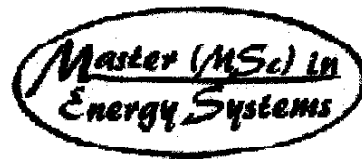


Business Administration



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Analysis of price-rise in German gastronomy caused by the €-introduction in 2002

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Introduction

With the change from “Deutsche Mark” (DM) to Euro (€) the prices in the gastronomy is calculated from DM to Euro in the rate of 1€ is 1.95583 DM. This calculation is from many gastronomies used to increase the price in the way that the consumer should not take notice of it. Nevertheless most consumers recognized a price increase however nobody was able to proof this feeling with adequate data. This analysis present this comparison data from selected bars and restaurants.

During this report we will analyze the reasons the price increase like increased costs and purchase prices caused by the Euro introduction. As a survey we will talk about possible other reasons for the price increase like making more profits. We also will discuss the consequence of this price increase related to the reasons.

Analysis of an existing business

The first existing business we analyzed is a cafe. The café is in a small rural town. The “business form” is a GbR (Gesellschaft bürgerlichen Rechts - Enterprise under the Civil Law).

The cafeteria has following opening hours:

- Monday to Friday: 2.00 pm – 6.00 pm
- Saturday and Sunday: 1.00 pm – 6.00 pm

It has 22 tables with 4 seats each, resulting in 88 seats.

According to the owner, there is an average of one „table-change“ per hour, which means

- 352 possible costumers per day during the week
- 440 possible costumers per day during the weekend

Profit & loss comparison between 2000 & 2003

Description	2000 in DM	2000 in €	2003 in €	Change	
				absolute	in %
Umsatzerlöse (Sales profits)	742.516,44 DEM	379.642,63 €	365.312,34 €	-14.330,29 €	-3,77%
Eigenleistungen (Own capital)	0,00 DEM	0,00 €	0,00 €	0,00 €	0,00%
Gesamterzeugung (Total output)	742.516,44 DEM	379.642,63 €	365.312,34 €	-14.330,29 €	-3,77%
Wareneinkauf (Goods purchase)	465.354,75 DEM	237.932,10 €	216.235,35 €	-21.696,75 €	-9,12%
Rohertrag (Gross profit)	277.161,69 DEM	141.710,52 €	149.076,99 €	7.366,47 €	5,20%
Sonstige betriebliche Erlöse (Other operational proceeds)	15.562,20 DEM	7.956,83 €	0,00 €	-7.956,83 €	-100,00%
Betrieblicher Rohertrag (Operational gross profit)	292.723,89 DEM	149.667,35 €	149.076,99 €	-590,36 €	-0,39%
Kostenarten (Cost categories):					
Personalkosten (Personnel costs)	158.257,13 DEM	80.915,59 €	67.093,98 €	-13.821,61 €	-17,08%
Raumkosten (Room costs)	35.311,52 DEM	18.054,49 €	27.300,00 €	9.245,51 €	51,21%
Betriebl. Steuern (Operational taxes)	400,00 DEM	204,52 €	280,76 €	76,24 €	37,28%
Versicherung (Insurance)	4.017,08 DEM	2.053,90 €	2.568,72 €	514,82 €	25,07%
Besondere Kosten (Special costs)	0,00 DEM	0,00 €	0,00 €	0,00 €	0,00%
KFZ-Kosten ohne Steuern (Car costs w/o taxes)	4.992,29 DEM	2.552,52 €	11.964,39 €	9.411,87 €	368,73%
Werbe- / Reisekosten (Publicity expenses / Travel expenses)	2.295,05 DEM	1.173,44 €	244,77 €	-928,67 €	-79,14%
Kosten Warenabgabe (Costs - Goods Delivery)	0,00 DEM	0,00 €	0,00 €	0,00 €	0,00%
Abschreibungen (Depreciation)	0,00 DEM	0,00 €	10.699,32 €	10.699,32 €	
Reparatur / Instandhaltung (Repair / Maintenance)	1.357,55 DEM	694,10 €	0,00 €	-694,10 €	-100,00%
Sonstige Kosten (Other costs)	36.685,32 DEM	18.756,91 €	7.204,47 €	-11.552,44 €	-61,59%
Gesamtkosten (Total costs)	243.315,95 DEM	124.405,47 €	127.356,41 €	2.950,94 €	2,37%
Betriebsergebnis (Operating result)	49.407,95 DEM	25.261,88 €	21.720,58 €	-3.541,30 €	-14,02%
Zinsaufwand (Interest)	230,63 DEM	117,92 €	1.804,71 €	1.686,79 €	1430,48%
Sonstiger neutraler Aufwand ("Other neutral expenditure")	0,00 DEM	0,00 €	0,00 €	0,00 €	0,00%
Neutraler Aufwand ("Neutral expenditure")	230,63 DEM	117,92 €	1.804,71 €	1.686,79 €	1430,48%
Zinserträge (Interest yields)	6,44 DEM	3,29 €	3,30 €	0,01 €	0,22%
Sonstige neutrale Erträge (Other neutral yields)	0,00 DEM	0,00 €	0,03 €	0,03 €	
Neutraler Ertrag ("Neutral yield")	6,44 DEM	3,29 €	3,33 €	0,04 €	1,13%
Kontenklasse 5/6 (Account category 5/6)	0,00 DEM	0,00 €	0,00 €	0,00 €	0,00%
Ergebnis vor Steuern (Result w/o taxes)	49.183,76 DEM	25.147,26 €	19.919,20 €	-5.228,06 €	-20,79%
Steuern Einkauf und Ertrag ("Taxes Purchase / Yield")	0,00 DEM	0,00 €	0,00 €	0,00 €	0,00%
Ergebnis (ohne Abschreibungen) (Result w/o depreciation)	49.183,76 DEM	25.147,26 €	19.919,20 €	-5.228,06 €	-20,79%
Abschreibung (Depreciation)	0,00 DEM	0,00 €	10.699,32 €	10.699,32 €	
Ergebnis (inkl. Abschreibungen) (Result with depreciation)	49.183,76 DEM	25.147,26 €	30.618,52 €	5.471,26 €	21,76%

Table 1 - Profit & loss comparison between 2000 & 2003

This table shows that the total output from 2000 to 2003 decreased by 4%. This means that less consumers visited the cafeteria. Due to that fact, the goods purchase decreased by 9%, which leads to an increase of 5% of the gross profit. In addition to that the operational gross profit decreased.

The most important data in this table are the total costs, which increased by 2,3% although the personnel costs decreased by 17%, the publicity expenses decreased by 79% and the other costs decreased by 61%. The reason for the decrease of the personnel costs is due to the fact the less consumers visited this café in the year 2003 compared to 2000. An other reason for the cost increase can be seen by the increase of the car cost without taxes and the increase of the depreciation.

This increase is due to the fact that probably during 2000 and 2003 an additional car was bought.

Further can be seen that the neutral expenditure and yield increased due to the interest, leading to a decreasing profit w/o depreciation by 20,79%.

Due to a depreciation in 2003 the profit with depreciation increased by 21,76%. This depreciation is as already mentioned related to the new car.

Selling price comparison between 2000 & 2003

Beverages

Description	2000 in DM	2000 in €	2003 in €	Change	
				absolute	in %
Warm beverages					
Cup of coffee	1,90 DEM	0,97 €	1,25 €	0,28 €	28,67%
Pot of coffee	3,80 DEM	1,94 €	2,50 €	0,56 €	28,67%
Espresso	2,00 DEM	1,02 €	1,25 €	0,23 €	22,24%
Cappuccino	2,40 DEM	1,23 €	1,50 €	0,27 €	22,24%
Cup of chocolate with cream	2,40 DEM	1,23 €	1,50 €	0,27 €	22,24%
Cup of chocolate w/o cream	2,10 DEM	1,07 €	1,30 €	0,23 €	21,08%
Pot of chocolate with cream	4,80 DEM	2,45 €	3,00 €	0,55 €	22,24%
Pot of chocolate w/o cream	4,20 DEM	2,15 €	2,60 €	0,45 €	21,08%
Tea (different sorts)	1,90 DEM	0,97 €	1,25 €	0,28 €	28,67%
"Russian chocolate"	5,80 DEM	2,97 €	3,30 €	0,33 €	11,28%
Irish Coffee	5,80 DEM	2,97 €	3,30 €	0,33 €	11,28%
Cold beverages					
Milk / cacao	1,40 DEM	0,72 €	0,80 €	0,08 €	11,76%
Ice tea	2,50 DEM	1,28 €	1,35 €	0,07 €	5,61%
"Coca-Cola", lemonade, water (0,2 l)	1,90 DEM	0,97 €	1,25 €	0,28 €	28,67%
Juices (0,25 l)	2,50 DEM	1,28 €	1,35 €	0,07 €	5,61%
Alcoholic drinks					
Beer (0,33 l)	2,30 DEM	1,18 €	1,45 €	0,27 €	23,30%
Liquor (0,02 l)	1,50 DEM	0,77 €	1,00 €	0,23 €	30,39%
Champagne (0,2 l)	6,90 DEM	3,53 €	3,90 €	0,37 €	10,55%
Average values				0,31 €	22,01%

Table 2 – Selling price comparison between 2000 & 2003 - Beverages

Pastries, cakes and ice cream

Description	2000	2000	2003	Change	
	in DM	in €	in €	absolute	in %
Pastries and cakes					
Portion cream	0,80 DEM	0,41 €	0,40 €	0,04 €	10,02%
Pastry ("Teilchen") (different sorts)	2,50 DEM	1,28 €	1,55 €	0,27 €	21,26%
Piece of cake (different sorts)	2,90 DEM	1,48 €	1,85 €	0,37 €	24,77%
Ice cream					
1 ball of ice cream	1,00 DEM	0,51 €	0,65 €	0,14 €	27,13%
Milk shake (different sorts)	3,50 DEM	1,79 €	2,20 €	0,41 €	22,94%
Mixed sundae with cream	3,20 DEM	1,64 €	1,95 €	0,31 €	19,18%
Mixed sundae w/o cream	3,80 DEM	1,94 €	2,40 €	0,46 €	23,53%
Ice coffee	3,80 DEM	1,94 €	2,40 €	0,46 €	23,53%
Sundae with fruits	5,20 DEM	2,66 €	3,20 €	0,54 €	20,36%
Special kind of sundae ("Hausbecher")	5,80 DEM	2,97 €	3,60 €	0,63 €	21,40%
Average values				0,37 €	22,58%

Table 3 – Selling price comparison between 2000 & 2003 – Pastries, cakes and ice cream

In 2003 there was an average selling price increase for beverages as well as for pastries and cakes of about 22%.

Interesting is the fact, that the most selling articles, like coffee, tea and ice-cream have the highest price increase. This means that the real price increase for the normal consumer is much higher than the 22% average price increase.

Purchase price comparison between 2000 & 2003

Beverages

Description	2000 in DM	2000 in €	2003 in €	Change	
				absolute	in %
Warm beverages					
Coffee (6 kg)	17,90 DEM	9,15 €	8,40 €	-0,75 €	-8,22%
Coffee (6 kg) w/o coffein	19,90 DEM	10,17 €	10,18 €	0,01 €	0,05%
Espresso (6 kg)	20,90 DEM	10,69 €	11,20 €	0,51 €	4,81%
Cappuccino (6 kg)	20,90 DEM	10,69 €	11,20 €	0,51 €	4,81%
Tea (200er Package)	20,58 DEM	10,52 €	11,50 €	0,98 €	9,29%
"Russian chocolate" (Package)	45,90 DEM	23,47 €	22,60 €	-0,87 €	-3,70%
Warm beverages - Accessories					
Sugar (Package)	36,13 DEM	18,47 €	18,75 €	0,28 €	1,50%
Cacao (10 kg)	10,90 DEM	5,57 €	5,77 €	0,20 €	3,53%
Coffee cream (Package)	9,95 DEM	5,09 €	5,00 €	0,00 €	0,05%
Cold beverages					
Milk / cacao (0,5 l)	0,72 DEM	0,37 €	0,40 €	0,03 €	8,66%
Ice tea (1 l)	1,16 DEM	0,59 €	0,65 €	0,06 €	9,59%
"Coca-Cola", lemonade (18 l container)	37,55 DEM	19,20 €	18,63 €	-0,57 €	-2,96%
Water (18 l container)	28,43 DEM	14,54 €	13,99 €	-0,55 €	-3,76%
Cold beverages - Accessories					
Carbonic acid (Container)	44,00 DEM	22,50 €	20,20 €	-2,30 €	-10,21%
Alcoholic drinks					
Beer (Package)	20,75 DEM	10,61 €	10,97 €	0,36 €	3,40%
Liquor (25er Package)	17,00 DEM	8,69 €	8,75 €	0,06 €	0,67%
Champagne (Package)	2,29 DEM	1,17 €	1,29 €	0,12 €	10,18%
Average values				-0,14 €	4,25%

Table 4 – Purchase price comparison between 2000 & 2003 – Beverages

Pastries, cakes and ice cream

Description	2000 in DM	2000 in €	2003 in €	Change	
				absolute	in %
Pastry and cakes					
Cake (Raspberry-Cheese-Cream - "Himbeer-Käse-Sahne")	22,05 DEM	11,27 €	11,48 €	0,21 €	1,83%
Ice cream					
Ice cream (5 l container)	21,15 DEM	10,81 €	11,08 €	0,27 €	2,46%
Ice cream - Accessories					
Cream (8 l container)	3,95 DEM	2,02 €	2,28 €	0,26 €	12,89%
Sauces (strawberry, chocolate) (Container)	16,48 DEM	8,43 €	7,69 €	-0,74 €	-8,74%
Wafer (500er package)	15,90 DEM	8,13 €	8,69 €	0,56 €	6,89%
Average values				0,63 €	3,07%

Table 5 – Purchase price comparison between 2000 & 2003 – Pastries

In 2003 there was an average purchase price increase for beverages compared to the year 2000 of about 4% and for pastries and cakes of about 3% which is not an unusual price effect in this business compared to the normal inflation rate.

According to data from the „Statistisches Bundesamt“^{1,2} the production costs and therefore the purchase prices increased by 4,1%, which justifies the data mentioned above. In detail the price development is like following:

- coffee: - 15%
- food: + 7,3%
- milk: + 7,1%
- beverages: + 4,9%
- pastries: + 4%

Both data shows for explicit that the coffee during this time period decreased. However the most increased items in the café were the coffee products.

This example of the café shows that although the costs and the purchase price had only a slight rise the selling price increase was much higher than necessary for this situation. This refers to the conclusion that the Euro introduction was used to make more profit by higher prices. But as this example shows that less consumers visited the café and there although the price increased the sales profit decreased. This means that this act was contra productive.

Additional examples

Restaurant

The restaurant of this example is located in a medium sized town. It has an upper class audience and has a good location site.

Description	2000 in DM	2000 in €	2004 in €	Change	
				absolute	in %
Cold beverages					
"Coca-Cola", water (0,2 l)	2,50 DEM	1,28 €	1,70 €	0,42 €	33,00%
Lemonade (0,2 l)	2,50 DEM	1,28 €	1,40 €	0,12 €	9,53%
Alcoholic drinks					
Beer (0,2 l)	2,50 DEM	1,28 €	1,40 €	0,12 €	9,53%
Wine (0,2 l)	6,00 DEM	3,07 €	4,20 €	1,13 €	36,91%
Champagne (0,1 l)	6,00 DEM	3,07 €	3,10 €	0,03 €	1,05%
Average values				0,22 €	9,46%

Table 6 – Selling price comparison between 2000 & 2003 – Additional example - Restaurant

In this example it can be seen that the average price increase is about 9.5%. It is obvious that the prices of popular articles increased more than the other prices.

Bar

The bar of this example is located in a medium sized town. The audience of this bar are mostly young people. It is also an event location.

Description	2000 in DM	2000 in €	2002 in €	Change	
				absolute	in %
Cold beverages					
"Coca-Cola", water (0,3 l)	3,50 DEM	1,79 €	3,50 €	1,71 €	95,58%
Lemonade (0,3 l)	3,50 DEM	1,79 €	3,50 €	1,71 €	95,58%
Orange juice (0,2 l)	3,50 DEM	1,79 €	3,50 €	1,71 €	95,58%
Alcoholic drinks					
Beer (0,33 l)	3,50 DEM	1,79 €	3,50 €	1,71 €	95,58%
Wine (0,2 l)	7,00 DEM	3,58 €	7,00 €	3,42 €	95,58%
Champagne (0,1 l)	7,00 DEM	3,58 €	7,00 €	3,42 €	95,58%
Average values				0,88 €	95,55%

Table 7 – Selling price comparison between 2000 & 2002 – Additional example - Bar

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Description	2002 In €	2004 in €	Change	
			absolute	in %
Cold beverages				
"Coca-Cola", water (0,3 l)	3,50 €	2,10 €	-1,40 €	-40,00%
Lemonade (0,3 l)	3,50 €	2,10 €	-1,40 €	-40,00%
Orange juice (0,2 l)	3,50 €	2,50 €	-1,00 €	-28,57%
Alcoholic drinks				
Beer (0,33 l)	3,50 €	2,30 €	-1,20 €	-34,29%
Wine (0,2 l)	7,00 €	3,20 €	-3,80 €	-54,29%
Champagne (0,1 l)	7,00 €	3,40 €	-3,60 €	-51,43%
Average values			-0,57 €	-36,61%

Table 8 – Selling price comparison between 2002 & 2004 – Additional example - Bar

Description	2000 in DM	2000 in €	2004 in €	Change	
				absolute	in %
Cold beverages					
"Coca-Cola", water (0,3 l)	3,50 DEM	1,79 €	2,10 €	0,31 €	17,35%
Lemonade (0,3 l)	3,50 DEM	1,79 €	2,10 €	0,31 €	17,35%
Orange juice (0,2 l)	3,50 DEM	1,79 €	2,50 €	0,71 €	39,70%
Alcoholic drinks					
Beer (0,33 l)	3,50 DEM	1,79 €	2,30 €	0,51 €	28,53%
Wine (0,2 l)	7,00 DEM	3,58 €	3,20 €	-0,38 €	-10,59%
Champagne (0,1 l)	7,00 DEM	3,58 €	3,40 €	-0,18 €	5,00%
Average values				0,19 €	19,37%

Table 9 – Selling price comparison between 2000 & 2004 – Additional example - Bar

In table 7 it is shown that the bar converted the price one to one from DM to Euro. With this conversion the new price was 95.6% higher than the previous one. The comparison from the year 2002 and 2004 shows that the prices were decreased by 36.6%. Probably the reasons for this act was the decrease of consumers due to the high price in 2002.

Although this bar decreased their prices between 2002 and 2004 the comparison between 2000 and 2004 still show a high price increase by 19.4%.

Also in this example it is verified by the data that for the most popular articles in the bar (e.g. Orange juice (39.7%), beer (28.5%)) there is the highest price increase.

Influences on price

The example of the café showed by increasing the selling price less consumers visited the café. This means that it is hardly possible to increase the price and get more profit and having the same amount of consumers.

The determination of the optimal price in a special region is influenced by the following factors:

- Income of the people
- Importance of the location
- Competition

Income of the people

The following “price-income-consumption-curve” shows that:

- there is more consumption by increasing the income
 - the price can be higher to have the same consumption as with lower income.
- by increasing the price the consumption get less
- by decreasing the price the consumption increase

Price-Income-Consumption-Curve

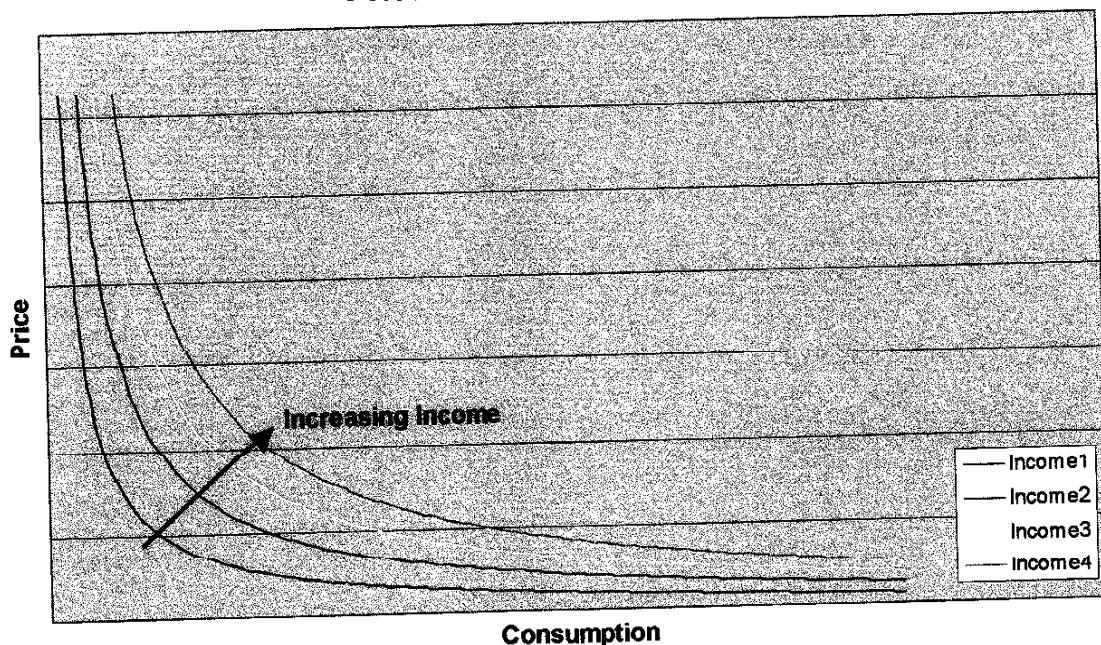


Fig. 1 – Price-income-consumption-curve³

Relation of location, competition and purchase power

Regarding the above mentioned factors, we developed an easy price equation. This calculation should show the relation between different factors and towns.

Beginning with the purchase price of a product we introduce factors for location, competition and purchase power (0 is the lowest – 3 is the highest (except competition)).

The purchase price is then multiplied with these factors to calculate an example for the selling price in a restaurant or a bar.

$$\text{Purchase price} \times \text{Location factor} \times \text{competition factor} \times \text{purchase power factor} = \text{Price}$$

	Purchase price of a cup of cappuccino	Location	Competition	Purchase power	Resulting price
Paris	0,25 €	3	2	3	4,50 €
Barcelona	0,25 €	2,5	2	3	3,75 €
Jülich	0,25 €	1	3	2	1,50 €

Table 10 – Examples for selling price calculation based on introduced factors

Summary and conclusion

Realcase examples prove an incorrect price increase by the introduction of the Euro in order to make more profit.

In the presented business examples can be seen, that by increasing the price the amount of consumers decrease. Therefore the profit is decreased, which is not productive.

The problem is now, that the prices can not be decreased again, because that would indicate the high price increase in order to make more profit.

The determination of the price for a product is a sensitive subject which has consider all kinds of influencing factors. Nevertheless the consumption is decreasing without changing one factor influencing the price.

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