# Calculation of Price Reduction in International Sale of Goods Contracts 

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#### Abstract

Price reduction is a part of The United Nation Convention on Contract for the International Sale of Goods remedial scheme and is available to the buyer if delivered goods are not in conformity with the sales contract. Price reduction is a very suitable remedy and offers numerous advantages in comparison to other remedies. It is widely used in practice. However, diverging scholarly interpretations and relevant case law show that there are some ambiguities and uncertainties as to its calculation. This paper will examine relevant issues regarding the calculation of price reduction.


Keywords: • international sale of goods • CISG • buyer's remedies • nonconformity $\bullet$ price reduction $\bullet$ calculation of price reduction $\bullet$

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## 1 Introductory notes

The 1980 UN Convention on Contracts for the International Sale of Goods (hereinafter: CISG, the Convention) stipulates that in the case of delivery of non-conforming goods, the buyer may exercise one of the following rights: (1) if the lack of conformity constitutes a fundamental breach of the contract, the buyer may either require a delivery of substitute goods (Art. 46(2) CISG) or declare the contract avoided (Art. 49(1)(a) CISG); (2) the buyer may require the seller to remedy the lack of conformity by repair, unless this is unreasonable having regard to all the circumstances (see Art. 49(1)(a) CISG); (3) the buyer may reduce the price (see Art. 50 CISG) and finally, (4) the buyer may claim damages and is not deprived of any right or the buyer may have to claim damages by exercising his or her right to other remedies (see Art. 45(1)(b) and 45(2) CISG).

Price reduction is part of the CISG remedial scheme. Pursuant to Art. 50 of the CISG, if the goods do not conform with the contract and whether or not the price has already been paid, the buyer may reduce the price in the same proportion as the value that the goods actually delivered had at the time of the delivery bears to the value that conforming goods would have had at that time.

The proportionate price reduction is a well-known remedy in civil, ${ }^{1}$ but not in common law systems (see more Shin, 2005-06: 349; Schwenzer, Fountoulakis, 2007: 393; Magnus, 2005: 532; Chang-Sop, 2005: 349; Secretariat Commentary: 42, para.3; for historical overview see Bergsten, Miller, 1979: 255-272). There are important conceptual differences between civil and common law jurisprudences and a certain degree of resistance to this remedy can be noticed among common law lawyers (see more Will, 1987: 368). They experienced great difficulty in understanding the nature of the remedy of price reduction and tended to confuse it with the remedy of damages (Will, 1987: 368, 369). This is the reason why Flechtner emphasizes that price reduction "is a remedy distinct from the damage remedies with which we are familiar" (Flechtner, 1995: 171). For comprehending this remedy, one should bear in mind that price reduction from Art. 50 of the CISG shows some distinct characteristics in comparison to remedy of price reduction that exists in civil law countries, as well as to the price reduction rule found in its predecessor, Art. 46 of the Uniform Law on the International Sale of Goods (hereinafter: ULIS) (see more Schlechtriem, 1986: 79; Schwenzer, Fountoulakis, 2007: 394; Magnus, 2005: 532; Kritzer, 1989: 373-375).

Similar provisions regulating price reduction are, among others, included in two soft law instruments. Namely, the right to reduce price, which is regulated in Art. 9:401 Principles on European Contract Law ${ }^{2}$ (hereinafter: the PECL) and in Section 6, Art. 3:601 Draft Common Frame of Reference ${ }^{3}$ (hereinafter: the DCFR). It is worth noting that these are European instruments drafted and used in the area where civil law countries are predominant. Interestingly, the 2016 UNIDROIT Principles of International Commercial Contracts (hereinafter: UPICC), which are widely used in international sales law contracts, contain no provision regarding price reduction.

The remedy of price reduction reflects the CISG's focus on preserving the contract even when a breach occurs. The mere existence of this remedy confirms that avoidance of the international sales contract is an ultima ratio remedy in CISG. Therefore, "the proportionate price reduction constitutes an alternative to avoidance for non-conformity under Article 49, though it is also available in cases where the buyer would not be entitled to avoid" (Lookofsky, 2000: para. 231).

The reduction of the price is a very suitable remedy and has numerous advantages in comparison to other remedies. The greatest advantage is the preservation of the contract even though the contract has been breached. In a situation when the buyer has received the goods that are not in conformity with the contract and are of less value, the buyer can still preserve the bargain by paying less. In other words, this remedy can be used when the seller delivers defective goods and the buyer decides nevertheless to accept them. The function of a reduction in price is to re-adjust the contractual party which has been disturbed due to the non-conformity of the goods (Schlechtriem, Butler, 2009: 152).

The right of the buyer to reduce the price is subject to several cumulative conditions. First, the seller must deliver non-conforming goods. The price reduction, following the previous condition, is not available to the buyer in case of late delivery or nonperformance of delivery. Also, the price reduction can be used only in the case of nonconforming goods and not in the case of delivery of the goods that are not free from any right or claim of a third party. Second, in order to claim price reduction, the buyer must notify the seller regarding the defects in accordance with Art. 39 of the CISG. Third, the buyer must declare the price reduction. Fourth, the right to reduce the price must not be excluded. Namely, if the seller remedies any failure to perform his obligations in accordance with article 37 or article 48 or if the buyer refuses to accept performance by the seller in accordance with those articles, the buyer may not reduce the price (Art. 50, second sentence). And finally, the price reduction is allowed only when the preconditions from Art. 80 CISG are not fulfilled.

The legal nature of this remedy is disputed in theory (see Đurđev, Fišer Šobot, 2017: 33). However, according to the opinion of the author, it represents the right of the buyer to modify a sales contract by a unilateral declaration (das Gestaltungsrecht) (Đurđev, Fišer Šobot, 2017: 33; also see Will, 1987: 372; Kritzer, 1989: 376; expressly confirmed in Switzerland 15 November 2002 Appellate Court Genève (Window frames case) ${ }^{4}$ - "Under Art. 50 CISG, if the goods do not conform to the contract, the buyer may reduce the price by a unilateral expression of intent. The declaration regarding price reduction, as a unilateral exercise of a right to modify...").

Although price reduction is widely used in practice, diverging scholarly interpretations and relevant case law demonstrate that there are some ambiguities and uncertainties regarding its calculation. According to Will "all the difficulties lie in calculating the amount of the reduction" (Will, 1987: 370). In this paper the author will examine several issues relevant for the calculation of price reduction.

## 2 Calculation of price reduction vs. calculation of damages

Confusion regarding the application of the price reduction brings "simultaneous availability of damages without fault and of the price reduction remedy" (Will, 1987: 368; see Saenger, 2003: 2852). Although both are pecuniary remedies, price reduction and damages are calculated in completely different manners. A proportionate method is used for calculation of price reduction, while the principle of full compensation is relevant for calculating damages "meaning that the compensation must satisfy not only the promisee's expectation, but also the indemnity interest" (Müller-Chen, 2016: 1058). The relative calculation of the price reduction shows that the reduction of price is not a kind of damages "under relieved requirements", as some common law jurists at the Vienna Conference thought (Schlechtriem, Butler, 2009: 153).

The buyer's recovery under Art. 50 can be different from his recovery in an action for damages (Kritzer, 1989: 376). Article 50 is especially unique since it is "not designed to protect a buyer's expectation, reliance, or restitution interests and it may at times violate expectation principles" (Flechtner, 1995: 172; Sondahl, 2003). Moreover, in some circumstances "the provision yields results inconsistent with a fundamental principle of common law remedies: protection of the expectation interest" (Flechtner, 1995: 171 and fn. 75). In addition, the proportional calculation method will not necessarily come down to the costs of the reparation of the goods (Jansen, 2014: 356; see also Schlechtriem, Butler, 2009: 152). This is generally confirmed in case law (Window frames case - price reduction is calculated "without taking into consideration the repair costs"; Switzerland 27 April 1992 District Court Locarno Campagna (Furniture case) ${ }^{5}$ - "it has to be noted that a reduction of the price pursuant to the provisions of Art. 50 of the CISG, does not represent a refund for the repairing expenses, yet would be an adjustment of the price to the actual value of the goods"). However, a Swiss court concluded in a 1992 decision that "the difference between the value of the conforming goods and the value of the nonconforming goods does not necessarily coincide with the cost of repair, but most of the time it does" (Furniture case).

Unlike damages-based remedies, the principle of price reduction is not dependent on actual loss being suffered by the buyer, but is solely dependent on the abstract relationship between the actual value of the goods delivered and the hypothetical value of conforming goods (Piliounis, 2000: 30). To phrase the matter in a fashion that echoes the traditional description of common law remedy principles, one could say that Article 50 puts an aggrieved buyer in the position she would have been in had she purchased the goods actually delivered rather than the ones promised - assuming she would have made the same relative bargain for the delivered goods (Flechtner, 1995: 174).

Formula for calculation of price reduction differs from expectation damage calculation method (Sondahl, 2003). For that reason many common law scholars argue that a price reduction principle set out in Art. 50 of the CISG is a principle unknown to common law. Put another way, expectation damages are designed to preserve for an aggrieved party the benefit of her bargain; reduction in price under Article 50 attempts to preserve the proportion of her bargain (Flechtner, 1995: 174).

One should bear in mind that the buyer will decide in each particular case which remedy can serve him better. If the prices decrease between the time of contracting and the time of delivery, it would be more favorable for the buyer to reduce the price. On the contrary, when the prices increase it would be more beneficial for the buyer to claim damages (see Đurđev, Fišer Šobot, 2017: 40; Kritzer, 1989: 377; Honnold, 1999: 338).

## 3 Calculation of price reduction

### 3.1 Formula for calculation of price reduction

Price reduction is calculated according to formula contained in Art. 50 of the CISG. If the goods do not conform with the contract and whether or not the price has already been paid, the buyer may reduce the price in the same proportion as the value that the goods actually delivered had at the time of the delivery bears to the value that conforming goods would have had at that time (Art. 50 CISG, $1^{\text {st }}$ sentence).

The formulation requires closer analysis of several issues. First, the price reduction is calculated by application of a proportionate method. Second, it is necessary to establish a relevant time and place when the value of actually delivered goods and the value of conforming goods are determined. Third, if the delivered goods have no value at all, it is disputed whether the price can be reduced to zero.

### 3.2 Proportionate calculation of price reduction

Art. 50 of the CISG prescribes that price reduction is calculated by application of proportionate or relative ${ }^{6}$ calculation method (relative Berechnungsmethode) (see Austria 09.11.1995 Oberlandesgericht Graz, Case No. 6 R 194/95; Austria 23.05.2005 Oberster Gerichtshof, Case No. 3Ob193/04; Benicke, 2004: 575; Huber, 2004: 2496; Jansen, 2014: 356). Price reduction is based on a hypothetical calculation and leads solely to the adjustment of the price (see Schnyder, Straub, 2010: 642) in case of a delivery of defective goods. This method maintains "the equivalency relationship between performance and counter-performance conceived of by the parties when they concluded the contract to be adjusted to the changed situation" (Müller-Chen, 2016: 803; see also Benicke, 2004: 574; Magnus, 2005: 535). This allows for the parties to keep in line with their good or bad bargain (Will, 1987: 370).

Opposite to the proportionate method is the absolute method of deducting from the stipulated purchase price the objective value of the goods received (Liu, 2005: 5.1; see more regarding absolute (linear) calculation method Müller-Chen, 2016: 803; Will, 1987: 370; Schnyder, Straub, 2010: 652; Huber, 2004: 2497). Absolute and relative methods can produce the same results only if the contracted price correlates with the value of the goods, and if the value of the goods at the time of delivery stays the same as at the time of contracting (see Huber, 2004: 2497; Schnyder, Straub, 2010: 652, 653). Therefore, the formula for price reduction is particularly important in a situation when the prices of the goods fluctuate between the time of the conclusion of the contract and the time of delivery.

Art. 50 of the CISG is not mandatory and the parties are "free to agree on a specific way to calculate the reduction in value" (UNCITRAL Case Law Digest, 2016: 238). However, if a price reduction is to be calculated pursuant to Art. 50, the relative calculation method is "the mandatory method of calculation and it is therefore inadmissible to instead simply use the estimated value of the delivered goods as the reduced purchase price, or to determine the reduced purchase price by subtracting the cost of repair from the contractually agreed price" (Switzerland 10 February 1999 Commercial Court Zürich (Art books case)"; Window frames case - "The price can be reduced only on a pro rata basis, using the appropriate method...."; other methods of calculation are inadmissible, Schnyder, Straub, 2010: 652; Magnus, 2005: 535; Piltz, 1996: 71; UNCITRAL Case Law Digest, 2016: 237 - "the amount of price reduction must be calculated as a proportion...").

The calculation of price reduction is a two step procedure. First, the value of the delivered goods at the time of delivery is compared to the value that the conforming goods would have had at that time. The two values that are compared are the value of actually delivered non-conforming goods and the value that the goods would have had if they were in conformity with the contract (see decision in case Germany 03.04.1990 Landgericht Aachen, Case No. 41 O 198/89 - The court found that the reduction should have been by one third rather than by half, in the same proportion as the value of the goods actually delivered had at the time of the delivery bears to the value that conforming goods would have had at that time). A relevant time for establishing those values is the time of delivery. Second, once the proportion is established, the contract price is reduced in that proportion (see para. 4.2.a. of decision in Switzerland 21 September 1998 Commercial Court Zürich (Catalogue case) ${ }^{8}$ - "The reduction of the price must be in the same proportion as the value of the defective goods bears to the value of conforming goods of the requested kind").

The formula can be presented by using the following mathematical model:

$$
\text { Reduced price }=\frac{\text { Price stipulated in the contract } * \text { Value of the delivered (nonconforming) goods }}{\text { Hypothetical value of conforming goods }}
$$

Let us assume that the contracted price is 50, the hypothetical value of conforming goods is 60 and the value of delivered non-conforming goods is 40 . The reduced price pursuant to the formula would be:

$$
\text { Reduced price }=\frac{50 \times 40}{60}=33.3
$$

This formula is extensively accepted in doctrine (see Will, 1987: 372; Schnyder, Straub, 2010: 651; Magnus, 2005: 535; Bernstein, Lookofsky, 1997: 95; Kritzer, 1989: 377; Flechtner, 1995: 173; Saenger, 2003: 2852; Jansen, 2014: 357; Huber, Mullis, 2007: 252; Liu, 2005: 5.1; Herber, Czerwenka, 1991: 235; Brunner, 2004: 299) and widely used in case law. In the Furniture case, the Swiss District Court stated: "Pursuant to well-settled case law, reduction of the price is performed in accordance with the following formula: reduced price: convened price $=$ objective value of the non-conforming goods: value of conforming goods". There are also cases in which courts were not consistent in applying
the formula. For example, in the Globes case ${ }^{9}$ the Court did not use the whole formula, but stated: "Hence, one has to apply the formula enshrined in Art. 50 CISG, i.e., value of the delivered goods multiplied by the agreed purchase price shall be the reduced price". It is obvious that the formula omits to divide the sum by hypothetical value of the conforming goods.

The drafters of Art. 50 of the CISG opted for the term "value" rather than the term "contract price". Therefore, it should be noted that the value of the conforming goods "is not just treated as equal to the price under the contract" (Enderlein, Maskow, 1992: 197) and that the hypothetical value of the conforming goods can be lower or higher than the price stipulated in the contract. It is even possible that, despite the fact that the seller delivered defective goods, there is no price reduction. This is generally the case when the prices are rising. However, under specific circumstances it may be necessary to appraise the value of the goods. If the market value of the goods is not easy to ascertain, it is to be assumed that the price at the time of contracting corresponds to the value of the goods (Globes case - The Court assumed that "the purchase price agreed between the parties reflects the real value of conforming goods under their sales contract"; for theoretical discussion see Magnus, 2005: 535; Schnyder, Straub, 2010: 653).

Time relevant for price reduction
The value of the goods may differ at different times and in different places. Therefore, it is essential for meaningful price reduction to establish which place and what time are relevant for the appropriate calculation. Before the issue of time and place relevant for price reduction is elaborated on, it is worth mentioning that it is not necessarily the same thing as the time and place of performance of price reduction.

Art. 50 of the CISG prescribes that the buyer may reduce the price in the same proportion as the value that the goods actually delivered had at the time of the delivery bears to the value that conforming goods would have had at that time. The time of delivery is relevant for determining the value of delivered goods and the hypothetical value of conforming goods (see para. 4.2.b of the decision in Catalogue case - "...the price could be reduced to the proportion the value of delivered goods bore to the value conforming goods would have had at the time of delivery"; para. 3 of the Opinion in Furniture case - "the value of the goods actually delivered at the time of the delivery bears to the value that conforming goods would have had at that time"; UNCITRAL Case Law Digest, 2016: 237, 238; Hutter, 1988: 173).

Unlike the CISG, the time of conclusion of the contract is decisive in ULIS. In Art. 46 of the ULIS, "the formula for price-reduction was based on the ratio between the value of non-conforming and of conforming goods at the time of the conclusion of the contract" (Honnold, 1999: 340; see also Enderlein, Maskow, 1992: 198; Jansen, 2014: 358). Also, in some national jurisdictions the time of conclusion of the contract is decisive for price reduction (see eg. Art. 498 Serbian Code of Obligations, Art. 478 Slovenian Obligations Code, § 441(3) German BGB, § 932 Austrian BGB; see decision in case Austria 09.11.1995 Oberlandesgericht Graz - "Other than Austrian law, under CISG the value of
the goods is to be determined at the time of delivery of the goods and not at the time of the conclusion of the contract.").

Pursuant to Art. 50 of the CISG, the time relevant for valuation of the goods is the time of delivery. According to leading view of the doctrine, it is easier to establish a current value of the goods at the time of delivery (see Enderlein, Maskow, 1992: 198; Herber, Czerwenka, 1991: 235) than at the time of conclusion of the contract. In addition, it is often the case that the goods do not exist at the time of conclusion of the contract and it is difficult to assess the value of non-conforming goods at that specific moment (see Jansen, 2014: 358; Liu, 2005: 5.2). Finally, at the time of conclusion of the contract the buyer expects to receive nothing but conforming goods and at that time the value of nonconforming goods is totally irrelevant (see Will, 1987: 371).

It is the author's opinion that the rule from the CISG is better, because it reflects the reality. For example: the seller delivers third class apples instead of first class apples, and the price per kilogram is $€ 1$ and $€ 2$ respectively. If the prices of both types of apples increase $20 \%$ from the time of conclusion of the contract to the time of delivery, the proportion, and consequently the price reduction, will remain the same. However if the price of first class apples increases $10 \%$ and of third class apples decreases $10 \%$ then the proportion would be completely different.

The wording of Art. 50 of the CISG "the goods actually delivered ... at the time of the delivery" means that the time when delivery is actually performed and not the time of delivery set in the sales contract is relevant (see Schnyder, Straub, 2010: 653; Brunner, 2004: 299).

Time of delivery can be determined in accordance with the contract or the CISG, and is closely connected to the place of delivery and the manner in which the delivery is performed. The time and place of delivery, although not essentialia negotii, are nevertheless very important elements of the contract for the sale of goods and are generally regulated by it. However, when the time and place of delivery are not determined by the contract, the general rule from Art. 31 of the CISG applies.

The seller can be obliged to bring the goods to the buyer's place of business (die Bringschuld). This type of delivery is not regulated by the CISG, but parties are free to agree that the seller must bring the goods to the buyer. In such a case, the seller is discharged from his obligation when he hands over the goods to the buyer at his place of business, and the time of delivery is the time of handing over of the goods to the buyer in his place of business (see Müller-Chen, 2016: 804; Saenger, 2003: 2852; Huber, 2004: 2497).

In the Convention, delivery of the goods is understood as unilateral performance of the seller. Pursuant to Art. 31 of the CISG, if the seller is not bound to deliver the goods at any other particular place, his obligation to deliver consists: (a) if the contract of sale involves carriage of the goods - in handing the goods over to the first carrier for transmission to the buyer; (b) if, in cases not within the preceding subparagraph, the contract relates to specific goods, or unidentified goods, to be drawn from a specific stock
or to be manufactured or produced, and at the time of the conclusion of the contract the parties knew that the goods were at, or were to be manufactured or produced at, a particular place - in placing the goods at the buyer's disposal at that place; (c) in other cases - in placing the goods at the buyer's disposal at the place where the seller had his place of business at the time of the conclusion of the contract.

Art. 31 of the CISG regulates two different situations. If, in accordance with Art. 31(1)(b) and (c) of the CISG, the seller does not have to dispatch the goods to the buyer, but to place them at the buyer's disposal at a specific place (the place where the goods are located or the seller's place of business at the time of conclusion of the contract; die Holschuld), time of delivery is the time of placing the goods at buyer's disposal.

If the obligation to deliver is deemed performed by handing over the goods to the first carrier for transmission to the buyer (der Versendungskauf), then the time of delivery is the time of handing over the goods. However, it is disputed in theory, whether the value of the goods should be established at the time of handing over the goods or at the time of their arrival at the specified destination. The dispute arises from the fact that the buyer can inspect the goods, notify the seller about non-conformity, and consequently reduce the price, only once the goods arrive at the place of destination and not at the time when delivery is performed. One should be careful when dealing with this issue, because in practice contracts involving carriage of the goods are quite common. In theory, advocated views are as follows. First, the author believes, as well as some other authors do, that the relevant time is the time of handing over the goods to the first carrier (see more Huber, 2004: 2497; Benicke, 2004: 576). Second, some scholars have suggested that the value of the goods is to be established at the place of destination after arrival of the goods (see Müller-Chen, 2016: 804; Saenger, 2003: 2852). In support of this view, it has been pointed out that, "the object of sale derives its economic value from the destination" (Müller-Chen, 2016: 804). According to those authors, the same applies when the goods in transit are sold (see Saenger, 2003: 2852; Müller-Chen, 2016: 804). The third view is that, "the calculation of price reduction should always be based on the point in time at which the buyer has taken or ought to have taken the goods" (Müller-Chen, 2016: 805).

The author would like to point out that the second view is not tenable for at least four reasons. First, this would be inconsistent with the concept of delivery clearly defined in Art. 31(1) of the CISG. As the author has demonstrated, delivery is a unilateral action of the seller and is effected when the seller undertakes all acts necessary for its performance (see also Huber, Mullis, 2007: 252; Schnyder, Straub, 2010: 653). Therefore, the time of delivery is the time of handing the goods over to the carrier. It is true that the price cannot be reduced before the goods arrive to their destination, but the wording of the CISG is unequivocal ("time of delivery") (confirming Benicke, 2004: 576) and can in no way be interpreted that the notion of delivery implies final arrival of the goods to their destination. Here, the author again stresses that the clear distinction should be made between the time relevant for price reduction and the time of performance of price reduction. Second, such a solution is not in compliance with the CISG rules on passing of risk (confirming Schnyder, Straub, 2010: 654). Pursuant to Art. 36(1) of the CISG, the seller is liable for any lack of conformity which exists at the time when the risk passes to the buyer. In other words, the seller is not liable for defects once the goods are delivered.

When the contract of sale involves carriage of the goods, the risk passes to the buyer when the goods are handed over to the first carrier (see Art. 67(1) CISG). Any damage to the goods after that specific moment can cause a decrease in the value of the goods (e.g. the goods can deteriorate during transit). The seller is not liable for such deficiencies of the goods, because after the risk has passed, the buyer is obliged to pay the price agreed upon despite non-conformity (see Art. 66 CISG). Consequently, this reasoning could lead to undesirable results, because the time of passing of the risk and the time relevant for price reduction could vary significantly. Third, there is one additional difficulty. If the goods deteriorate during transit and their value should be assessed at the time of their arrival to the destination, the only possible solution for the application of such criteria would be to "undertake a hypothetical evaluation on the basis that the deterioration has not occurred" (Huber, Mullis, 2007: 253; see more Huber, 2004: 2497). Finally, as to the argument that the goods derive their economic value from the destination, it should be noted that in international sales the goods are transported regardless of whether they have been put at the buyer's disposal at a specific place or are handed over to the carrier. The main difference between the two is whether the contract of sale involves a carriage of the goods (i.e. who organizes the transport), and therefore it is hard to comprehend the argument, that in the former case the goods derive their value at the time of their placing at buyer's disposal, i.e. before the transport, while in the latter the object of sale (the goods) derives its economic value from the destination.

The third reasoning is based on a contention that the time of delivery from Art. 50 of the CISG and performance of obligation to deliver from Art. 31 of the CISG are not equivalent, because to the concept of delivery should be added "not only the actions of the seller (offer or handover of the goods) but also the actions of the buyer (acceptance of the goods)" (Müller-Chen, 2016: 805; opposite view Schnyder, Straub, 2010: 654, 655). Regarding that view, it is the author's opinion that the formulation, "time of delivery", cannot be interpreted in an extensive manner, because such an interpretation changes the sense of the notion of the delivery from the Convention. The term "delivery" should be understood as a unilateral act of the seller and should be interpreted in the same manner throughout the Convention (same opinion Schnyder, Straub, 2010: 654).

### 3.3 Place relevant for price reduction

The CISG does not determine which place or geographical market should be considered relevant when determining the value of the goods. Although the CISG clearly specifies that the goods should be valued when they are delivered, no mention is made with respect to what country's market shall control the valuation of the goods (Sondahl, 2003). This issue was largely debated at the diplomatic conference and two roads diverged: one was the place of delivery and the other the buyer's place of business (see more Schnyder, Straub, 2010: 655; Herber, Czerwenka, 1991: 235). ${ }^{10}$

The place for the calculation of the reduction of price is an important issue in international trade, because market prices may vary from one market to another. The matter has been extensively discussed in legal writing. The CISG is silent regarding the place where the value of the goods will be appraised, "but better thinking suggests it would be the place where the seller has to perform" (DiMatteo, Dhooge, Greene, Maurer, Pagnattaro, 2005:

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139; Enderlein, Maskov, 1992: 197 -"according to the sense and purpose of the pricereduction provision, the decisive place must be the place where the seller has to perform"; see more Magnus, 2004: 720). According to the prevailing opinion, the place for the calculation of the price reduction should be the place of delivery. This position is advocated in theory, notwithstanding the fact that it was explicitly denied at diplomatic conference (see more Schnyder, Straub, 2010: 256). When the seller delivers the goods by placing them at buyer's disposal, the place of delivery is the place where the goods are located (Art. 31(1)(b) and (c)CISG). When the seller is obliged to bring the goods to the buyer's place of business, the place of the price reduction is buyer's place of business. If the delivery is performed by handing the goods over to the carrier, the place of performance is the place where the handing over takes place (Art. 31(1)(a) CISG).

According to the predominant view, however, an exception should be made by looking at the place of destination in cases of sales involving carriage or sales of goods in transit (Huber, Mullis, 2007: 253; Enderlein, Maskov, 1992 : 197; Schlechtriem, 1986: 70; Müller-Chen, 2016: 805; Saenger, 2003: 2852; Herber, Czerwenka, 1991: 235; Brunner, 2004: 299). Kritzer points out that, "it is not excluded, however, that buyers may consider the place of destination" (Kritzer, 1989: 377) relevant. Other scholars suggest that the buyer's place is generally not relevant (Müller-Chen, 2016: 806), while Will advocates a three-step solution: the place of destination, then the place of delivery, and finally the place of business of either the buyer or the seller, depending on where a market price can be assessed (see Will, 1987: 375). Finally, some scholars explicitly exclude the place of delivery and consider the place of destination relevant (Benicke, 2004: 576; Schnyder, Straub, 2010: 655). According to this view, the place of destination is always decisive, irrespective of the manner in which the goods are delivered, and even when the delivery is performed by placing the goods on buyer's disposal. The reasons behind this thinking is that it is the easiest way to determine the price there.

Relevant case law indicates that ambiguities exist in applying Art. 50 of the CISG regarding the place of calculation of the price reduction. There are cases in which place of delivery was deemed relevant. There is at least one court decision in which Art. 76(2) of the CISG was applied by analogy and a conclusion was drawn that the place of delivery should be relevant. ${ }^{11}$ (see Austria 09.11.1995 Oberlandesgericht Graz, Case No. 6 R 194/95 - "In addition, according to the Court, the value of the goods, in analogy with Art. 76 CISG, must be determined according to the market value at the place of delivery."). This reasoning can be justified, because the hypothetical value of the conforming goods is actually the current price (of the goods on the market) and the current price is determined at the place of delivery.

One arbitral tribunal, citing scholarly authority, has identified the buyer's place of business or the place where the goods will be directed as the market in which the value is to be ascertained (DiMatteo, Dhooge, Greene, Maurer, Pagnattaro, 2005: 139; see Hungary 5 December 1995 Budapest Arbitration proceeding VB 94131 (Waste container case) ${ }^{12}$ - Ad. 2 (substantive issues) "Generally, it is in accordance with the idea of CISG Art. 50 to set a reduction of price in accordance with the price level at the place where the goods are being directed that the seller knows of; or in accordance to the price level at the place where the buyer is situated").

It is the author's opinion, that for resolving this dilemma, one should bear in mind the very nature of this remedy and the fact that price reduction is calculated proportionally. The place of the calculation of the price reduction is relevant, because the value ratio may differ at the place of performance and at the place of destination. In other words, the ratio between conforming and non-conforming goods at the place of delivery, and the place of destination, may not be the same (see Huber, 2004: 2498). Price reduction allows the buyer to get compensation for non-conformities present at the time of passing of the risk. Therefore, the relevant place should be the place of performance of delivery, because only this reasoning is in line with the rules on passing of the risk from the CISG. It would be unjust and too burdensome for the seller to assume that he should bear the risk if the value ratio between conforming and non-conforming goods changes.

### 3.4 Goods without value

It is widely discussed whether the price can be reduced to zero when delivered goods have no value at all. Scholarly interpretations diverge on this issue. According to the prevailing view, the buyer can reduce the price to zero when the goods are completely worthless and unsellable (see Jansen, 2014: 361; Magnus, 2005: 536; Huber, 2004: 2499; Saenger, 2003: 2852; Brunner, 2004: 301). This was reflected in case law. The German Federal Supreme Court in the Frozen pork case stated: "[Buyer] was, therefore, allowed to reduce the purchase price to zero for the non-conforming partial shipments because there was also no other possibility for utilizing the meat" ${ }^{13}$. This would lead to the price reduction having almost the same effect as avoidance, except that it does not oblige the buyer to return the goods (UNCITRAL Case Law Digest, 2016: 238; see Jansen, 2014: 362 ). An opposite view contends that the reduction of the price to a zero sum would practically have the same effect as avoidance, and therefore it should be subject to the same restrictive conditions applicable to the latter remedy (see decision in case Austria 23.05.2005 Oberster Gerichtshof Case No. 3Ob193/04k; see more Jansen, 2014: 362; Magnus, 2005: 537; Schnyder, Straub, 2010: 657).

It is the opinion of the author that the buyer should be allowed to reduce the price to zero when the goods are unusable and worthless. This can be especially favorable for the buyer when he has lost its right to declare the contract avoided in accordance with Art. 49 of the CISG (confirming Schnyder, Straub, 2010: 657; similar Brunner, 2004: 301).

## 4 Concluding remarks

Price reduction is the remedy available to the buyer in case of non-conforming delivery, irrespective of whether the price has already been paid. It has numerous advantages for the buyer in comparison to other remedies. Price reduction should be distinguished from damages. These two pecuniary remedies serve different purposes, and the method of their calculation is, therefore, quite different. While price reduction is calculated proportionally, damages are calculated by application of absolute (linear) method. The main goal of the proportionate calculation method is that the buyer can keep the bargain. Price reduction is especially unique since it is not designed to protect a buyer's expectation, reliance, or restitution interests, and it may at times violate expectation principles (Sondahl, 2003).

The calculation of the price reduction presupposes two steps. First, the value of the delivered non-conforming goods at the time of delivery is compared to the value that conforming goods would have had at that time. Second, once the proportion is established the contract price is reduced in that proportion. In academic writings, however, there are divergent views regarding the time and the place of calculation of price reduction. According to Art. 50 of the CISG, the time relevant for determining the value of conforming and delivered non-conforming goods is the time of delivery. For a correct calculation of price reduction, it is of crucial importance that the notion of delivery is interpreted in the same manner throughout the Convention. The wording of the Convention ("time of delivery") can in no way be understood that the notion of delivery implies final arrival of the goods to their destination. Therefore, if the contract of sale involves carriage of the goods, the time relevant for price reduction is the time of handing over the goods to the first carrier for transmission to the buyer. On the other hand, if the seller does not have to dispatch the goods to the buyer, the time relevant for reduction of the price is the time of placing the goods at buyer's disposal. Although it is not explicitly regulated in the Convention, it is the opinion of the author that the relevant place for the calculation of the price reduction should be the place of performance of delivery, because only this reasoning is in line with the rules on passing of the risk from the CISG. Finally, if the seller delivers completely worthless goods, the price can be reduced to zero.

## Notes

${ }^{1}$ Price reduction has its roots in actio quanti minoris from Roman law.
${ }^{2}$ Art. 9:401(1) PECL - A party who accepts a tender of performance not conforming to the contract may reduce the price. This reduction shall be proportionate to the decrease in the value of the performance at the time this was tendered compared to the value which a conforming tender would have had at that time.
${ }^{3}$ Art. 3:601(1) DCFR - A creditor who accepts a performance not conforming to the terms regulating the obligation may reduce the price. The reduction is to be proportionate to the decrease in the value of what was received by virtue of the performance at the time it was made compared to the value of what would have been received by virtue of a conforming performance.
${ }^{4}$ Available at http://cisgw3.law.pace.edu/cases/021115s1.html [English translation by Andrea Vincze].
${ }^{5}$ Available at http://cisgw3.law.pace.edu/cases/ 920427s1.html [English translation by Alex Turina].
${ }^{6}$ Relative approach is used in civil law. See more Liu C. (2005), Price Reduction for NonConformity: Perspectives from the CISG, UNIDROIT Principles, PECL and Case Law, 2nd edition: Case annotated update available at: http://www.cisg.law.pace.edu/cisg/biblio/chengwei2.html\#v, para. 5.1. (accessed 19 November 2017).
${ }^{7}$ Available at http://cisgw3.law.pace.edu/cases/990210s1.html [English translation by Ruth M. Janal].
${ }^{8}$ Available at http://cisgw3.law.pace.edu/cases/980921s1.html [English translation by Veit Konrad].
9 Germany 27 February 2002 District Court München available at http://cisgw3.law.pace.edu/cases/020227g1.html [English translation by Stefan Kuhm].
${ }^{10}$ Argentina, Spain, Portugal (A/CONF.97/C.1/L.168) proposed to add at the end of the first sentence the words: "at the buyer's place of business or habitual residence." At the 23rd meeting the joint amendment by Argentina, Spain, Portugal (A/CONF.97/C.1/L.168) was rejected by 11 votes in favour and 23 against. Argentina submitted orally an alternative amendment by the addition at the end of the first sentence of article 46 [became CISG article 50] of the words "at the place of delivery". The oral amendment was rejected by 12 votes in favour and 22 against. Detailed information about legislative history of Art. 50 CISG is available at http://cisgw3.law.pace.edu/cisg/ 1stcommittee/summaries50.html (accessed 20 November 2017).
${ }^{11}$ Art. 76(2) CISG: (2) For the purposes of the preceding paragraph, the current price is the price prevailing at the place where delivery of the goods should have been made or, if there is no current price at that place, the price at such other place as serves as a reasonable substitute, making due allowance for differences in the cost of transporting the goods.
${ }^{12}$ Available at http://cisgw3.law.pace.edu/cases/951205h1.html [English translation by Marko Maljevac].
${ }^{13}$ Para. II(3)(a) of the decision in Germany 2 March 2005 Federal Supreme Court (Frozen pork case) available at http://cisgw3.law.pace.edu/cases/050302g1.html [English translation by Birgit Kurtz].

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