GST exclusive or inclusive. Hence, it is not possible to determine how prices will be passed on and what effect this will have on margins.

6.6 Reverse Charge – No Conclusion

Reverse charge cannot currently be added to the scenario table. Further information is required for each vendor-to-case firm and case firm-to-customer transaction. In particular, we need to know what sort of service is being provided, whether fuel is part of the service, and the constitutions of both the supplier and receiver. In addition, we require knowledge of the invoice tax rate together with the notification type that applied on the day of supply. If reverse charge applies, then we must establish who is liable to pay the tax and when the relevant party can claim credit. Just because reverse charge is applicable does not necessarily imply that the tax will be irrecoverable. We also need to assess whether the receiver can claim ITC.

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6.7 Cash flow model

Initially, we analysed output GST for particular days during the year and related this to the firm's cash position at the year-end. However, this did not fully address all relevant considerations. We have now modified the paper to incorporate the below monthly cash flow model.

Monthly cash-flow line	Calculation/record required
Opening unrestricted cash	Actual bank and cash balance at the start of the month.
Customer invoices raised	Invoice-wise taxable value, GST rate, output tax and invoice date.
Customer collections	Actual receipt date and amount; identify GST-inclusive or exclusive settlement.
Vendor invoices received	Vendor-wise taxable value, GST, service classification, fuel inclusion and invoice date.
Vendor payments	Actual payment date and amount; identify credit-note or retention adjustments.
Eligible ITC available	Invoice-wise credit passing statutory conditions and reflected in relevant records.
GST liability and payment	Output tax / reverse-charge liability less eligible ITC, with statutory due date.
Other operating payments	Payroll, rent, fuel or other costs only where actually borne by the case firm.
Closing cash	Opening cash + collections − vendor payments − GST payments − other payments.

A usable monthly model requires dated records. Until those records are collected, the paper does not estimate a numerical funding gap. The ₹13,831 year-end cash and bank figure is retained only as a historical liquidity indicator and must not be treated as the amount available during every month.

6.8 Sensitivity analysis: variables, not unsupported outputs

The revised sensitivity framework identifies the variables that should be changed once transaction-level data are obtained. It does not reproduce the earlier net-GST sensitivity table because that table depended on unverified overhead ITC and unconfirmed assumptions about vendor rates and eligibility.

Sensitivity variable	Low / base / high cases to test	Expected channel
Share of vendor invoices qualifying as same-line services	0%, 50%, 100% of verified hire-service value	Changes eligible ITC under the restricted-credit option, subject to the statutory cap and invoice conditions.
Vendor tax rate	Actual invoice rates by vendor; do not assume one rate for all	Changes tax paid to vendors and potential credit, subject to eligibility.
Customer price basis	GST-exclusive versus fixed GST-inclusive contract price	Changes customer invoice value or retained taxable revenue.
Collection period	Actual contractual and observed days outstanding	Changes cash available before GST payment dates.
Vendor payment period	Actual days payable and any 180-day ITC condition	Changes cash outflow timing and potential credit reversals.
Input credit availability	Eligible, blocked, delayed or disputed invoice-level credits	Changes tax remittance and irrecoverable cost.
Fuel inclusion and service type	Fuel included / excluded; renting / passenger transport / without operator	May change classification and applicable rate/RCM analysis.

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VII. DISCUSSION

7.1 Review

Review of the accounts highlights that expenditure on vehicle hire forms a large proportion of total company spending (53.10% of gross income) for FY 2024-25. Furthermore, the accounts state that the company held cash and bank of Rs 13,831 at year-end and achieved a net profit of Rs 5,85,635. Therefore, it is pertinent to analyse how the company manages its supplier invoices and cash flows. However, information about the rate of GST applied, whether suppliers charge GST and the volume of input tax credit and GST actually paid is not given.

7.2 Categorisation

Different types of provision will be categorised in differing ways. For example, there may be different categorisations for vehicle provision with and without an operator and for passenger transport on a particular route. As a result, the principle of line input service cannot be universally applied to all vehicle-related expenditure. An asset-light vehicle operator should therefore maintain data on all inward and outward provisions.

7.3 Tax refund and economic cost

As shown in the output tax example above, the gross tax payable can differ substantially depending on the rate of GST assumed. It is important to recognise both the level of allowable input tax credit and the manner in which tax is levied to determine the final tax refund. Despite the possibility of claiming input tax credit, cash flow problems can still arise as this may not be received immediately. Where little or no input tax credit can be claimed, tax may effectively constitute an economic cost. These two aspects should be analysed separately.

7.4 Working capital

Whilst the company's year-end cash position is relatively small in comparison to its yearly income, it would be beneficial to examine cash flow patterns. It is not guaranteed that GST will pose a cash flow problem. This will be influenced by the company's billing policy, customer payment behaviour, supplier payment arrangements, the availability of input tax credit and the timing of tax repayments. The model of cash flow developed in section 6.7 can serve as a basis for collecting such information.

7.5 Academic and managerial relevance

This paper makes academic and managerial relevant contributions. Broad areas of knowledge – namely credit chains, compliance expenditure and working capital – have been transformed into a guide to enable a transactional analysis to take place within an asset-light vehicle hire operation [1, 15, 16, 22-24]. Although this can be used as a template for a further investigation involving a number of companies, it is not stated that the development of compliance expertise will definitively lead to enhanced profitability.

VIII. MANAGERIAL IMPLICATIONS

Owner and Finance Team

- Avoid basing your decision about which rate to apply on the overall percentage. Determine the category of each outward provision and confirm that the appropriate rate has been applied for that period.
- Confirm that contracts and tax invoices have been obtained for all suppliers. Identify whether the vehicle provided by the supplier was with or without an operator, whether fuel was provided and whether the invoice was pre- or post-GST.
- Prepare a register of Input Tax Credit for each of your suppliers. Details required are: GSTIN, invoice number and date, nature of provision, taxable value, rate, tax, GSTR-2B and date of payment. Indicate whether or not input tax credit can be claimed.
- Maintain another register specifically for reviewing reverse charge situations. This should detail instances where both the supplier and recipient may legally fall into a category which would invoke the relevant notification.

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- Prepare a monthly cash flow summary. This should detail both when money is received from customers and when suppliers are paid. Again, tax should be analysed separately to non-recoverable input tax credit and finance expenses.
- Not all amounts incurred on rent, professional services, bank and printing will be able to claim 18% GST. Analyse invoices and refer to the relevant credit limit.

8.2 Recommended implementation register

Priority	Action	Responsible role	Evidence of completion
1	Collect customer contracts, vendor agreements and sample invoices for each service type.	Proprietor/accounts	Document set with transaction classifications.
2	Prepare transaction-level GST and reverse-charge matrix for each supply category.	Tax adviser/accounts	Signed review with applicable notification and date.
3	Reconcile vendor invoices with GSTR-2B and maintain an ITC eligibility register.	Accounts	Monthly reconciliation and exception log.
4	Create a monthly cash-flow model for collections, vendor payments, ITC and GST due dates.	Finance/proprietor	Month-wise cash forecast and actual variance.
5	Review customer price terms as GST-inclusive or GST-exclusive and document pass-through treatment.	Proprietor / commercial team	Contract-wise pricing register.
6	Verify questionnaire counts and means against the original response file before publication.	Researcher	Reconcile survey summary with item-wise denominators.

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8.3 Policy Recommendations

Although this analysis is restricted in scope, it has identified opportunities to improve clarity around defining leases, the 'same line of business ', and reverse charge. It is desirable that these can easily be applied at the invoicing stage. Further policy clarification and research is required.

IX. LIMITATIONS AND RESEARCH OPPORTUNITIES

Limitations

Analysis was carried out for one business and one financial year only. Findings therefore cannot be extrapolated.

Information relating to GST returns, GSTR-2B, supplier tax invoices, purchase ledger, ITC register and challans was unavailable. Consequently, it is not possible to verify a business' tax obligations and credits.

No information regarding customer and supplier contracts was available. It was therefore not possible to establish whether a service was a lease, if fuel was provided and the composition of suppliers and those receiving services. Furthermore, it was not known whether service costs quoted by suppliers and charged to customers were exclusive or inclusive of tax and whether reverse charge would form part of this. Finally, no data was available relating to customer and supplier payment times. Hence, it is not possible to measure the quantitative extent of a GST cash shortfall.

A convenience sampling approach was adopted. Questions relating specifically to GST were not included. Also, no access was gained to the raw data file or the number of valid responses for each question.

Business accounting data relates to the financial year 2024-25. Different rates, from 22 September 2025, have been applied to establish scenarios. As such, these are purely hypothetical and should not be considered to reflect true occurrences in 2024-25.

Furthermore, estimates of ITC on expenditure have not been included as it was not possible to verify tax at the invoicing stage.

Research Opportunities

Future research should collect data relating to several years' financial accounts, supplier tax invoices, customer contracts, GST returns, GSTR-2B, ITC register, reverse charge challans and information about customer and supplier payment timelines. With a multiple-case methodology, various vehicle rental businesses can be analysed. This would assist in exploring differences between owner-operator and asset-light business models and assessing whether services are classified as a lease. In addition, the research could investigate the impact of customer concentration and payment timing on cash requirements. A broader survey could also be conducted incorporating GST topic-specific questions and well-defined metrics. However, this would need to be validated and a decision reached on the denominators for responses.

X. CONCLUSION

This case study has investigated the effects of GST rates and Input Tax Credit (ITC) on an asset-light B2B vehicle rental company. Financial statements for the year 2024-25 for SS Global Services show that the company's gross income was ₹15,04,680. Vehicle hire revenue accounted for 53.10% of this. Consequently, consideration must be given to how supplier services are classified.

There is no evidence to establish what GST rate the company was required to pay, nor what ITC entitlements it possessed. Also, there is no indication of whether the company incurred a reverse charge obligation and what tax was actually paid. In addition, there is no evidence to establish whether there was a GST cash shortfall or to explore links between GST compliance and business performance. The GST rates calculated within this paper are hypothetical and are based upon the outlined assumptions and historic data. Such analysis should be supplemented by knowledge of invoicing-level eligibility for ITC along with data regarding cash in- and outflows in order to allow a business to make informed decisions.

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Primarily, this analysis has contributed by producing an informative decision-making guide. Firstly, it enables businesses to recognise the nature of their supply. Secondly, it allows businesses to identify the correct rate and charge. It then permits verification of ITC entitlement and distinguishes recoverable and non-recoverable tax expenditure. Lastly, cash flow can be modelled using real cash inflows and outflows. Compared to other decision-making approaches, this is a more defensible process as it is grounded in evidence. Rather than arbitrarily choosing a GST rate from summary percentage data or making assumptions about the recoverability of expense ITC, evidence is utilised.

REFERENCES

[1] Ebrill, L., Keen, M., Bodin, J.-P. & Summers, V. (2001). The modern VAT. International Monetary Fund.
[2] Bird, R.M. & Gendron, P.-P. (2007). The VAT in developing and transitional countries. Cambridge University Press.
[3] Keen, M. (2013). The anatomy of the VAT. National Tax Journal, 66(2), 423-446.
[4] Keen, M. & Lockwood, B. (2010). The value-added tax: Its causes and consequences. Journal of Development Economics, 92(2), 138-151.
[15] Evans, C. (2003). Studying the studies: An overview of recent research into taxation operating costs. eJournal of Tax Research, 1(1), 64-92.
[16] Eichfelder, S. & Vaillancourt, F. (2014). Tax compliance costs: A review of cost burdens and cost structures. Hacienda Pública Española / Review of Public Economics, 210(3), 111-148.
[18] Keen, M. & Smith, S. (2006). VAT fraud and evasion: What do we know and what can be done? National Tax Journal, 59(4), 861-887.
[20] Pomeranz, D. (2015). No taxation without information: Deterrence and self-enforcement in the value added tax. American Economic Review, 105(8), 2539-2569.
[22] Shin, H.-H. & Soenen, L. (1998). Efficient working capital management and corporate profitability. Financial Practice and Education, 8(2), 37-45.
[23] Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? Journal of Business Finance & Accounting, 30(3-4), 573-588.
[24] García-Teruel, P.J. & Martínez-Solano, P. (2007). Effects of working capital management on SME profitability. International Journal of Managerial Finance, 3(2), 164-177.
[25] Eisenhardt, K.M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532-550.
[26] Flyvbjerg, B. (2006). Five misunderstandings about case-study research. Qualitative Inquiry, 12(2), 219-245.
[28] Eisenhardt, K.M. & Graebner, M.E. (2007). Theory building from cases: Opportunities and challenges. Academy of Management Journal, 50(1), 25-32.
[29] Yin, R.K. (2018). Case study research and applications: Design and methods (6 th ed). Sage.
[30] Rindfleisch, A. & Heide, J.B. (1997). Transaction cost analysis: Past, present and future applications. Journal of Marketing, 61(4), 30-54.
[31] Central Board of Indirect Taxes and Customs (2017). Notification No. 11/2017–Central Tax (Rate), dated 28 June 2017 (as amended). Ministry of Finance, Government of India.
[32] Government of India. (2017). Central Goods and Services Tax Act, 2017 (Act No.12 of 2017) and Central Goods and Services Tax Rules, 2017. Central Board of Indirect Taxes and Customs.
[37] Petersen, M.A. & Rajan, R.G. (1997). Trade credit: Theories and evidence. Review of Financial Studies, 10(3), 661-691.
[41] Baños-Caballero, S., García-Teruel, P.J. & Martínez-Solano, P. (2014). Working capital management, corporate performance and financial constraints. Journal of Business Research, 67(3), 332-338.
[44] Richards, V.D. & Laughlin, E.J. (1980). A cash conversion cycle approach to liquidity analysis. Financial Management, 9(1), 32-38.

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International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 6, Issue 6, November 2026 Impact Factor: 8.2

[46] Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
[48] Williamson, O.E. (1975). Markets and hierarchies: Analysis and antitrust implications. Free Press.
[49] Williamson, O.E. (1979). Transaction-cost economics: The governance of contractual relations. Journal of Law and Economics, 22(2), 233-261.
[50] Williamson, O.E. (1981). The economics of organisation: The transaction cost approach. American Journal of Sociology, 87(3), 548-577.
[51] Williamson, O.E. (1985). The economic institutions of capitalism. Free Press.
[52] Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, 5(2), 171-180.
[53] Teece, D.J., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509-533.
[54] Pannell, D.J. (1997). Sensitivity analysis of normative economic models: Theoretical framework and practical strategies. Agricultural Economics, 16(2), 139-152.
[55] Dubois, A. & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. Journal of Business Research, 55(7), 553-560.
[58] Voss, C., Tsikriktsis, N. & Frohlich, M. (2002). Case research in operations management. International Journal of Operations & Production Management, 22(2), 195-219.
[60] Penman, S.H. (2013). Financial statement analysis and security valuation (5 th ed). McGraw-Hill.
[61] Central Board of Indirect Taxes and Customs. (2023). Notification Nos. 12/2023 to 20/2023-Central Tax (Rate), dated 19 October 2023 (credit restriction under the 5% option, for passenger transport and vehicle rental). Ministry of Finance, Government of India.
[62] Central Board of Indirect Taxes and Customs. (2017). Notification No. 13/2017-Central Tax (Rate), dated 28 June 2017 (as amended) (reverse charge services). Ministry of Finance, Government of India.
[83] Selviaridis, K. & Spring, M. (2007). Third-party logistics: A literature review and research agenda. International Journal of Logistics Management, 18(1), 125-150.

Appendix A – Questionnaire for Potential Future Primary Research

Below is an example of a questionnaire that could be used to carry out future primary research examining GST compliance, Input Tax Credit (ITC) and related financial aspects for asset-light B2B vehicle rental organisations in India. This has not been used within this study. The questionnaire can be modified to meet the needs of future research. Before deployment, it should be piloted.

Business owners, finance and accounts professionals, GST and tax consultants and those engaged in financial and/or tax management for vehicle rental firms are all appropriate target groups for this questionnaire.

Section A – Respondent Details

- What is your role?
  (Owner/Proprietor / Finance or Accounts Personnel / GST or Tax Consultant / Operations Manager / Other)
- What vehicle rental business model is your business associated with?
  (Asset-owned fleet / Asset-light model (vehicles sourced from third party) / Mixed model / Other)
- How knowledgeable are you in relation to GST compliance and Input Tax Credit (ITC) provisions for vehicle rental services?
  (Not at all familiar / Moderately familiar / Quite familiar / Highly familiar / Extremely familiar)

Section B – GST compliance and Input Tax Credit

- How crucial is it to correctly categorise vehicle rental and passenger transport services so that appropriate GST can be applied?
  (Not at all important / Moderately important / Quite important / Highly important / Extremely important)
- How regularly does your organisation compare supplier tax invoices with information on the GST portal (including GSTR-2B)?

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(Always / Often / Occasionally / Rarely / Never / Not applicable)

- Easy access to valid supplier tax invoices enables appropriate Input Tax Credit (ITC) claims to be made.
  (strongly disagree / disagree / neutral / agree / strongly agree)
- Supplier GST compliance and reporting frequency affects the availability of appropriate Input Tax Credit for our business.
  (strongly disagree / disagree / neutral / agree / strongly agree)
- GST rate application and ITC entitlement have a substantial effect on a business' overall tax expenditure for vehicle rental.
  (Strongly disagree / disagree / neutral / agree / strongly agree)

Section C – Financial and Working Capital

- GST payment expectations can place working capital demands upon vehicle rental organisations as customers' payments are not immediately received.
  (strongly disagree / disagree / neutral / agree / strongly agree)
- Supplier payment times, customer payment times and/or Input Tax Credit availability can influence vehicle rental business cash flow.
  (strongly disagree / disagree / neutral / agree / strongly agree)
- Good GST record keeping, invoice comparison and compliance processes contribute to improved business financial management.
  (strongly disagree / disagree / neutral / agree / strongly agree)

Section D – Open Response Items

- What are the key GST compliance and/or Input Tax Credit issues experienced by asset-light vehicle rental businesses?
- What could be done to enhance GST compliance, Input Tax Credit usage and working capital management within the vehicle rental industry?

Note: This questionnaire is for future research purposes only. Responses have not been obtained or analysed in this study. Piloting and validation of the questionnaire could occur before it is deployed for future primary research.