

Carsten Berkau

Management Accounting

7th Edition

- Link 6.B –
C/S SCHLUCHMAN

The owner, Mr Schluchman, starts the business as a privately-owned company and after 2 years he transfers it into a privately-owned limited company in the legal form of a German GmbH. The legal change is planned. We prepare a business plan for 4 years during which the change of legal form occurs.

Find below the data sheet for SCHLUCHMAN:

Date Sheet for SCHLUCHMAN

Classification: Hospitality Management;
 Inception: 1.01.20X3;
 P, P, E: stove: 3,000.00 EUR; fridge: 360.00 EUR; car: 21,200.00 EUR;
 Materials: dough 1.20 EUR/kg; toppings; BOM: 100 g dough/pizza; 1.25 EUR toppings/pizza;
 Net selling price: 3.60 EUR/pizza;
 per event: 100 French pizza sold, 250.00 EUR set-up costs, 80.00 EUR for the waiter;
 Advertising: 2,400.00 EUR;
 VAT not applicable.

For the first 2 years, SCHLUCHMAN is a caterer in private ownership. It sells French pizza baked freshly in a mobile pizza stove. Customers can rent the stove and the chef coming out to their house or event location and serving their guests French pizza. On 1.01.20X3, the company is established by the chef Mr Schluchman. He deposits 10,000.00 EUR in a bank account dedicated to the business "SCHLUCHMAN". Note, the bank account is in the name of its owner, Mr Schluchman. The company is not registered for VAT reduction.

On 2.01.20X3, Mr Schluchman buys a pizza stove and pays the price of 3,000.00 EUR to an extent of 50 %. The remainder is due in arrears of 500.00 EUR every yearend. The supplier charges interest at a rate of 4 %/a. The interest is paid together with the 500.00 EUR for pay-off. The mobile pizza stove has a useful life of 4 years. No residual value applies after depreciation.

On 2.01.20X3, Mr Schluchman buys a mobile fridge with electrical socket access (cigarette lighter plug) for the delivery van to keep pizza dough and toppings fresh during transport. The mobile fridge costs 360.00 EUR. It will be deployed for 3 years. Mr Schluchman pays the fridge per bank transfer.

The business car is a Mercedes Benz Vaneo. Mr Schluchman owns it already, and it is 2 years old. The car was acquired on 2.01.20X1 at a price of 31,200.00 EUR. At that time, Mr Schluchman paid the gross amount of 31,200.00 EUR – he is not registered for VAT reduction; hence, the costs of acquisition are the car's gross value. Mr Schluchman estimates to use the car for 6 years and to sell it then for 1,200.00 EUR. On 1.01.20X3, the car's carrying value is: $31,200 - (31,200 - 1,200)/3 = 21,200.00 \text{ EUR}$.

Mr Schluchman buys dough from a nearby pizza restaurant which costs 1.20 EUR/kg. Mr Schluchman always keeps a safety stock of 25 kg dough. There is also a 25 kg dough stock left at the yearends. We pretend, dough does not expire, it is used on a first-in-first-out basis, and therefore, no spoilage is relevant.

The toppings for the French pizza are: onions, olives, bacon, sour cream, rocket salad etc. Mr Schluchman stores the toppings in the mobile fridge. The safety stock of toppings is worth 60.00 EUR. As not all toppings can be stored for a week, we consider toppings waste to an extent of 50 % of the safety stock on average every week. The toppings value at the end of the week is 60.00 EUR. Half thereof is disposed. As a result, there is toppings stock at the yearend to the extent of 30.00 EUR. During the Accounting periods 20X5 and 20X6, the stock level is the same, but the VAT reduction declines the cost of purchase to: $60/120\% = 50.00 \text{ EUR}$. Waste and spoilage according are: $50/2 = 25.00 \text{ EUR}$. Mr Schluchman pays the toppings supplier 80 % instantly, the remainder is due in the next Accounting period.

Per French pizza, 100 g/u of dough are used, and toppings worth 1.25 EUR/u (purchase costs) are added to the dough. Every French pizza is sold at 3.60 EUR/u, which is the price paid by the clients.

Mr Schluchman's business model is to charge the client who hosts the party for all French pizza sold. Per event, he sells 100 French pizza. For each event, Mr Schluchman charges extra 250.00 EUR set-up costs. During the years 20X3 and 20X4, Mr. Schluchman plans to cater 180 events. Mr Schluchman bakes the French pizza himself but does not pay himself a salary. No imputed costs are considered. His daughter works as waiter/assistant cook. She is paid 80.00 EUR/event on a freelancer basis.

Mr Schluchman asks an Advertising agency to design a website. He assumes that after 2 years of business, the

company will grow and can be taken to the next level. The agency charges for its service 2,400.00 EUR on 30.06.20X3 as once-off payment.

Mr SCHLUCHMAN pays personnel income taxes based on a (simplified) tax progression system at the income tax rates below:

from: 0 ... 20,000 EUR: 0%

from: 20,001 ... 30,000 EUR: 20 %

from: 30,001 ... 40,000 EUR: 25 %

from: 40,001 ... 50,000 EUR: 30 %

from: 50,001 ... 60,000 EUR: 35 %

from: 60,001 EUR: 40%

Mr SCHLUCHMAN has no other occupation - meaning he does not earn another income. He makes a drawing to the extent of his personal income tax liability resulting from the business plus a 35,000.00 EUR/a amount.

After two years, Mr Schluchman transfers his business into a limited company in the legal form of a GmbH. He launches MOBILE TARTE FLAMBEE GmbH. See below the data sheet for MOBILE TARTE FLAMBEE GmbH:

Data Sheet for MOBILE TARTE FLAMBEE GmbH

Classification: Hospitality Management;
Established: 1.01.20X5: 40,000.00 EUR;
 registered for VAT reduction;
P, P, E: 5 stoves (4 new, one preowned: 2 years); 4 mobile fridges (3 new, one preowned: 2 years); car: 11,200.00 EUR;
Labour: waiter: 80.00 EUR/event; cook: 100.00 EUR/event; Mr Schluchman: 40,000.00 EUR/a / 45,000.00 EUR/a;
Business plan for 20X3, 20X4; 20X5; 20X6.
VAT applicable at a VAT rate of 20 %.

The company is established with 40,000.00 EUR issued capital – fully paid into the company's bank account. Mr Schluchman hires an attorney to establish MOBILE TARTE FLAMBEE GmbH and to register the company at the local court. It is registered for VAT reduction at the revenue service on 2.01.20X5, too.

MOBILE TARTE FLAMBEE GmbH buys 4 stoves at 3,000.00 EUR gross purchase price. The prior terms and conditions apply: the price is only paid half, and the remainder is charged 4 %/a of interest per year. The 5th stove is the one, Mr Schluchman privately sells his company at 1,500.00 EUR. For the latter payment no VAT can be claimed as Mr Schluchman (seller) is a private person. The remaining useful life is 2 years. The purchase contract and the amount Mr Schluchman owes the stove supplier for the old stove, does not matter for the business plan, as Mr Schluchman is the supplier's debtor – not his firm. He pays the remaining debts of 500.00 EUR and interest of: $500 \times 4\% = 20.00 \text{ EUR}$ at the end of 20X5 privately. The company buys the stove from Mr Schluchman at 1,500.00 EUR which is at carrying value. MOBILE TARTE FLAMBEE GmbH buys 4 mobile fridges at the same price (360.00 EUR gross selling price) and same useful life (3 years). No residual value applies. The old fridge is sold to the company at 120.00 EUR by Mr Schluchman. It gets replaced by a new fridge (gross amount of 360.00 EUR) on 2.01.20X6. Its useful life is 3 years then, too.

With the new equipment, MOBILE TARTE FLAMBEE GmbH can serve 5 events at a time. We refer to the

equipment required to serve 1 party as a 'party-unit'. MOBILE TARTE FLAMBEE GmbH buys the delivery van from Mr Schluchman at 11,200.00 EUR. No VAT applies for the purchase from the private seller (Mr Schluchman). However, when selling the car at the end of 20X6, its net selling price will be 1,000.00 EUR and the gross amount: $120\% \times 1,000 = 1,200.00 \text{ EUR}$ – as scheduled before.

The inventory levels are now relevant per party-unit, which requires to be multiplied with 5. All other business conditions apply for 5 party-units. E.g., the waste on toppings is: $5 \times 25 = 125 \text{ EUR/w.}$

The van serves all party-units during a night.

No inventories, like dough or toppings, are transferred from the old private business to the new company.

For the cooking and service, MOBILE TARTE FLAMBEE GmbH employs freelancers. The waiters charge 80.00 EUR/event. 1 student is needed per event. A freelancer-cook charges 100.00 EUR/event. One is deployed per party. Mr Schluchman is now the manager and does not work as chef anymore.

MOBILE TARTE FLAMBEE GmbH is busy for 800 events in 20X5 and 950 events in 20X6. Mr Schluchman is the chief executive officer (CFO) at MOBILE TARTE FLAMBEE GmbH and earns 40,000.00 EUR in 20X5 and 45,000.00 EUR in 20X6.

We prepare a business plan for the Accounting periods 20X3 – 20X6. In the first years, the business is privately-owned and in the 2 following years the company is a limited company. The appropriation of profits for the company is at a 50 : 50 ratio, which means 50 %

of the distributable amount goes to reserves and 50 % are paid to the owners. No profit is carried forward.

Revenue Plan – MTF GmbH

We look at Mr Schluchman's and MOBILE TARTE FLAMBEE GmbH's (MTF GmbH) revenue plan. It is depicted in Figure 1.

Revenue plan	20X3	20X4	20X5	20X6
Parties, set up costs	45,000	45,000	200,000	237,500
French pizza	64,800	64,800	240,000	285,000
Total revenue	109,800	109,800	440,000	522,500

Figure 1: Mr Schluchman's/
MOBILE TARTE FLAMBEE GmbH's revenue plan

The revenue is divided into 2 items, the set-up fees (fixed) and the French pizza sale (prop.). The set-up fees depend on the event numbers. In 20X3, the set-up revenue is: $180 \times 250 = 45,000.00 \text{ EUR}$. In 20X5, the set-up fees are the same per event, however the value is ex VAT. This means by registration for VAT reduction, the set-up fees net value stays but the money received from clients increases due to output-VAT collection. Thus, the registration of VAT reduction causes the prices to increase for a non-VAT-registered client. As a lot of events are house parties this applies for most of the events. In 20X5, the revenue from set-up fees is: $800 \times 250 = 200,000.00 \text{ EUR}$. In the next year, the value will increase to: $950 \times 250 = 237,500.00 \text{ EUR}$.

The sales price of French pizza is always 3.60 EUR. Hence, the revenue per French pizza declines in 20X5 and 20X6 due to VAT registration. The revenue in the first years equals: $180 \times 100 \times 3.6 = 64,800.00 \text{ EUR}$. After MOBILE TARTE FLAMBEE GmbH's incorporation, the net selling price per French pizza drops to: $3.60/120\% = 3.00 \text{ EUR/u}$. As a result, the revenue in 20X5 is: $800 \times 100 \times 3 = 240,000.00 \text{ EUR}$. In the next year, the revenue equals: $950 \times 100 \times 3 = 285,000.00 \text{ EUR}$.

Cost Plan – MTF GmbH

The cost plan for Mr Schluchman/ MOBILE TARTE FLAMBEE GmbH is shown in Figure 2. We explain every value disclosed therein below.

Cost plan	20X3	20X4	20X5	20X6
<i>Stove</i>				
Depreciation stove	750	750	2,500	2,500
Depreciation old stove			750	750
Interest on stove	60	40	240	160
<i>Fridge</i>				
Depreciation on fridge	120	120	120	
Depreciation on new fridge			400	500
<i>Car</i>				
Depreciation on car	5,000	5,000	5,100	5,100
<i>Materials</i>				
Material dough	2,160	2,160	8,000	9,500
Material toppings	24,060	24,060	91,133	106,758
<i>Labour</i>				
Labour waiters/assistants	14,400	14,400	144,000	171,000
Web agency costs	2,400			
Manager costs			40,000	45,000
Total costs	48,950	46,530	292,243	341,268

Figure 2: Mr Schluchman's /
MOBILE TARTE FLAMBEE GmbH's cost plan

The cost plan goes by items: stove, refrigerator, car, material costs and labour.

The stoves are depreciated. Depreciation is in the first years (1 stove) amounting to: $3,000 / 4 = 750.00 \text{ EUR/a}$. The stove is transferred to MOBILE TARTE FLAMBEE GmbH and written-off in 20X5 and 20X6. The costs of acquisition for the new stoves are: $3,000 / 120\% = 2,500.00 \text{ EUR/u}$. The amount is written-off over 4 years, which results in an annual depreciation of: $2,500 / 4 = 625.00 \text{ EUR/(u} \times \text{a)}$. MOBILE TARTE FLAMBEE GmbH operates 4 stoves. Thus, depreciation is: $4 \times 625 = 2,500.00 \text{ EUR/a}$. The stoves are paid only half. Mr Schluchman owes the supplier 1,500.00 EUR in 20X4 and pays 4 %/a on interest. The interest is: $1,500 \times 4\% = 60.00 \text{ EUR}$. At the end of the Accounting period, Mr Schluchman pays-off 500.00 EUR. The interest for 20X4 is: $(1,500 - 500) \times 4\% = 40.00 \text{ EUR}$.

When buying the new stoves MOBILE TARTE FLAMBEE GmbH owes the supplier 6,000.00 EUR in 20X5 and pays interest to an extent of: $6,000 \times 4\% = 240.00 \text{ EUR/a}$. In the next year, interest costs: $4,000 \times 4\% = 160.00 \text{ EUR/a}$.

The mobile fridge is bought at 360.00 EUR. Depreciation equals: $360 / 3 = 120.00 \text{ EUR/a}$. As the mobile fridge is sold to MOBILE TARTE FLAMBEE GmbH at the beginning of 20X5 for 120.00 EUR and still got a year of useful life, the depreciation on that fridge is 120.00 EUR in 20X5, too. In 20X5, MOBILE TARTE FLAMBEE GmbH buys 4 fridges at 360.00 EUR/u which gives cost of acquisition of: $360 / 120\% = 300.00 \text{ EUR/u}$. Depreciation on 4 fridges is: $4 \times 300 / 3 = 400.00 \text{ EUR}$. In 20X6, MOBILE TARTE FLAMBEE GmbH replaces the old fridge and according to the acquisition, it now depreciates 5 fridges at 100.00 EUR/a. Hence, depreciation equals: $5 \times 100 = 500.00 \text{ EUR/a}$.

The car is valued at 21,200.00 EUR when Mr Schluchman starts his private business. He depreciates it following straight-line method and estimates to sell the car for 1,200.00 EUR 4 years later. As a result, depreciation in the first two years is: $(21,200 - 1,200) / 4 = \mathbf{5,000.00 \text{ EUR/a}}$. After MOBILE TARTE FLAMBEE GmbH bought the car for 11,200.00 EUR, depreciation is based on the cost of acquisition and the estimated net selling price. It equals: $(11,200 - 1,000) / 2 = \mathbf{5,100.00 \text{ EUR/a}}$. The net selling price changes due to output-VAT. The costs of acquisition are 11,200.00 EUR as the firm buys from a private seller. No VAT reduction is possible. For the residual value, VAT is considered as the company is registered for VAT reduction and must collect the output VAT for the car sale.

The “materials” for dough and toppings are linked to the amounts that are used or wasted. The dough per pizza is 100 g. In the first 2 Accounting periods, the dough which is bought at 1.20 EUR/kg equals: $180 \times 100 \times 0.1 \times 1.20 = \mathbf{2,160.00 \text{ EUR}}$. No waste of dough applies. In the next periods, MOBILE TARTE FLAMBEE GmbH can claim input-VAT. Thus, the dough costs drop to: $1.20 / 120\% = \mathbf{1.00 \text{ EUR/kg}}$. In 20X5, the total dough costs are: $800 \times 100 \times 0.1 \times 1 = \mathbf{8,000.00 \text{ EUR}}$. In 20X6, the costs are: $950 \times 100 \times 0.1 \times 1 = \mathbf{9,500.00 \text{ EUR}}$. The toppings consumed in the first Accounting periods cost 1.25 EUR/u per French pizza.

Furthermore, waste of 30.00 EUR per week is considered. The toppings cost: $180 \times 100 \times 1.25 + 30 \times 52 = \mathbf{24,060.00 \text{ EUR}}$. In the next Accounting periods 20X5 and 20X6, MOBILE TARTE FLAMBEE GmbH reduces the cost of purchase due to input-VAT deduction. The amount is: $800 \times 100 \times 1.25 / 120\% + 5 \times 25 \times 52 = \mathbf{89,833.33 \text{ EUR}}$. In 20X6, the costs are: $950 \times 100 \times 1.25 / 120\% + 5 \times 25 \times 52 = \mathbf{105,458.33 \text{ EUR}}$.¹

Labour costs in the first Accounting period are only for the waiter/assistant cook. Mr Schluchman does not pay himself a salary as he earns the profit from the business. Labour costs are 80.00 EUR per party. The total labour costs are: $180 \times 80 = \mathbf{14,400.00 \text{ EUR}}$. In the next Accounting periods 20X5 and 20X6, the labour costs are: $100 + 80 = \mathbf{180.00 \text{ EUR/party}}$. This gives: $800 \times 180 = \mathbf{144,000.00 \text{ EUR}}$ in 20X5 and: $950 \times 180 = \mathbf{171,000.00 \text{ EUR}}$ in 20X6 for the waiter and chef. The management salary is 40,000.00 EUR in 20X5 and 45,000.00 EUR in 20X6. No imputed salary applies for the 1st years as the business plan is not used for pricing the French pizza.

The web agency charges 2,400.00 EUR in 20X3.

Profit Plan – MTF GmbH

The profit calculation can be derived from the table in Figure 3.

¹ As the material expenses drop due to input-VAT reduction and the waste remains unchanged, a higher waste rate applies.

Profitability plan	20X3	20X4	20X5	20X6
Revenue	109,800	109,800	440,000	522,500
less Total of costs	(48,950)	(46,530)	(290,943)	(339,968)
Earnings before taxes EBT	60,850	63,270	149,057	182,532
Income taxes	0	0	(44,717)	(54,760)
Earnings after taxes	60,850	63,270	104,340	127,772
-> reserves			52,170	63,886
-> dividend			52,170	63,886
Profit along 4.3:	65,668	63,264		
Schluchman's tax	13,267	12,305		

Figure 3: Mr Schluchman's /
MOBILE TARTE FLAMBEE GmbH's profitability plan

The profitability analysis based on the commercial law is less complicated than for the tax law. For the commercial profit calculation, all costs are deducted from the revenue as it can be seen in the profitability plan.

However, the tax calculation in the first 2 Accounting periods follows the 4.3-profit-calculation method in Germany. In accordance with the 4.3-method the accrual principle only applies for investment/depreciation. Otherwise, payments count. The difference becomes relevant for the purchase of the toppings as they are paid in the next Accounting period to an extent of 20 %. As a result, the profit increases by: $20\% \times 24,090 = 4,818.00 \text{ EUR}$. The income tax relevant profit based on the 4.3-method then equals: $60,850 + 4,818 = 65,668.00 \text{ EUR}$. The income taxes following the given tax scheme, equal: $20,000 \times 0 + 10,000 \times 20\% + 10,000 \times 25\% + 10,000$

$\times 30\% + 10,000 \times 35\% + (65,668 - 60,001) \times 40\% = 13,266.80 \text{ EUR}$. In the next Accounting period, the deferred payments for the toppings cancel out themselves, except of the safety stock to the extent of: $20\% \times 30 = 6.00 \text{ EUR}$. As a result, the taxable income is amounting to: $63,270 - 6 = 63,264.00 \text{ EUR}$. As the assets, such as stove, fridge and car, are sold at their carrying amounts to the new company, no taxable profit results from liquidations. The income taxes paid are: $20,000 \times 0 + 10,000 \times 20\% + 10,000 \times 25\% + 10,000 \times 30\% + 10,000 \times 35\% + (63,264 - 60,001) \times 40\% = 12,305.20 \text{ EUR}$.²

The tax payments for 20X3 and 20X4 are Mr Schluchman's personnel business. We determine taxes only to calculate the drawings as disclosed on the liquidity plan.

The appropriation of profits in 20X5 and 20X6 follows a half : half approach.

² Mr Schluchman can deduct the payments for toppings as expense in 20X5 from his personal income taxes. This gives him an individual taxable income of: $40,000 - 4,812.00 + 51,714.83 = 86,902.83 \text{ EUR}$. The income tax resulting from working in the company plus the loss from the application of 4.3-method are levied along the given income tax scheme. The same applies for the income from the company shares which is subject to the withdrawal tax for capital gains. We assume, Mr Schluchman is the only shareholder. For our simplified tax calculation, we ignore tax-free income and any personal characteristics of taxpayers as well as the

German reunion tax. We further assume the income tax on capital gains equals 25 %.

The tax liabilities of Mr Schluchman in 20X5 equal: $20,000 \times 0 + 10,000 \times 20\% + (40,000 - 4,812 - 30,001) \times 25\% + 25\% \times 51,714.83 = 3,296.75 + 12,928.71 = 16,225.46 \text{ EUR}$. The tax liabilities contain income tax and the tax on capital gains. The tax liabilities of Mr Schluchman are not relevant for the business plan of the company and, thus, do not appear thereon in 20X5 and 20X6.

Thus, half of the earnings after taxes are paid to the shareholders (Mr Schluchman only) and the other half is added to reserves.

The liquidity plan is displayed in Figure 4.

Liquidity plan	20X3	20X4	20X5	20X6
Opening value	10,000	9,651	40,000	243,800
<i>Proceeds</i>				
Revenue	109,800	109,800	440,000	522,500
Output-VAT			88,000	104,500
Output-VAT paid				(88,000)
<i>Car</i>				
Acquisition of the car	(21,200)	0	(11,200)	
<i>Stove</i>				
Acquisition of the stove	(1,500)	0	(1,500)	
Downpayment for stoves			(6,000)	
Input-VAT on stove refunded				2,000
Interest on stove	(60)	(40)	(240)	(160)
Pay-off of stove	(500)	(500)	(2,000)	(2,000)
Acquisition of the old fridge			(120)	
<i>Refrigerator</i>				
Acquisition of the fridges	(360)	0	(1,440)	(360)
Input-VAT on fridge refunded				240
<i>Materials</i>				
Payment for dough	(2,190)	(2,160)	(9,750)	(11,400)
Input-VAT refunded				1,625
Payment for toppings	(19,272)	(24,066)	(107,950)	(126,550)
Input-VAT refunded				17,992
Labour waiter/assistant	(14,400)	(14,400)	(144,000)	(171,000)
Payment for web agency	(2,400)	0	0	0
Payment for manager			(40,000)	(45,000)
Payment for dividend				(52,170)
Drawing for tax/ later: ITL	(48,267)	(47,305)		(44,717)
Liquidity	9,651	30,980	243,800	351,300

Figure 4: Mr Schluchman's /
MOBILE TARTE FLAMBEE GmbH's liquidity plan

The liquidity plan only shows payments and opening/closing balances. The opening value is the owner's contribution and the value in cash/bank resulting from prior Accounting periods. Next, we explain all numbers in Figure 5. The revenue is the basis for the calculation of proceeds. After the company registered for VAT, it starts to collect output-VAT from its customers and pays it accordingly to the

conventions in chapter (1) during the next Accounting period to the German revenue service.

The acquisition of the car takes place in 20X3 when the business opens. The car is bought in 20X5 by MOBILE TARTE FLAMBEE GmbH from Mr Schluchman. The cash input for the car sale in Mr Schluchman's private account is not relevant for the company's business plan. It is his own business. The business

plan only contains the payments made by him in 20X3/20X4 and MOBILE TARTE FLAMBEE GmbH's payments in 20X5/20X6. The latter one is with VAT consideration.

The payment for the stove is only half of the price following the payment terms above. Mr Schluchman pays the remaining price later. The instalments are shown as pay-off of the stove. The acquisition of 4 pizza-stoves during 20X5 leads to a payment of: $4 \times 3,000 / 2 = 6,000.00 \text{ EUR}$. The company pays only half of the price. The stove prices contain input-VAT to an extent of: $20\% \times 12,000 / 120\% = 2,000.00 \text{ EUR}$.³ MOBILE TARTE FLAMBEE GmbH receives a refund for input-VAT in 20X6 from the German revenue service. The instalments for the stoves are 500.00 EUR per stove and Accounting period. Mr Schluchman and MOBILE TARTE FLAMBEE GmbH pay interest on the owing amount. Interest is calculated in the cost plan already and is disclosed to the same value on the liquidity plan.

The first fridge is bought at 360.00 EUR. No VAT is relevant. It is later sold at carrying value of 120.00 EUR to MOBILE TARTE FLAMBEE GmbH by Mr Schluchman. The acquisition of the new fridges leads to a payment of: $4 \times 360 = 1,440.00 \text{ EUR}$. The payment contains: $20\% \times 1,440 / 120\% = 240.00 \text{ EUR}$ input-VAT as refunded in 20X6. The replacement fridge is bought in 20X6 at a price of 360.00 EUR. The input-VAT therein is a receivable on the balance sheet and expected for 20X7.

The material payments are for the dough and the toppings. The dough payment in 20X3 is higher to the extent

of 30.00 EUR because Mr Schluchman must buy the safety stock. In 20X5 the payment for the dough contains the dough plus safety stock – both including input-VAT. The price equals: $(8,000 + 125) \times 120\% = 9,750.00 \text{ EUR}$. The input-VAT therein to the extent of: $20\% \times 8,125 = 1,625.00 \text{ EUR}$ is refunded in 20X6. In the next Accounting period 20X6, the dough purchase is based on material costs only, as the safety stock is still in the fridge (consider FIFO). The gross amount is: $9,500 \times 120\% = 11,400.00 \text{ EUR}$. The input-VAT therein which is 1,900.00 EUR is a receivable on the balance sheet as at 31.12.20X6.

For the toppings, a 2-Accounting-Period-payment applies. The toppings cost (including waste and spoilage) plus the initial stock level are paid to an extent of 80 %. In the first Accounting period, the payment equals: $(24,060 + 30) \times 80\% = 19,272.00 \text{ EUR}$. In 20X4, the remaining 20 % of the 20X3 delivery are paid. No toppings must be stocked as the safety stock of toppings still exists. The price paid is: $(24,060 + 30) \times 20\% + 24,060 \times 80\% = 24,066.00 \text{ EUR}$. At the time of MOBILE TARTE FLAMBEE GmbH commences its operations, no safety stock of topping gets transferred. The price for the toppings contains the topping materials including waste plus the safety stock of 125.00 EUR. The price also contains input-VAT and adds up to: $(89,833.33 + 125) \times 120\% = 107,950.00 \text{ EUR}$. The payment includes an amount of 17,991.67 EUR input-VAT to be refunded in 20X6. In 20X6, no safety stock for toppings is paid for and the toppings payment equals: $105,458.33 \times 120\% = 126,550.00 \text{ EUR}$. The input-VAT

³ The timing of payments is irrelevant for VAT calculation.

portion therein equals: $20\% \times 126,550 / 120\% = 21,091.67 \text{ EUR}$ and is recorded as receivables on the balance sheet for 20X6.

The payment for labour equals to the labour costs. Dividends and taxes are paid one Accounting period delayed following our conventions in chapter (1). The owner, Mr Schluchman, takes a cash drawing to the extent of his personal income taxes in 20X3 and 20X4 plus

35,000.00 EUR/a. In 20X3, the drawing equals: $13,266.80 + 35,000 = 48,266.80 \text{ EUR}$. One year later the drawing is amounting to: $12,305.20 + 35,000 = 47,305.20 \text{ EUR}$.

Budgeted Balance Sheet – MTF GmbH

The budgeted balance sheet is depicted in Figure 5.

Budgeted balance sheet	20X3	20X4	20X5	20X6
P, P, E				
Stove (4)	2,250	1,500	7,500	5,000
old stove			750	0
Fridges	240	120	800	600
old fridge			0	
car	16,200	11,200	6,100	1,000
Inventory				
Dough	30	30	125	125
Toppings	30	30	125	125
Accounts receivables				
VAT receivables			21,857	23,052
Cash/Bank	9,651	30,980	243,800	351,300
Total assets	28,401	43,860	281,057	381,202
Share capital	10,000	10,000	40,000	40,000
Reserves			52,170	116,056
Retained earnings	12,583	28,548	0	0
Accounts payables				
output VAT			88,000	104,500
stove	1,000	500	4,000	2,000
dividend			52,170	63,886
A/P toppings	4,818	4,812		
Tax liabilities			44,717	54,760
Total equity and liabilities	28,401	43,860	281,057	381,202

Figure 5: Mr Schluchman's /
MOBILE TARTE FLAMBEE GmbH's balance sheet

The balance sheet shows the carrying values of the assets. The values are the cost of acquisition less accumulated depreciation. E.g., the carrying value for the car in the 20X3 equals: $21,200 - 5,000 = 16,200.00 \text{ EUR}$. Additionally, the

inventory values are provided which include the safety stocks. The value for VAT receivables in 20X5 contains the input-VAT for the stoves, the fridges, the dough and the toppings: $2,000 + 240 + 1,625 + 17,991.67 = 21,856.67 \text{ EUR}$. The

value for cash/bank can be taken from the liquidity plan.

*On the credit side, the balance sheet shows an issued capital of 10,000.00 EUR for the privately-owned business and of 40,000.00 EUR share capital. The line retained earnings contains the profit less drawings in the first periods and a zero for the Accounting periods 20X5 and 20X6 – due to the full appropriation of profits. The reserves contain the portions of the profits that are not distributed to the shareholders. In 20X6, the reserves equal: 52,169.83 + 63,886.08 = **116,055.91 EUR**.*

The liabilities are displayed separately and are easily understandable. The short-term liabilities are linked to output-VAT, liabilities to suppliers and shareholders and for toppings payments scheduled for the next Accounting period and resulting from the previous one. The tax liabilities only appear at MOBILE TARTE FLAMBEE GmbH, as Mr Schluchman is privately obliged to pay taxes.