

QUESTION 1**100 marks**

Cheslin Transport Ltd ('Cheslin') is a company listed in the industrial transportation sector on the Johannesburg Securities Exchange (JSE). The company provides a range of logistical services to customers in Southern Africa, including the following:

- Distribution and transportation of third party goods;
- Clearing, forwarding and warehousing of third party goods; and
- Vehicle renting and leasing.

Poor economic conditions and increased competition in the markets in which the company operates have resulted in subdued earnings growth for Cheslin over the past three years. Key financial indicators, which have been extracted from the audited financial statements of Cheslin for the year ended 30 September 2013, are summarised in the table below:

CHESLIN TRANSPORT LTD		
YEARS ENDED 30 SEPTEMBER	2013	2012
	R million	R million
Revenue	1 297,0	1 198,7
Operating profit	110,7	118,0
Total comprehensive income for the year	67,8	73,1
Cash and cash equivalents	88,0	42,7
Total assets	939,0	919,7
Equity	433,0	388,5
Total interest-bearing borrowings (at fair value)	182,5	209,3
Other financial information		
Total number of shares in issue (million)	132,4	132,4
Headline earnings per share (cents)	51,0	55,0
Share price at year end (cents)	408,0	550,0

The board of directors of Cheslin has been considering various alternatives over the past two years to diversify operations and to increase earnings growth. The most promising growth opportunity identified is a start-up operation involved in the rental of tuk-tuks for the purpose of transporting passengers.

A tuk-tuk is a specially constructed motor tricycle, which can transport two or three passengers and a limited amount of their luggage. Tuk-tuks have three wheels and can reach a maximum speed of 70 km per hour, although the maximum recommended speed for urban areas is 45 km per hour. These vehicles are ideal for transporting paying customers over short distances (between two and eight km) in cities – for example from their homes to restaurants or from transport hubs (train stations and bus depots) to their homes.

Short Haul Transport (Pty) Ltd

Cheslin has incorporated a wholly-owned subsidiary called Short Haul Transport (Pty) Ltd ('SHT'). SHT is currently dormant but will be used to carry out the new business venture if it is approved by the board of directors of Cheslin.

There are numerous tuk-tuk operators in Johannesburg, Cape Town and Durban and these are generally owned by individuals who have fleets, ranging between two and 20 tuk-tuks. Currently the demand for the taxi service provided by tuk-tuks exceeds the supply in these cities. According to recent market research, customers opt for tuk-tuk services because of their lower fares and the novelty of travelling in a three-wheel vehicle. The market research also revealed that the average taxi fare charged by a conventional taxi (four-wheel sedan) is R15 per km in Johannesburg while tuk-tuks charge an average fare of R5 per km.

SHT will not provide the tuk-tuk taxi services directly to the public but instead will rent tuk-tuks to licensed taxi drivers on a daily basis. The board of directors of Cheslin is interested in the opportunity for various reasons:

- 1 It will leverage existing infrastructure as Cheslin currently rents out commercial vehicles to customers. Expanding the existing product range made up of 12-seater passenger vehicles, light delivery vehicles (1–8 tonnes) and refrigerated trucks to include tuk-tuks, is within the group's expertise.
- 2 The tuk-tuk rental operation could add significantly to the group's profitability.
- 3 There is an opportunity to become the first major transport group to expand into this sector. Cheslin could have the first mover advantage and dominate the industry. Other transport groups are likely to pursue this opportunity if Cheslin does not rapidly move into this high growth industry.

Financial viability of SHT

The chief financial officer (CFO) of Cheslin, Ms Laura Brown, has prepared a detailed business plan for SHT. The new company will not conduct any other business apart from renting out tuk-tuks. Ms Brown proposed that the new business venture be housed in a separate company, so as to limit Cheslin's exposure should there be any public liability claims: for example the risk that passengers injured in an accident involving a tuk-tuk could claim damages from Cheslin or its insurers.

The financial projections for SHT are summarised in the table below together with explanatory notes:

Forecasts for SHT		Year 0	Year 1	Year 2	Year 3	Year 4
	Notes	R'000	R'000	R'000	R'000	R'000
Revenue		0	24 120	42 820	45 825	49 100
Tuk-tuk rentals	2	0	9 720	17 820	19 575	21 600
Advertising	3	0	14 400	25 000	26 250	27 500
Operating costs		(1 695)	(18 279)	(29 646)	(29 723)	(24 230)
Allocated costs	4	0	(1 750)	(1 890)	(2 040)	(2 200)
Call centre costs	5	0	(3 888)	(7 000)	(7 560)	(8 160)
Depreciation	6	0	(5 333)	(9 333)	(9 333)	(4 000)
Initial set-up costs	7	(1 500)	0	0	0	0
Marketing costs	8	0	(250)	(250)	(200)	(150)
Service and maintenance costs	9	0	(1 560)	(2 800)	(3 000)	(3 240)
Telecommunication costs	5	0	(5 249)	(8 100)	(7 290)	(6 480)
Tuk-tuk branding costs	10	(150)	(100)	0	0	0
Vehicle licence fees	11	(45)	(149)	(273)	(300)	0
Operating profit	12	(1 695)	5 841	13 174	16 102	24 870

Notes

The business plan has been drafted on the basis that all cash flows occur at the end of each year unless otherwise specified.

- 1 SHT intends to purchase 300 tuk-tuks at the start of year 1, and a further 200 tuk-tuks at the start of year 2. The tuk-tuks are to be purchased from a supplier based in Thailand and the costs are denominated in US dollar. Forecast purchases are summarised in the table below:

Tuk-tuk acquisition costs	Year 1	Year 2
Number of tuk-tuks purchased	300	200
US dollar cost per tuk-tuk	\$5 000	\$5 000
Total purchase consideration at forecast exchange rates	R16 million	R12 million

- 2 SHT is to rent out tuk-tuks to taxi drivers on a daily basis. The revenue projections are based on the following assumptions:

Tuk-tuk revenue projections	Year 1	Year 2	Year 3	Year 4
Days per year	365	365	365	365
Days used for servicing and maintenance of tuk-tuks	(4)	(4)	(4)	(4)
Days tuk-tuks are not rented out	(91)	(91)	(91)	(91)
Annual rental days	270	270	270	270
Daily rental fees	R120	R132	R145	R160

- 3 SHT is in the process of finalising an agreement with Baobab Ltd ('Baobab'), a major financial services group in South Africa, to place Baobab's logo and advertisements on the exterior of SHT's tuk-tuks (i.e. 'brand' the tuk-tuks). Baobab is very excited about the opportunity, as it will give their group enormous mobile exposure in Johannesburg, Cape Town and Durban. The cost of advertisements on tuk-tuks is also much more affordable than outdoor, radio and television advertisements.

SHT is planning to place Baobab's advertisements on 240 tuk-tuks at the start of year 1 and on a further 160 tuk-tuks at the start of year 2. The annual advertising cost per tuk-tuk charged to Baobab will be R48 000 in year 1, R50 000 in year 2, R52 500 in year 3 and R55 000 in year 4, payable annually in arrears. These advertising rates are slightly higher than market rates as SHT has agreed not to allow any other company (except for the Cheslin group itself) to place advertisements on their tuk-tuks.

Cheslin will place its logo and advertising material on the remainder of the tuk-tuks as follows: 60 tuk-tuks at the start of year 1 and a further 40 tuk-tuks at the start of year 2. Although this will be higher than market-related rates, Cheslin will pay the same advertising rates as Baobab. The advertising rates that Cheslin would normally pay would be 90% of the rates to which Baobab has agreed.

- 4 Cheslin will be responsible for providing all finance, administration, human resources, marketing and managerial services to SHT. The allocated cost forecasts represent the estimated incremental cost of these services plus a group profit recovery of R250 000 in year 1, R275 000 in year 2, R303 000 in year 3 and R330 000 in year 4. The CFO of

Cheslin is of the opinion that Cheslin should make a reasonable return on the services it provides. Furthermore, the managers of Cheslin would be prejudiced in their performance evaluations if Cheslin did not make a profit on the services it provides.

- 5 SHT is to outsource the call centre operations to Skyworks Ltd ('Skyworks'), an independent provider. Skyworks's call centre agents will answer all incoming calls on behalf of SHT and route requests for taxi services to the closest tuk-tuk driver. Skyworks will, at its cost, install a global positioning system (GPS) in each tuk-tuk to enable call centre agents to track and identify the closest tuk-tuk to the customer.

Skyworks is to charge a fixed annual fee to SHT based on the number of dedicated call centre agents to answer SHT's incoming calls and refer taxi service requests. These fees are designated as 'call centre costs' in the financial forecasts above.

Skyworks will invoice SHT separately for the cost of incoming and outgoing telephone calls made on behalf of SHT. SHT will offer customers a toll-free number to call when they require a taxi service. This means that customers will not pay for telephone calls made to SHT. These costs have been designated as 'telecommunication costs' in the financial forecasts table.

- 6 SHT is to depreciate the cost of tuk-tuks purchased on a straight-line basis over three years – this is equal to the wear and tear allowance that the South African Revenue Service (SARS) will permit for income tax purposes. The useful life of a tuk-tuk is estimated to be four years, based on 60 000 km travelled annually by each tuk-tuk.
- 7 Set-up costs include the cost of obtaining the necessary permits from the Department of Transport as well as market research costs and travel expenditure incurred in visiting the tuk-tuk supplier in Thailand. Cheslin has also charged a management fee of R300 000 for services rendered in drafting the business plan, including the financial forecasts, for SHT.
- 8 Marketing costs represent the cost of advertising SHT's services in community newspapers and on billboards. Expenditure is expected to decrease over time as SHT establishes its brand and services in the market.
- 9 Each tuk-tuk will be serviced four times per annum.
- 10 The tuk-tuk branding costs represent the cost to Cheslin of designing and printing its own advertising material for placement on the tuk-tuks. Baobab will pay for the development of its own advertisements and affixing them to the tuk-tuks.
- 11 SHT will be responsible for licensing each tuk-tuk and renewing such licences annually.
- 12 The income tax expense for SHT has not been estimated yet. The income tax rate for companies is 28% and is expected to remain so throughout the forecast period. All expenditure, apart from depreciation and the tuk-tuk branding costs, is deductible for income tax purposes in the year in which that expenditure is incurred. SARS has indicated that tuk-tuk branding costs should be amortised over three years and would not be deductible in full in the year in which the amounts are paid.

Tuk-tuk taxi drivers

Tuk-tuk taxi drivers will be required to pay rental fees due to SHT in advance on a daily basis. Market research indicates that tuk-tuk taxi drivers working 270 days a year are likely to –

- complete 24 fare-paying trips daily during a 12 hour shift;
- travel an average of 58 320 km per annum; and
- earn an average of R30 per fare-paying trip in year 1. Average taxi fares are expected to increase to R36 in year 2, R40 in year 3 and R44 in year 4.

Taxi drivers will be responsible for petrol used by tuk-tuks. The average petrol price in year 1 is forecast to be R12 per litre and to increase by 10% per annum thereafter. The tuk-tuk supplier has indicated that, globally, the fuel consumption of tuk-tuks travelling in urban areas is 5 litres per 100 km.

Initial feedback on the SHT business plan from the board of directors

The board of directors of Cheslin has reviewed the financial forecasts of SHT prepared by the CFO of Cheslin as well as the business plan. The board has requested that the internal rate of return (IRR) of the project be determined and compared to Cheslin's weighted average cost of capital (WACC).

SHT is planning to raise a medium-term loan from Cheslin's commercial bankers to finance the acquisition of tuk-tuks and the operations of SHT on the following terms and conditions:

- The capital amount will be R20 million, repayable in a bullet repayment at the end of year 4;
- The loan will bear interest at 10% per annum (nominal), payable half yearly in arrears; and
- The loan will be secured by a guarantee from Cheslin that it will stand suretyship for all of SHT's obligations in terms of the loan.

Cheslin has not previously estimated its WACC and will need to do so in order to evaluate the SHT opportunity. The board has recommended that the WACC used to evaluate the SHT opportunity be 20% higher than Cheslin's WACC, in view of the higher risk associated with the new business venture.

Market data which may be relevant to determining Cheslin's WACC:

Market risk premium	7,0%
Interest rates	
Cheslin's long-term borrowing cost	10,0%
Average ten-year government bond yield	8,5%
Three-month treasury bill rate	5,0%
Beta coefficient of Cheslin	1,20
Effective tax rate: Cheslin	28,0%

Alternative business model

The board of directors has asked the CFO to investigate the feasibility of an alternative business model. The changes suggested are as follows:

- Introduction of an exclusive membership scheme whereby only members thereof will be transported in SHT's tuk-tuks:

- Members of the public will be offered the opportunity to become members of the scheme;
- Members will pay monthly fees upfront for travelling up to a maximum number of kilometres;
- Members will pay additional amounts if they exceed the maximum number of kilometres purchased on a monthly basis; and
- Members will be entitled to cancel the contract by providing six months' written notice.
- SHT will own and operate a tuk-tuk taxi service as opposed to renting out tuk-tuks to licensed taxi drivers. It would then have to employ tuk-tuk taxi drivers to ensure a reliable service to its members.

Should SHT introduce the above proposals, this would entail a fundamental change to the way it intends to operate.

Press article – Tuk-tuks

The board of directors of Cheslin noted an article published recently in a leading financial magazine in South Africa which inter alia stated the following:

‘... the big question is whether the tuk-tuk industry is sustainable. Tuk-tuks are a global phenomenon and can be profitable if they stick to niche markets. However, tuk-tuks suffer from limited capacity (they can only transport two or three passengers at a time) and, hence, struggle to generate the returns of mini-buses, which can cram in 20 to 25 passengers. Furthermore, if mini-buses perceive tuk-tuks to be a threat to their livelihood, it could lead to outbreaks of violence ...’

REQUIRED

		Marks	
		Sub-total	Total
(a)	Prepare a capital budget for SHT and estimate the expected IRR of the new business venture over the period year 0 to year 4. Assume that the mathematical calculations in the financial forecasts are accurate.	20	20
(b)	Discuss ways in which SHT could hedge against adverse currency movements with regard to the importation of tuk-tuks from the supplier in Thailand.	8	8
(c)	Estimate the WACC to be used for the purposes of evaluating the SHT venture. Show all calculations.	10	10
(d)	Assuming that the original business model of renting out tuk-tuks is to be pursued, prepare a report to the board of directors of Cheslin in which you – (i) identify and explain the key business risks to which SHT will be exposed; and (ii) critically discuss the strategy of Cheslin to enter the tuk-tuk market. <i>Communication skills – layout and structure; clarity of expression; logical argument</i>	14 12 3	29
(e)	Calculate how much profit before taxation each of the tuk-tuk drivers is forecast to generate in year 2.	5	5
(f)	Identify and discuss the merits and pitfalls, from the perspective of SHT, of offering a membership-based service to passengers who make use of the tuk-tuk taxi service. <i>Communication skills – logical argument; clarity of expression</i>	18 2	20
(g)	Discuss, with reasons, how SHT should recognise its membership revenue in its accounting records, assuming that it adopts the alternative business model of introducing an exclusive membership scheme.	8	8
Total			100