

Calculation of the Lost Profit in Business Damage Cases

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Abstract:

This article deals with the method of calculating lost profits, or determining the relevant basic formula, respectively. The aim is to summarise the knowledge about the used calculations, evaluate them and comment on the possibility of their use with regard to the purpose of the prepared calculation of economic damage and the nature of the economic damage case, respectively. The link of the area of quantification of economic damages with a certain legislative framework naturally follows from the very subject of the economic research, *i.e.* damage. I will examine the above within the legislation of the Czech Republic, which uses different terms related to economic damage and which represent different levels/categories of damage. Based on a search of the relevant literature and the case law, the intention of this article is to determine which parts of the calculation represent the levels/categories of damages that may be caused and the impact of this categorisation on the appraiser's overall approach to the quantification of appropriate damages and the complexity of proving.

Keywords: Economic Damage; Actual Damage; Lost Profits; Level of the Damage; Category of the Damage; Formula.

JEL classification: G30.

1 Introduction

Although the formula could be viewed as a simple calculation, *i.e.* subtracting from the value of either the company or the stream of lost profits the value of the company or the profits actually achieved during the period affected by the loss event, in many cases the company generates costs that are directly caused by the loss event, or the company, in an effort to eliminate the effects of such a loss event, generates revenues that it would not have achieved in the normal course of business as it would not be able to engage in such activities.

Based on a search of the available literature, it can be stated that most of the formulas focus on the calculation of lost profits in a perfect condition and the question of whether this is a calculation of lost profits in perfect condition or a calculation of

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compensation that the injured party should receive therefore does not get resolved. The fact that this is likely to be a quantification of the total compensation can be deduced from the description of the available methods reported, which indicate the need to compare the two economic conditions/situations. Within the selected literature, *e.g.* Pratt *et al.* (1998), Gaughan (2009), Everett (2011), or Fannon and Dunitz (2014), there are specific designations for the methods that are used in determining the amount of damage. These are the Before-and-After Method, which is based on the analysis of past results for the projection of expected profits and a comparison of these projected profits with the actual development of the surveyed company, the Yardstick (Comparable) Method, which bases the projection of lost profits on the performance of comparable enterprises, and the “But For” Method, which is based on the projection of what the normal course of events would look like if it were not the harmful event.

Based on the literature search, it can be stated that the majority of research is devoted primarily to the method of calculating sales which the injured party would have generate if it were not for the harmful events; *e.g.* Blair and Esquibel (1994). The creation of the formula is mainly associated with the projection of basic quantities into the DCF model (Boudreaux *et al.*, 2000).

The need to examine the structure of the calculated lost profit or the assumption of a different method of the calculation for the individual components of the final calculation could be inferred in the case of the stated limiting factors. Many authors comment on the limitations for determining the amount of damage based on the market valuation. However, according to Kantor (2008), one of the limiting factors is the failure to take into account the preventive obligation – the injured party must try to prevent the effects of damage. Therefore, the actual situation must be taken into account and reflected in the resulting calculation.

The importance of identifying the individual types of damage within the structure of economic damage is given by the different way of proving and by the demands for economic analysis. Although this does not apply solely to the Czech legislation, the terms “lost profit” and “actual damage” are in fact to the Czech legislation specific.

The presented case study will assess the effects of different perceptions of definitions on the overall quantification of economic damage or lost profits, respectively.

2 Data and Methodology

Although it is possible to be inspired by foreign literature in order to choose the methodology for determining the amount of damage, it is necessary to adapt the presented methodologies mainly to the valid legislation and the established case law, or to clearly state why it is not possible to apply the case law, because I consider it indisputable that the methodology should still respect economic theories and, above all, practice itself. At the same time, however, I am also considering a situation where a Czech appraiser/expert will calculate a compensation for the needs of international arbitrations.

Liability for damage and compensation for damage is regulated in Title III of Act No. 89/2012 Coll., The Civil Code (hereinafter also referred to as the “Civil Code”).

In the following text I present selected provisions of this Act:

- According to Article 2894 Section 1: “The duty to provide compensation to another for harm shall always involve the duty to provide compensation for harm to assets and liabilities (compensation for damage).”
- According to Article 2910: “A tortfeasor who is at fault for breaching a statutory duty, thereby interfering with an absolute right of the victim, shall provide compensation to the victim for the harm caused. A tortfeasor also becomes obliged to provide compensation if he interferes with another right of the victim by a culpable breach of a statutory duty enacted to protect such a right.”
- According to Article 2913 Section 1: “If a tortfeasor acts in a manner different from what can be reasonably expected in private dealings from a person of average qualities, he is presumed to be acting negligently.”
- According to Article 2952: “The actual damage and what the victim lost (lost profit) is paid. If the actual damage consists in the creation of a debt, the victim has the right to be released from the debt or provided with compensation by the tortfeasor. ”

The legislation cited above does not define in more detail the terms actual damage and lost profit, which are commonly used in practice, so it is necessary to proceed from the settled case law of the courts of the Czech Republic and professional legal literature.

In legal theory and practice, damage means harm that has occurred in the property sphere of the injured party and it is objectively expressible by the general equivalent, *i.e.* money. It is the resulting reduction of the damaged property and is repairable by providing property benefits (money).¹

¹ See, for example, the Opinion of the Supreme Court of the Czechoslovak Socialist Republic Cpj 87/70, published under No. 55 in the Collection of Judicial Decisions and Opinions, 1971.

The damage thus manifests itself as:

- **Actual damage** – the occurrence of a reduction in the property of the injured party; represents the property value needed to restore it to its previous condition, or to balance the consequences of failure to restore.
- **Lost profit** – lost property benefit, consisting in the non-sudden increase in the property of the injured party, which could be reasonably expected in the event of a loss with regard to the regular course of things.² In addition, the lost profit presupposes that the property benefit that was reasonably expected has been definitively lost³ and must be determined in such a way as to determine the probable amount approaching certainty⁴ according to normal reasoning. The amount of lost profit is determined on the basis of total expected business revenues reduced by expected costs. Its amount is given by the difference between the total income from the business and the costs needed to achieve this income, regardless of whether these costs were actually incurred by the injured party or not.

However, if the injured party has incurred certain costs which could have been used to generate business income but have not been used as a result of the loss event and have not been reimbursed by business income, this is actual damage to which the injured party is entitled, provided that this damage is causally related to the loss event. It is therefore possible that the injured party may lose the profit and at the same time suffer real damage consisting in incurring unnecessary costs.

The right to compensation for lost profits and actual damage (see Article 2952 of the Civil Code) are separate claims, independent of each other, both can arise from the same loss event, the existence of actual damage is not a prerequisite for lost profits, and vice versa.

The situation as it was before the damage occurred is therefore decisive for the quantification of the lost profit.

The current legislation wording of the appropriate provisions of the relevant regulation, respectively (and similarly wording of the insurance conditions in the case of insurance companies, the) may be crucial for determining the quantification procedure. This statement mainly concerns the original laws valid until the end of 2013, namely Act No. 513/1991 Coll., The Commercial Code, and Act No. 40/1964 Coll., The Civil Code, whose provisions concerning compensation for damage resp. the interpretation of these provisions could be used in the selection of some

² See, for example, Supreme Court Decision R 55/1971.

³ See, for example, the decision of the Supreme Court of the Czech Republic No. 30 Cdo 1151/2009 or 25 Cdo 2846/2008.

⁴ See, for example, the decision of the Supreme Court of the Czech Republic No. 2 Odon 15/96.

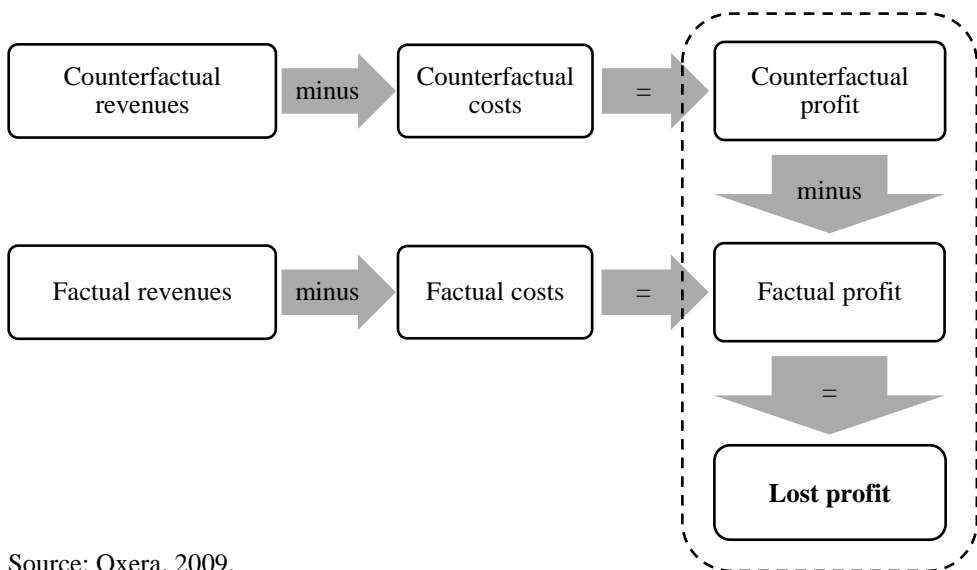
parameters, which will be discussed in more detail below. At present, under the new Civil Code, Act No. 89/2012 Coll., some of these provisions have disappeared. However, it can be assumed that the current decision of the courts will be based on the existing case law. The methodology for determining the amount of damage in terms of lost profits should therefore reflect the relevant provisions of applicable legislation, or correspond to the case law, but should still respect economic theories and, above all, practice itself.

Lost profit represents the amount by which the injured party's assets would potentially increase if the infringement had not taken place. The loss of profit is the result of a comparison between the natural (perfect) condition and the consequences of a loss event (defective condition). Lost profit is economic damage to the affected person's property, the term “profit” is understood in economic, not accounting terms, and it is based on cash flows that could be achieved in a perfect condition.

The economic framework for calculation of lost profit was given by the study “Quantifying antitrust damages towards non-binding guidance for courts” prepared by Oxera Consulting LLP for the European Commission.

From the economic point of view, the lost profits can arise either from increased costs or from reduced revenues, or from both. The effect of increased costs or reduced revenues is a reduction of profit or an increase in loss. The basic economic framework can be shown in the following scheme in Fig. 1.

Fig. 1 Formula for the calculation of lost profit



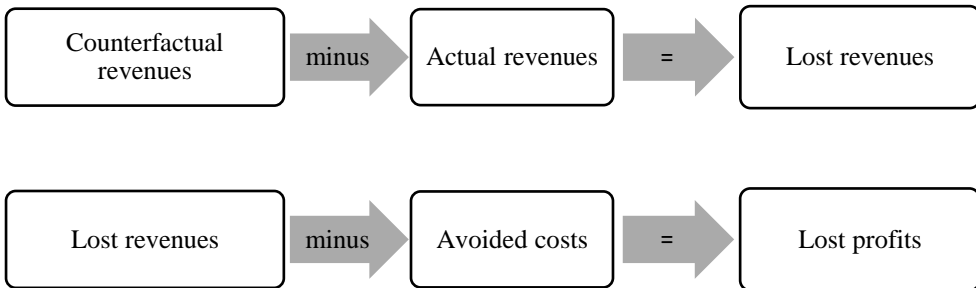
Source: Oxera, 2009.

The abovementioned scheme shows that the lost profit is given by the difference between the counterfactual profit and the factual profit.

The counterfactual profit is calculated as the difference between counterfactual revenues, *i.e.* revenues the company would generate in the absence of the harmful incident, and the counterfactual costs, *i.e.* the costs the company would have to incur in such a hypothetical situation. The factual profit is calculated as a difference between the factually generated revenues and factually incurred costs for the duration of the harmful incident.

The formula can be also rearranged as shown in the following scheme in Fig. 2.

Fig. 2 Rearranged formula for the calculation of lost profit



Source: Oxera, 2009.

In this scheme the lost profit is expressed as a difference between lost revenues and avoided costs. Avoided costs are the costs that were not incurred due to the decrease in revenues compared to the hypothetical situation. This re-arranged formula has the advantage of requiring less detailed knowledge of the cost structure of the company.

The main principle of the income approach is based on an estimate of cash flows from the future business activities of the company, and their transfer to the present value. The valuation process is as follows. Firstly, it is necessary to define the subject of valuation. An expert should also estimate the likely cash flow of the subject of valuation and its timing. The last step is to calculate the net present value of expected cash flow of the subject of valuation.

To determine the amount of damage in terms of lost profits of the company, the DCF method could be used as the most reliable one (Kantor, 2008). Discounted cash flow (DCF) analysis uses projections of future free cash flows and discounts them (most often using the weighted average cost of capital) to arrive at a present value. The cost method will be used to determine the actual damages, *i.e.* reduction of the

existing property damaged in comparison to what was there before the damage. Loss of earnings is understood as the difference between the discounted net revenue that could be implemented without the damaging event, and discounted net revenues, which were generated with respect to the incident.

With regard to the length of the assessment period, I define the loss of profit of the company based on the above presented formula in Fig. 1, respectively, as follows (this is already the aggregate discounted value) – responds to the Option 2 in the case study:

$$LP = (R_{pc} - E_{pc}) - (R_{ac} - E_{ac}), \quad (1)$$

where LP is loss of profits of the company for the period; R_{pc} means the company's overall income/revenues that would have been generated during the period without the loss event (for a perfect condition); E_{pc} means overall expenses/costs of the company that would have been spent efficiently to achieve the revenue generated without the loss event, during the period (for a perfect condition); R_{ac} means overall income/revenues of the company, which were actually generated during the period and E_{ac} means overall actual costs/expenses of the company that were generated over the period.

In terms of the data and calculations used, it is necessary to interpret the meaning of the individual parts of the formula in accordance with the Czech legislation and the case law.

Based on the performed case study, the following can be stated:

- In Formula (1), the part $(R_{pc} - E_{pc})$ is mainly used to determine the amount of lost profit.
- In Formula (1), the part $(R_{ac} - E_{ac})$ must be examined according to the following levels of sales and costs.

If the company generates revenues in the event of a loss, it is necessary to assign to them the corresponding costs, which should be covered by these revenues. The loss of profit calculated according to the part of the formula $(R_{ac} - E_{ac})$.

Thus, the lost profit according to the Czech legislation – which responds to the Option 1 in the case study – could be calculated as:

$$LP = (R_{pc} - E_{pc}) - (R_{ac} - E_{Rac}), \quad (2)$$

where E_{Rac} means costs incurred to achieve revenue R_{ac} .

E_{ac} may also include costs incurred exclusively in connection with the loss event. The definition of these is necessary in the event that the company would otherwise be able to generate only such costs that are covered by revenues, e.g. from

replacement activities. These costs correspond to the definition of actual damage – responds to the Option 1 in the case study:

$$AD = E_{le} + E_{nr} = E_{ac} - E_{Rac}, \quad (3)$$

where AD is actual damage; E_{le} means costs that are solely caused by the loss event and E_{nr} means costs generated during the loss period that cannot be reduced.

If the company generates costs during the loss period that cannot be reduced (mainly due to maintaining capacity for the further operation of the company), these costs correspond more to the definition of actual damage.

It follows that the E_{ac} contains the following items:

$$E_{ac} = E_{Rac} + E_{le} + E_{nr}. \quad (4)$$

Based on the above, it can be stated that in the case of using the statements of the whole company, the formula leads to the calculation of total compensation,

- regardless of whether it is lost profits or actual damage,
- regardless of the legislation of the country.

The necessary starting point is that the statements used are prepared for one functional unit.

3 Case Study

Based on the above, the question is which documents I can use to compare the defective/actual and perfect conditions.

In my case, the harmful event is the execution of work on the land of the company whose lost profit I am examining. The subject of this company's activity is the operation of a golf course. The execution of excavation work will affect the operation of the company in such a way that it will not be able to carry out its activities for at least one year. However, possible losses in the volume of clients will affect the operation of the company in the years to come.

An important starting point is that the loss event affected the operation of the whole company.

Since the defective/actual condition is *de facto* documented financially by the financial statements, namely the profit and loss statement, I will use the profit and loss statement for the actual condition and the profit and loss statement which would be created for the perfect condition for the application of the above formula in Fig. 1.

In the case of determining the amount of compensation, it is necessary to define the so-called perfect condition. This is a state which can be reasonably assumed in the absence of a condition (failure) considered by the injured party as a loss event. For

the purposes of this article, considered as the perfect condition will be a situation in which excavation work is not carried out and the golf course is subsequently restored to its original condition. An expert considers in a defective condition a situation where the company is forced to completely interrupt its activities and there comes to a subsequent loss of customers.

The definition of a perfect condition is an estimate of the development of the company's business activities, provided that no harmful conduct has occurred.

3.1 Actual condition

Tab. 1 shows an overview of individual income and expense items and the amount of profit before tax that the company achieved during the loss period.

Tab. 1 Actual revenues in CZK

	2019 ac	2020 ac	2021 ac
Total revenues	2,208,328	14,481,537	22,149,686
Fee for the field, entry to the DR, chips	1,058,372	2,158,389	3,301,283
Fee for GCCM members	499,481	1,018,617	1,557,987
Other operating income	10	21	33
Lease space	0	895,372	1,369,482
Promotion and advertising	0	6,612,846	10,114,428
Commissions, benefits	0	6,237	9,539
Energy re-invoicing	470	958	1,466
Trainings	25,309	64,518	98,681
Revenue from the restaurant	445,278	2,270,194	3,472,288
Revenue from renting a playground during training lessons	259	660	1,010
Revenue from renting a buggy	76,945	156,917	240,007
Revenue from golf services (locker, non-competitive result, entry fee, ...)	99,410	202,731	310,079
Revenues from sales of services	0	1,065,584	1,629,823
Sales of goods	31	320	490
Sales of goods – golf accessories	2,763	28,172	43,090

Source: Company information.

Note: ac – actual condition.

The following tables show the costs and calculations of the results of operations of the company in individual years. Especially in 2019, the starting point for this calculation is that the selected cost items also include an increase taking into account the loss situation, *i.e.* they are directly caused by the loss event. For this reason, the resulting calculation of lost profits *de facto* includes the actual damage. These are mainly the costs of fertiliser and promotional services.

Tab. 2 provides an overview of costs incurred during the loss period.

Tab. 2 Actual costs and profit or loss in CZK

	2019 ac	2020 ac	2021 ac
Total costs	15,223,887	16,550,222	18,657,449
Administrative and office services	0	31,297	47,869
Alcoholic drinks in the restaurant	18,065	92,100	140,868
Bank charges	1,390	9,117	13,944
Bank charges from card payments for the restaurant	4,782	24,378	37,287
Tournament prizes	0	73,920	113,061
Travel expenses	2,110	2,151	2,194
Sale of other goods in a restaurant	12,027	61,317	93,785
Membership fees	4,386	4,472	4,560
Transport, transportation	58,849	40,004	61,187
Minor assets	10,870	71,282	109,027
Small material	106,931	701,218	1,072,521
Small intangible assets	24,765	25,253	
Energy 19% VAT (electricity, gas, ...)	470,982	300,155	459,091
Energy 5% VAT (water, ...)	3,238	21,235	32,479
Golf Tournament – Prizes for the winners	0	6,653	10,176
Fertiliser	1,196,650	406,731	622,100
Hospitality activities	0	15,973	24,431
Call – mobile phones	63,676	64,929	66,206
Music production	648	4,250	6,500
Internet	13,651	13,920	14,194
Office supplies	12,242	12,483	12,728

	2019 ac	2020 ac	2021 ac
Courses, training	3,377	3,444	3,511
Labour costs	6,033,472	6,152,179	6,273,223
Labour costs – DOPP	369,643	376,915	576,497
Land lease	107,616	109,733	111,892
Rent office space	764,488	779,529	794,866
Rent AAA	33,958	34,627	35,308
Rent BBB	9,395	9,579	9,768
Rent CCC	219,430	223,747	228,150
Purchase of goods	2,433	24,810	37,947
Soft drinks for the restaurant	39,657	202,189	309,250
Non-tax expense	88,233	89,969	91,739
Still water	14,110	14,387	14,670
Car repair and maintenance	13,383	13,646	13,915
Equipment repair and maintenance	105,533	107,610	109,727
Other operating expenses	9,363	61,401	93,914
Other overhead services	29,348	192,458	294,367
Fuel	560,184	571,206	582,444
Premiums	205,124	209,160	213,275
Fines and penalties – non-deductible for tax purposes	0	0	0
Consulting	0	0	0
Postage	4,573	4,663	4,755
Food, ingredients for restaurants	156,076	795,732	1,217,082
Marshal's work	77,690	79,219	121,166
Lawyer services	126,944	129,442	131,989
Land for rent 69/22	31,330	31,946	32,575
Lease space	11,349	11,572	11,800
Rental of machinery and equipment	111,585	113,780	116,019
Equipment rental	31,706	32,330	32,966
Commission	0	12,462	19,061

	2019 ac	2020 ac	2021 ac
Commissions, benefits	0	–22,195	–33,947
Income of partners and members of the cooperative from dependent activities	20,887	10,649	21,717
Advertising	791,020	806,583	616,840
Road tax	0	13	20
Information technology services	48,034	48,979	49,943
SMS services	613	625	637
Services in the transferred tax liability	58,663	59,818	60,994
Contractual fines and penalties – rent penalties	0	0	0
Social insurance	1,444,653	1,473,076	1,502,059
Fuel oil	3,352	21,983	33,624
Coaching services	7,031	46,109	70,524
Accounting services	240,718	245,454	250,283
Cleaning work	254,713	259,724	397,251
Adjustment of the course	494,273	503,998	513,914
Interest on a loan	0	0	0
Garden, maintenance work outdoors	174,591	178,026	181,529
Statutory insurance	0	16,498	25,234
Health insurance	520,077	530,309	540,743
Profit or loss	–13,015,559	–2,068,686	3,492,238

Source: Company information + authorial computation.

As can be seen from the table above, some costs do not decrease in proportion to the decrease in sales. From the point of view of significance, these are mainly wage costs, when, with regard to the situation on the labour market, especially in the field of gastronomy, it does not seem economical to dismiss existing employees. Not only due to the cost of severance pay, but also with respect to other costs associated with their re-hiring.

Furthermore, it is not possible to avoid costs related to rentals, due to consulting services and playground maintenance.

Based on the above overview of the costs and the impact of their occurrence on the generation of the company's loss, the question is whether in terms of the very definition of actual damage, if the company generates a total loss for the period, it

is still a calculation of lost profits. This question arises from the fact that the loss really means a reduction in the value of the company's assets.

At the same time, when using the given scheme of calculation of lost profit, when the difference between the value of actual sales and actual costs is negative, *i.e.* this value is added to the total value of lost profits, it reflects the requirement of the Czech case law, which requires compensation of (unavoidable) costs without expected appropriate revenues/income.

3.2 Perfect condition

The calculation of the company's profits was performed on the basis of the forecast of revenues and costs necessary to achieve these revenues, and the company's profits were also calculated on the assumption of a perfect condition.

In order to determine the company's revenues, the method of determining the amount of revenues was chosen on the basis of an estimate of their future growth rate, taking into account the conclusions of the market search at the level of the forecast inflation of the Czech Republic.

The amount of revenues for individual years of the loss period is shown in Tab. 3. Data for 2018 are also given for comparison.

Tab. 3 Counterfactual revenues in CZK

	2018	2019 pc	2020 pc	2021 pc
Total revenues	27,856,165	28,404,228	28,963,074	29,532,914
Fee for the field, entry to the DR, chips	4,151,800	4,233,486	4,316,779	4,401,710
Fee for GCCM members	1,959,376	1,997,926	2,037,234	2,077,316
Other operating income	41	42	43	44
Lease space	1,722,305	1,756,191	1,790,743	1,825,976
Promotion and advertising	12,720,234	12,970,501	13,225,692	13,485,904
Commissions, benefits	11,997	12,233	12,474	12,719
Energy re-invoicing	1,844	1,880	1,917	1,954
Trainings	124,104	126,546	129,036	131,575
Revenue from the restaurant	4,366,863	4,452,780	4,540,387	4,629,718
Revenue from renting a playground during training lessons	1,270	1,295	1,320	1,346
Revenue from renting a buggy	301,840	307,779	313,835	320,009

	2018	2019 pc	2020 pc	2021 pc
Revenue from golf services (locker, non-competitive result, entry fee, ...)	389,966	397,638	405,461	413,439
Revenues from sales of services	2,049,718	2,090,046	2,131,167	2,173,097
Sales of goods	616	628	641	653
Sales of goods – golf accessories	54,191	55,258	56,345	57,453

Source: Company information + authorial computation.

Note: pc – perfect condition.

For the purposes of planning individual cost items, a standard financial planning tool was used, where individual cost items are, due to their nature, planned using their share of revenues.

Due to the fact that no different development of individual revenues items is expected within the perfect condition, the development of the growth rate of all cost items will be the same. However, due to the fact that some cost items are related in nature to specific revenues items representing various activities of the company, cost items are planned as a share of a specific revenue item. The projection of these costs is shown in Tab. 4.

Tab. 4 Counterfactual costs in CZK

	2018	2019 pc	2020 pc	2021 pc
Total costs	19,704,818	20,092,505	20,487,820	20,890,916
Administrative and office services	60,201	61,386	62,593	63,825
Alcoholic drinks in the restaurant	177,161	180,646	184,200	187,824
Bank charges	17,537	17,882	18,233	18,592
Bank charges from card payments for the restaurant	46,893	47,816	48,756	49,716
Tournament prizes	142,190	144,987	147,840	150,749
Travel expenses	2,069	2,110	2,151	2,194
Sale of other goods in a restaurant	117,947	120,268	122,634	125,047
Membership fees	4,302	4,386	4,472	4,560
Transport, transportation	76,951	78,465	80,009	81,583
Minor assets	137,115	139,813	142,564	145,369

	2018	2019 pc	2020 pc	2021 pc
Small material	1,348,837	1,375,375	1,402,435	1,430,028
Small intangible assets	24,287	24,765	25,253	25,749
Energy 19% VAT (electricity, gas, ...)	577,368	588,728	600,311	612,122
Energy 5% VAT (water, ...)	40,846	41,650	42,469	43,305
Golf Tournament – Prizes for the winners	12,798	13,050	13,307	13,568
Fertiliser	782,373	797,766	813,462	829,467
Hospitality activities	30,725	31,330	31,946	32,575
Call – mobile phones	62,447	63,676	64,929	66,206
Music production	8,174	8,335	8,499	8,666
Internet	13,388	13,651	13,920	14,194
Office supplies	12,005	12,242	12,483	12,728
Courses, training	3,312	3,377	3,444	3,511
Labour costs	5,917,056	6,033,472	6,152,179	6,273,223
Labour costs – DOPP	725,021	739,285	753,831	768,662
Land lease	105,540	107,616	109,733	111,892
Rent office space	749,737	764,488	779,529	794,866
Rent AAA	33,303	33,958	34,627	35,308
Rent BBB	9,213	9,395	9,579	9,768
Rent CCC	215,196	219,430	223,747	228,150
Purchase of goods	47,723	48,662	49,620	50,596
Soft drinks for the restaurant	388,923	396,575	404,377	412,333
Non-tax expense	86,530	88,233	89,969	91,739
Still water	13,837	14,110	14,387	14,670
Car repair and maintenance	13,125	13,383	13,646	13,915
Equipment repair and maintenance	103,497	105,533	107,610	109,727
Other operating expenses	118,109	120,432	122,802	125,218
Other overhead services	370,205	377,489	384,916	392,489
Fuel	549,376	560,184	571,206	582,444

	2018	2019 pc	2020 pc	2021 pc
Premiums	201,166	205,124	209,160	213,275
Fines and penalties – non-deductible for tax purposes	0	0	0	0
Consulting	0	0	0	0
Postage	4,485	4,573	4,663	4,755
Food, ingredients for restaurants	1,530,642	1,560,757	1,591,464	1,622,776
Marshal's work	152,382	155,380	158,437	161,555
Lawyer services	124,495	126,944	129,442	131,989
Land for rent 69/22	30,725	31,330	31,946	32,575
Lease space	11,130	11,349	11,572	11,800
Rental of machinery and equipment	109,432	111,585	113,780	116,019
Equipment rental	31,094	31,706	32,330	32,966
Commission	23,972	24,444	24,925	25,415
Commissions, benefits	-42,693	-43,533	-44,390	-45,263
Income of partners and members of the cooperative from dependent activities	20,484	20,887	21,298	21,717
Advertising	775,758	791,020	806,583	822,453
Road tax	26	26	27	27
Information technology services	47,107	48,034	48,979	49,943
SMS services	601	613	625	637
Services in the transferred tax liability	57,531	58,663	59,818	60,994
Contractual fines and penalties – rent penalties	0	0	0	0
Social insurance	1,416,778	1,444,653	1,473,076	1,502,059
Fuel oil	42,286	43,118	43,966	44,832
Coaching services	88,694	90,439	92,218	94,033
Accounting services	236,073	240,718	245,454	250,283
Cleaning work	499,596	509,425	519,448	529,668
Adjustment of the course	484,736	494,273	503,998	513,914

	2018	2019 pc	2020 pc	2021 pc
Interest on a loan	0	0	0	0
Garden, maintenance work outdoors	171,222	174,591	178,026	181,529
Statutory insurance	31,735	32,360	32,996	33,645
Health insurance	510,042	520,077	530,309	540,743
Profit or loss	8,151,347	8,311,723	8,475,254	8,641,999

Source: Company information + authorial computation.

For the purposes of the presented case study, the time value of money will not be considered. If the loss period is set for the period 2019–2021, the loss of profit using the above formula is CZK 37,020,983.

If I assume that the lost profit means only the profit in a perfect condition less the factual profit in the state of damage, it is essential how the costs incurred to achieve revenues in the state of damage are calculated. To demonstrate the differences between the individual methods of calculation, I will consider two variants depending on the different interpretation of individual quantities in accordance with the presented in Fig. 1.

In the presented case study, it is clear that not all the costs that the company actually incurred need to be spent on generating these revenues. As mentioned above, for the further development of the company, for example, it was not appropriate to dismiss most employees. In the case of such an interpretation, designated as Option 1, the procedure for calculating lost profits for years 2019 – 2021 (Tab. 5) would be as follows:

Tab. 5 Calculation of the lost profit in CZK – Option 1

	2019	2020	2021	Sum
Counterfactual revenues	28,404,228	28,963,074	29,532,914	
Actual/Factual revenues	2,208,328	14,481,537	22,149,686	
Counterfactual costs	20,092,505	20,487,820	20,890,916	
<i>Costs margin</i>	70.74%	70.74%	70.74%	
Costs incurred to achieve Actual/Factual revenues	1,562,121	10,243,910	15,668,184	
Lost profit – Option 1	7,665,516	4,237,627	2,160,497	14,063,640

Source: Company information + authorial computation.

The considered cost margin (the difference between 100% and the projected profit margin in a perfect condition) was used to determine the amount of costs for these

revenues. The remaining part of the costs, *i.e.* costs that were not adequately covered by the generation of revenues, can be classified as actual damage according to the searched legislation and the relevant case law.

If I do not calculate the costs that are absolutely necessary to incur in order to generate revenue in the loss period, and for the calculation of lost profits I deduct all actual costs incurred – Option 2, in the loss period, the resulting calculation of lost profits for years 2019 – 2021 (Tab. 6) is as follows:

Tab. 6 Calculation of the lost profit in CZK – Option 2

	2019	2020	2021	Sum
Counterfactual revenues	28,404,228	28,963,074	29,532,914	
Actual/Factual revenues	2,208,328	14,481,537	22,149,686	
Counterfactual costs	20,092,505	20,487,820	20,890,916	
Actual/Factual costs	15,223,887	16,550,223	18,657,448	
Lost profit – Option 2	21,327,282	10,543,940	5,149,760	37,020,982

Source: Company information + authorial computation.

It follows from the above that in the case of Option 2, the total compensation, or all revenues and all costs generated by the company in a perfect condition and in loss period, are compared with each other. In the case of Option 1, the structure of the total economic damage is obvious, when it is possible to determine, with a certain simplification, which part of the costs (companies identified as unavoidable) was covered by a certain amount of revenues in an effort to eliminate the damage. The remaining part of the costs, the compensation of which the company would also require, is presented in Tab. 7. These costs could therefore be considered as the actual damage. For this part of the costs, the company must prove that they could not be avoided or declare that it was not possible to use them to generate other revenues.

Tab. 7 Calculation of the actual damage in CZK – Option 1

	2019	2020	2021	Sum
Actual/factual costs not covered by revenues – actual damage	13,661,766	6,306,313	2,989,263	22,957,342

Source: Company information + authorial computation.

4 Conclusion

It follows from the above that the part of the formula where it is necessary to focus on the categorisation of values is $(R_{ac} - E_{ac})$. At the same time, it can be confirmed that the necessary procedure for the correct categorisation of the type of damage is to compare the projected revenues and costs with the actually generated revenues and costs, while this calculation determines the maximum possible compensation. This may include both income and expenses that are directly attributable to the loss event, such as expenses for legal and economic advice, repair and restitution costs, and income may include various compensations. It is clear from the above definition of actual damage that a part of these costs is precisely of the nature of the actual damage. At the same time, it can be confirmed that the necessary procedure for the correct categorisation of the type of damage is to compare the projected revenues and costs with the actually generated revenues and costs, while this calculation determines the maximum possible compensation. However, the question remains whether in the case of revenues and costs incurred in the connection with the use of the company's capacity to carry out an activity that the company would not otherwise perform and which contributes to the payment of fixed costs these fixed costs are also a part of the actual damage or lost profits. For these purposes, it is necessary to perform a detailed analysis of individual items that enter R_{ac} and E_{ac} and classify them at least according to the criteria: directly related to the damage, or not.

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