УДК *657.4*
JEL Code *M41*

В.С. АМБАРЧЯН [*]
(Київський національний економічний університет імені Вадима Гетьмана, м. Київ, Україна)

Особливості обліку активів і зобов'язань, зафіксованих у договорах з покупцями, що містять істотний компонент фінансування

Метою статті є обґрунтування методичних засад обліку контрактних активів, дебіторської заборгованості та контрактних зобов'язань в договорах з покупцями, що містять істотний компонент фінансування. Предметом дослідження є контрактні активи, дебіторська заборгованість та контрактні зобов'язання в договорах з покупцями, які містять істотний компонент фінансування. В роботі застосовано загальнонаукові та спеціальні методи пізнання: індукція, дедукція, порівняння, табличний метод, метод ефективної ставки відсотка, метод дисконтування грошових потоків. Розкрито методику відображення в обліку активів та зобов'язань, що виникають за наявності істотного компоненту фінансування в договорі з покупцями. Проаналізовано рекомендації МСФЗ 15 «Виручка за договорами з клієнтами» щодо визнання істотного компоненту фінансування. Представлено покрокову модель визнання доходів за наявності істотного компоненту фінансування, що включає ідентифікацію істотного компоненту фінансування, його оцінку, дисконтування та визнання доходу. Розкрито економічну суть та методику обліку контрактних активів та дебіторської заборгованості, що виникають за наявності вигоди для покупця, яка ідентифікується як істотний компонент фінансування. Представлено методику визнання в обліку контрактних зобов'язань за наявності вигоди для постачальника, що класифікується як істотний компонент фінансування. Розкрито процедури визнання зменшення корисності дебіторської заборгованості за МСФЗ 9 «Фінансові інструменти», що визнана в договорі з покупцями, який містить істотний компонент фінансування.

Ключові слова: *бухгалтерський облік активів і зобов'язань, договори з покупцями, істотний компонент фінансування, контрактний актив, дебіторська заборгованість, контрактне зобов'язання, зменшення корисності.*

V.S. AMBARCHIAN
(Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine)

Peculiarities of Accounting for Assets and Liabilities in Contracts with Customers that Contain a Significant Financing Component

The purpose of the article is substantiation the methodical support of accounting for contract assets, receivables, and contract liabilities in the contracts with customers that contain a significant financing component. Subject of the research includes contract assets, receivables and contract liabilities in the contracts with customers, which contain a significant financing component. During the research the author applied general and specific scientific methods of cognition: induction, deduction, comparison, a tabled method, an effective interest rate method, a discounted cash flow method. The procedures of accounting for assets and liabilities arising from the contracts with customers, which have a significant financing component, were considered. The recommendations of IFRS 15 regarding recognition of a significant financing component were analyzed. Disclosed the model of revenue recognition in contracts with a significant financing component, which comprises four consistent steps: identification of a significant financing component, its assessment, discounting, and revenue recognition. The article explains economic meaning of contract assets and receivables that arise when terms of the contract provide the customer with benefits identified as a significant financing component. The accounting procedures for recognition of contract liabilities that arise when terms of the contract provide benefits for a seller identified as a significant financing component were disclosed. The

[*] **Амбарчян Вікторія Самвелівна**, доцент кафедри обліку в кредитних і бюджетних установах та економічного аналізу Київського національного економічного університету імені Вадима Гетьмана (м. Київ), кандидат економічних наук.

procedures for impairment of receivables under IFRS 9, recognized in the contracts with customers, which contain a significant financing component were explained.

Keywords: *accounting of assets and liabilities, contracts with customers, significant financing component, contract asset, receivable, contract liability, impairment.*

Introduction. Convergence between International Financial Reporting Standards (IFRS) and US Generally Accepted Accounting Principles (GAAP) is considered as a new stage of international accounting standards development. Cooperation between the IFRS Board and the Financial Accounting Standards Board (FASB) resulted in publishing of IFRS 15 «Revenue form Contracts with Customers» (ASC 606 under the FASB numbering). The standard presents a five-step model of revenue recognition from contracts with customers, discloses procedures of accounting for contract modifications, accounting for discounts, procedures of a transaction price allocation to performance obligations, methods of progress measurement towards complete satisfaction of a performance obligation. Also, the developers of the standard require adjust the expected consideration for delivered goods for effects of time value of money. A contract is identified as the one that contains a significant financing component if it provides an entity or a customer with a benefit from change in the value of money over time. Interest revenue or expenses from the contract, which contains a significant financing component, is calculated using the effective interest rate method, while the asset, arising from the benefits for the entity, is classifies as a financial asset and revised for impairment under IFRS 9.

Literature Review. The issues of accounting for revenues from contracts with customers under IFRS 15 are disclosed in the papers of R. Bloom, J. Kamm [2], K. Yeaton [6], R.W. Rutledge, K.E. Karim, T. Kim [5]. Procedures of impairment recognition for financial assets are considered in the articles of L.P. Snigurska [1]. Nevertheless, the issues of revenue recognition from the contracts with customers that contain significant financing component as well as the procedure of accounting for assets impairment, arising in the contracts with a significant financing component, haven't become the object of analysis in scientific papers, which determines the topicality of the research.

The purpose of the article is substantiation of theoretical and applied issues of accounting for contract assets, receivables and contract liabilities in the contracts with customers that contain a significant financing component.

The main results. IFRS 15 «Revenue from Contracts with Customers» has been developed to provide fair presentation of information about revenues of the entity in amount that responses expected consideration rather than the amount determined by the terms of the contract. Under new accounting rules, a transaction price, by which the revenue is recognized, contains only the amount of consideration with high probability of receiving.

The standard contains new requirements to consider the factor of the time value of money while recognizing the revenue from the contract, by which one of the parties is provided with a significant benefit of financing the transfer of goods or services. In order to assess such benefit the developers of the standard apply the term «a significant financing component». The contract contains a significant financing component if «the timing of payments agreed to by the parties to the contract provides the customer or the entity a significant benefit with the financing the transfer of goods or services to the customer [4, p. 60]». Therefore, a significant financing component can arise only in terms of a time interval between the dates of the goods transfer and the consideration receipt. Herewith, the time interval will be considered in both cases:

1) the asset is transferred to the consumer at the moment or soon after the contract signature, while the consideration will be received by the entity in the future – not received consideration will be recognized by the entity as a receivable or a contract asset;

2) the entity has received consideration at the moment or soon after the contract signature, while the asset will be transferred in the future – received consideration will be recognized by the entity as a contract liability.

For better understanding the mechanism of significant financing component recognition it's necessary to determine the economic meaning of the terms «contract asset» and «contract liability» and consider peculiarities of their accounting. Both of these terms are new in the theory of accounting and applied in IFRS 15 in the following meanings:

· the contract asset – «an entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when the right is conditioned on something other than the passage of time [4]» (payment for goods or services depends on their selling; payment for goods or services after delivery of the other portion of goods);

· the contract liability – «an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or the amount is due) from the customer [4]».

The contract with customers is represented in the accounts and in a statement of financial position as the contract asset or the contract liability when the part of the contract is settled. The mechanism of accounting for the contract assets and the contract liabilities is captured in Figure 1.

Understanding the mechanism of accounting for the contract assets and the contract liabilities makes possible to continue the identification of a significant financing component. The next step after the identification of a time lapse between the delivery of goods and the receipt of the consideration is an assessment of a significant financing component in the contract. The key evidence of existence of a significant financing component is the difference between:

a) the promised consideration – a transaction price, determined in the contract; and б) a cash selling price for goods and services – price, which would be paid by the customer in case of payment immediately after the receipt of control over the assets (the absence of the time lapse between both transactions).

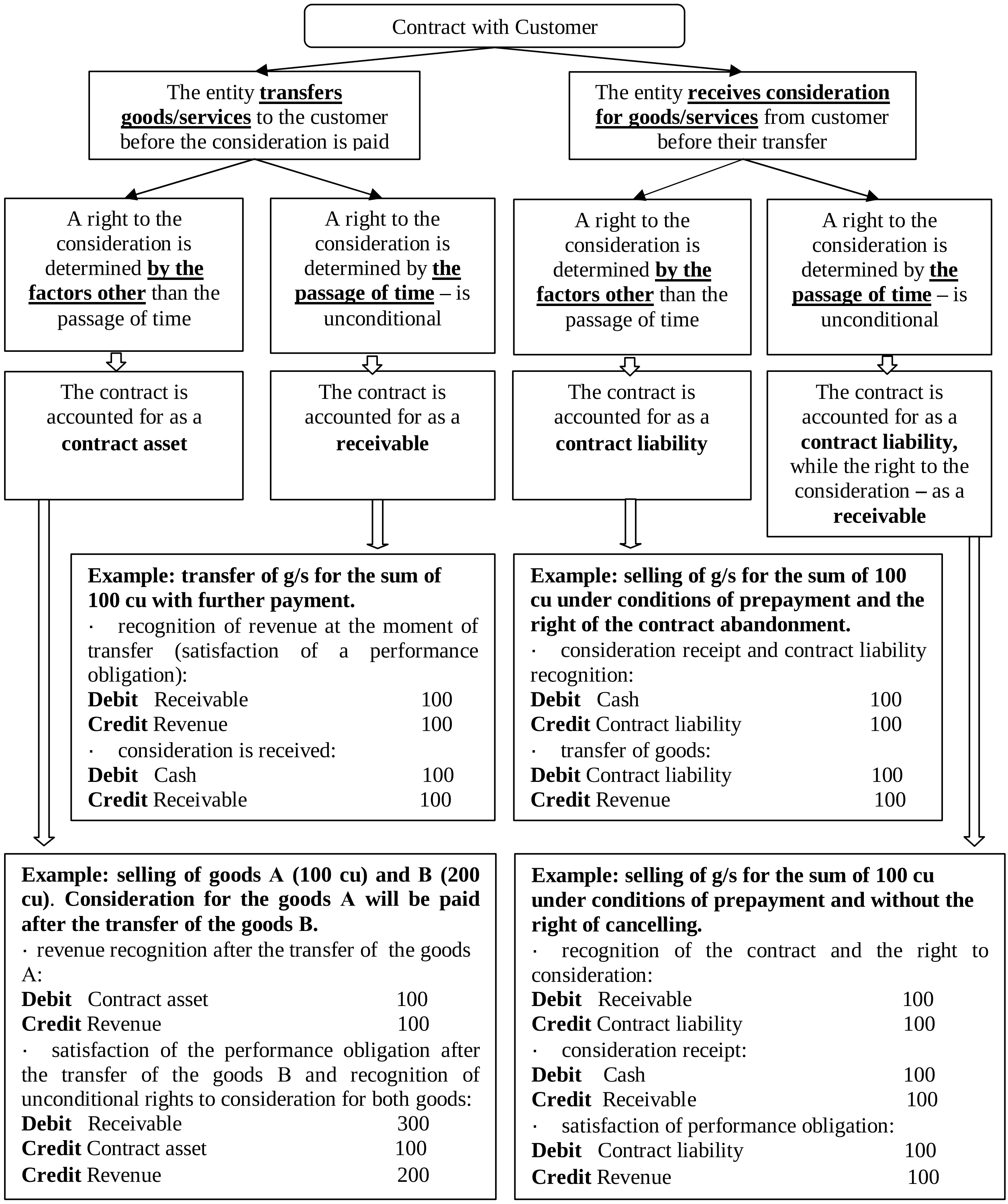

Figure 1. **Recognition of the contract assets and the contract liabilities in the contracts with customers under IFRS 15**

Source: developed by the author.

The difference between these two sums means that the promised consideration is adjusted to the factor of the time value of money (and so the benefit for one counterpart). That is why the promised consideration differs from the cash selling price at the moment of delivery. The entity benefits from the delivery of the assets if the first event is the receipt of the consideration. In turn, the customer benefits when the delivery of the goods is considered as the first event.

The third step is the discounting of the promised consideration to the cash selling price using the discount rate, which «would be reflected in a separate financing transaction between the entity and its customer at contract inception [4, § 64]». If the contract discount rate in the operation is not equal to the discount rate in the separate financing transaction, the cash selling price is to be adjusted to the discount rate in the separate transaction. The difference between the promised consideration and the transaction price will be accounted for as interest revenues or expenses in the income statement separately from the revenues from contracts with customers.

The revenue from the contract with customer is recognized in the sum of the cash selling price.

It is worth mentioning that following § 63 of the IFRS 15, accountants may not apply the method of adjustment of the promised consideration for the effects of a significant financing component if in contract inception the entity expects that the period between the transfer of the assets and the receipt of the consideration will be one year or less [4, § 63].

Accounting for revenue from contracts with customers, which contain significant financing component, is captured in the Figure 2.

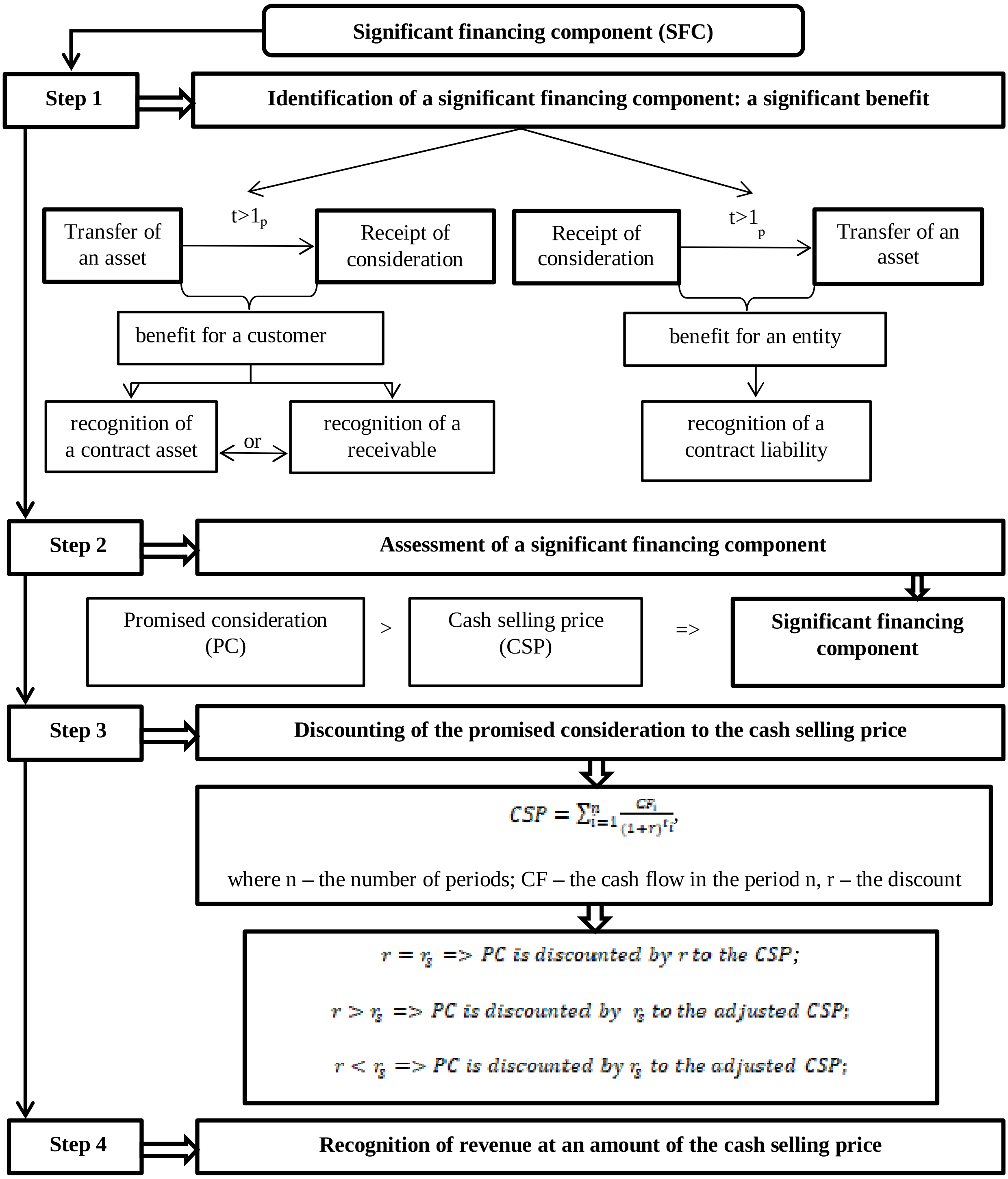

Figure 2. **Recognition of a significant financing component in the contracts with customers under IFRS 15**
Source: developed by the author.

For better understanding the procedures of revenue recognition from the contracts with significant financing component, it's useful to consider an illustrative example.

A company, that produces consumer goods, has signed a contract with customer for delivery of 1000 units of a product A and 900 units of a product B for the total sum of 105 000 cu. The company has just entered the market and in order to grab the segment it offers beneficial terms of payment. A stand-alone selling price for the product A is 50 cu per unit, and for the product B – 70 cu per unit. Because of difficult financial position the company agrees to deliver the product A immediately after the contract inception with the postponement of the payment. The customer will pay for the product A only after the delivery of the product B. The product B will be delivered in three month with 12-month payment postponement. Because of the postponement, the price for the product A will rise to 55 cu per unit, and for the product B – to 85 cu per unit. How to recognize the revenue?

The five-step model of the revenue recognition under IFRS 15 [4] requires applying the following steps:

I. Identify the contract: the parties of the contract have approved it in written form, it has commercial substance, contains information about the rights of the parties and the terms of payment.

II. Identify the performance obligation in the contract:

1) a performance obligation 1 – delivery of the product A;

2) a performance obligation 2 – delivery of the product B.

III. Determine the transaction price: the transaction price is 105 000 cu.

IV. Allocate the transaction price to the performance obligations:

$$\text{Stand} - \text{alone selling price for } A \text{ and } B = 50 \cdot 1000 + 70 \cdot 900 = 113000 \text{ cu.}$$

$$\text{Stand} - \text{alone selling price for } A = \frac{50000}{113000} \times 105000 \approx 46460 \text{ cu.}$$

$$\text{Stand} - \text{alone selling price for } B = \frac{63000}{113000} \times 105000 \approx 58540 \text{ cu.}$$

V. Recognize the revenue: as the entity satisfies the performance obligation – immediately after the delivery of the products A i B. The recognition of the revenue at the accounts requires additional explanations.

The contract says that the consideration for the product A will be paid only after the delivery of the product B. That means that the entity shell recognize the contract asset, because the right for the consideration for the product A is determined by the delivery of the product B. On a delivery date of the product A the entity recognizes revenue for the satisfied performance obligation:

Debit	Contract asset	46460
Credit	Revenue	46460

Under the terms of the contract, the entity postpones the payment for the product A, but in 3 month the customer will pay the higher price – 55 cu per unit. Hence, the promised consideration (55000 cu) is higher than the cash selling price (46460 cu) that confirms the existence of a significant financing component. However, the time period between the delivery of the product A and the payment is three month, which enables not to use the method of discounting of the expected consideration to the cash-selling price. The difference is recognized as the interest revenue in the Income statement:

Debit	Accrued revenue	8540
Credit	Interest revenue	8540

In 3 month the company delivers the product B and recognizes the revenue:

Debit	Receivable	105000
Credit	Contract asset	46460
Credit	Interest revenue	58540

Receipt of money for the product A is recorded in a journal entry:

Debit	Cash	55000
Credit	Receivable	46460
Credit	Accrued revenue	8540

The period between the delivery of the product B and the repayment of the consideration is 12 month, which enables to recognize a significant financing component. The difference between the promised consideration and the cash-selling price is considered as a significant financing component:

SFC = 85*900-58540 = 17960 cu.

Under the terms of the contract, the consideration is to be paid in such a way: by the end of the first year – half of the obligation, the rest of the sum – in equal shares quarterly during the second year. The interest is calculated each month.

In order to adjust the promised consideration to the cash selling price, it's necessary to calculate the discount rate:

$$58540 = \frac{38250}{(1+r)^4} + \frac{9562{,}5}{(1+r)^5} + \frac{9562{,}5}{(1+r)^6} + \frac{9562{,}5}{(1+r)^7} + \frac{9562{,}5}{(1+r)^8}$$

$$r = 5{,}301026\%.$$

It is supposed that the contract discount rate is equal to the discount rate in the separate financial transactions, which does not require adjusting the cash-selling price. Under IFRS 9, when the contract contains a significant financing component, the receivable is classified as the financial asset, and the promised consideration is adjusted for a significant financing component using an effective interest rate method. The calculations are disclosed in the Table 1.

Table 1

Accounting for the asset (receivable) in the contract, which contains a significant financing component

Period	Beginning receivable	Cash flow	Interest revenue	Ending receivable
1	*2 = 5_{n-1}*	*3*	*4 = $5_{n-1} * r$*	*5 = 2-3+4*
0		-58540,00		58540,00
1	58540,00	0	3103,22	61643,22
2	61643,22	0	3267,72	64910,94
3	64910,94	0	3440,95	68351,89
4	68351,89	38250,00	3623,35	33725,24
5	33725,24	9562,50	1787,78	25950,53
6	25950,53	9562,50	1375,64	17763,67
7	17763,67	9562,50	941,66	9142,83
8	9142,83	9562,50	419,67	0,00
Total		**76500,00**	**17960,00**	

Source: calculated by the author.

The interest revenue and the received consideration for the product B are registered using the following journal entry (for the 4th period):

Debit	Deferred revenue	3623,35
Credit	Interest revenue	3623,35
Debit	Cash	38250,00
Credit	Receivable	38250,00

It is worth mentioning that the adjustment procedure for the consideration will differ from the presented above if the discount rate, determined by the contract, isn't equal to the discount rate in the separate financing transaction.

But let's suppose that in the separate financing transaction the discount rate equals 7 % and, accordingly, does not respond to the 5,0301026 % contractual discount rate. Consequently, the cash selling price is lower than 58540 cu. Following p. 64 of IFRS 15, the promised consideration shell be adjusted using the discount rate, applied in the separate financial transaction. Therefore, the adjusted cash selling price is calculated in such a way: $38250/1.07^4+9562,5/1,07^5+9562,5/1,07^6+9562,5/1,07^7+$ $+9562,5/1,07^8=53891$ cu. The entity recognizes both the revenue and the receivable for 53891 cu.

Special attention, in case of a significant financing component accounting, is to be paid to the procedures of impairment of the contract asset and the receivable, which are in scope of IFRS 9 [4, § 107,108].

Under IFRS 9, in order to recognize impairment of the contract asset or the trade receivable, the entity may apply simplified approach: the loss allowance is measured at an amount equal to lifetime expected credit losses [3, § 5.5.15]. Figure 3 captures the procedures of impairment for the contract assets and the receivables.

Continuing the example, after the initial recognition the entity assesses the lifetime expected credit losses for the asset, which is 5 % in the 4th period, 8 % in the 5th period, 10 % in the 6th period, 11,5 % in the 7th period, and 12,5 % in the 8th period. The expected credit losses are: $1912,5/1,053^4+765/1,053^5+956,25/1,053^6+$ $+1099,69/1,053^7+1195,31/1,053^8=4405$ cu. In the second period, the expectations for the lifetime credit losses left constant, while in the third period the expectations deteriorated: 8 % in the 4th period, 10 % in the 5th period, 14 % in the 6th period, 15 % in the 7th period, and 20 % in the 8th period. The expected credit losses are calculated in such a way: $3060/1,053^2+956,25/1,053^3+1338,75/1,053^4+$ $+1434,38/1,053^5+1912,5/1,053^6=7178$ cu. The growth of the expected credit losses requires increase the sum of the reserve for more 2540 cu.

In the fourth period expectations of the supplier didn't change. But in the end of the 4th period, as a result of deteriorating financial position, the customer informed of a failure to meet 10 % of obligations. Incurred credit losses are calculated as the present value of the difference between contractual and expected cash flows: $3060/1,053^1+956,25/1,053^2+956,25/1,053^3+$ $+956,25/1,053^4+956,25/1,053^5=6830$ cu. Therefore, the incurred losses of 6830 cu are covered by the loss allowance.

In the following periods the entity continues preparing loss allowance for the impaired asset as the difference between the amortized cost (gross carrying amount minus loss allowance) of the receivable and the present value of the expected credit losses [3, § 5.5.33]. Also, the entity is ought to apply the other formula to calculate interest revenue: effective interest rate multiples amortized cost of the asset. In the following periods the entity doesn't recognize actual impairment of the asset, while the reserve is adjusted to the expected credit losses. Table 2 explains the procedures of loss allowance calculation to cover the expected and the incurred credit losses of the receivable in the contract with significant financing component.

The loss allowance preparation is accounted with the following entry:

Debit	Expenses	380
Credit	Loss allowance	380

The incurred losses are covered by the allowance using the following entry:

Debit	Loss allowance	6830
Credit	Receivables	6830

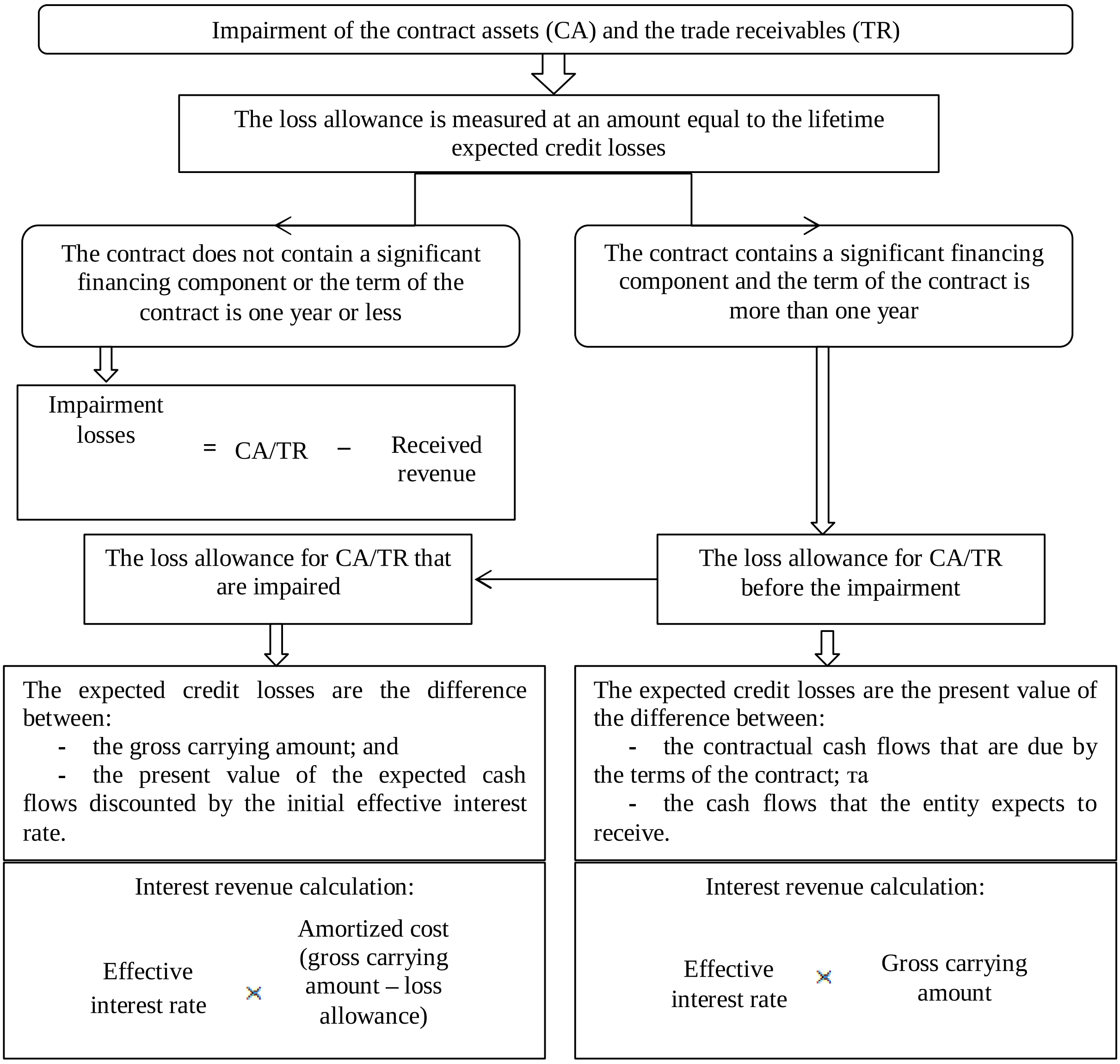

Figure 3. **Calculation of the loss allowance to cover credit losses for contract assets and receivables**
Source: developed by the author.

Table 2

Impairment of the receivable in the contract with customer that contains significant financing component

Period	Beginning gross carrying amount	Beginning amortized cost	Interest revenue	Cash flows	Expected credit losses	Allowance loss/(gain)	Incurred losses	Loss allowance	Ending gross carrying amount	Ending amortized cost
1	*$2=8_{n-1}$*	*$3=9_{n-1}$*	$4=2(3)*i_{ef}$	*5*	*6*	*$7=6-9_{n-1}$*	*8*	*9=6-8*	*10=2+4-5-8*	*11=10-9*
0				-58540					58540	58540
1	58540	58540	3103	0	4405	4405		4405	61643	57238
2	61643	57238	3268	0	4638	233		4638	64911	60273
3	64911	60273	3441	0	7178	2540		7178	68352	61173
4	68352	61173	3623	34425[1]	7559[2]	380	6830	729	30720	29991
5	30720	29991	1590[3]	8606[1]	2364[3]	1636		2364	23704	21339
6	23704	21339	1131[3]	8606[1]	1322[3]	-1042		1322	16228	14907
7	16228	14907	790[3]	8606[1]	1086[3]	-236		1086	8412	7326
8	8412	7326	388[3]	8606[1]	648[3]	-438		648	195[5]	-453[6]

[1] After the loss event the cash flows are adjusted for the actually received sum that is 10 % lower.
[2] The credit risk, estimated at the beginning of the 4th period is as follows: 8 % in the 4th period, 10 % in the 5th period, 14 % in the 6th period, 15 % in the 7th period, 20 % in the 8th period.
[3] After the impairment recognition the interest revenue is calculated as the multiple of the amortized cost and the effective interest rate.
[4] After the impairment recognition the expected credit losses are calculated as the difference between the gross carrying amount and the present value of the expected credit losses. Credit risks, estimated for the remaining periods, are equal to 5 %, 6 %, 7 %, 8 % in the 5th period; 3 %, 4 %, 5 % in the 6th period; 4 % and 6 % in the 7th period; and 5 % in the 8th period.
[5] By the end of the 8th period the carrying amount of 195cu is left unamortized; that is because the procedures for amortization after the impairment were changed, while the effective interest rate was not adjusted for the modified expected cash flows.
[6] In fact, the gross carrying amount of the asset at the end of the 8th period is also 195 cu, because the loss allowance of 648 cu will be reversed.

Source: calculated by the author.

Conclusions. The research results in disclosure of theoretical and applied issues of accounting for the assets and the liabilities in the contracts with customers that contain a significant financing component. The paper discloses economic meaning and the mechanisms of assessment of a significant financing component as well as the procedures of accounting for the contract assets, the contract liabilities and the receivables, recognized by the entity in the contracts with customer that contain a significant financing component up to the moment of satisfaction of the performance obligation. Illustrative example explains the procedures of accounting for revenue from contracts with customer, which contain significant financing component. Also, the paper explains the procedure of impairment for assets in contracts with customers that contain a significant financing component.

Список використаних джерел

1. Снігурська Л. П. Проблеми формування банком облікової політики щодо кредитів та інших фінансових активів зі зменшеною корисністю (частина 2). *Вісник Національного банку України*. 2014. № 10. С. 34-46.

2. Bloom R., Kamm J. Revenue recognition: how we got here and where it will take us. *Financial Executive.* 2014. URL: https://www.thefreelibrary.com

3. International Financial Reporting Standard 9 «Financial instruments» / International Accounting Standards Board. July, 2014. 233 p.

4. International Financial Reporting Standard 15 «Revenue from Contracts with Customers» / International Accounting Standards Board. July, 2014. 39 p.

5. Rutledge Robert W., Karim Khondkar E., Kim T. The FASB's and IASB's New Revenue Recognition Standard: What Will Be the Effects on Earnings Quality, Deferred Taxes, Management Compensation, and on Industry-Specific Reporting?. *Journal of Corporate Accounting and Finance.* 2016. Vol. 27, Issue 6. URL: https://www.onlinelibrary.wiley.com

6. Yeaton K. A New World of Revenue Recognition: Revenue from Contracts with Customers. *The CPA Journal, New York.* 2014. Vol. 85, Issue. 7. URL: https://www.questia.com

References

1. Snihurska, L. (2014). Problemy formuvannia bankom oblikovoi polityky shchodo kredytiv ta inshykh finansovykh aktyviv zi zmenshenoiu korysnistiu (chastyna 2) [Problems in formation of the accounting policy concerning impaired loans and other financial assets by banks]. *Visnyk NBU*, (10), 34-46.

2. Bloom, R., Kamm, J. (2014). *Revenue recognition: how we got here and where it will take us.* Financial Executive. Retrieved 01 December 2017, from https://www.thefreelibrary.com

3. International Accounting Standards Board. (2014). *International Financial Reporting Standard 15 «Revenue from Contracts with Customers».* IFRS Foundation Publications Department.

4. International Accounting Standards Board. (2014). *International Financial Reporting Standard 9 «Financial instruments».* IFRS Foundation Publications Department.

5. Rutledge, Robert W., Karim, Khondkar E., Kim, T. (2016). The FASB's and IASB's New Revenue Recognition Standard: What Will Be the Effects on Earnings Quality, Deferred Taxes, Management Compensation, and on Industry-Specific Reporting? *Journal of Corporate Accounting and Finance*, (27 (6)). Retrieved 03 December 2017, from https://www.onlinelibrary.wiley.com

6. Yeaton, K. (2014). A New World of Revenue Recognition: Revenue from Contracts with Customers. *The CPA Journal, (85(7)).* Retrieved 10 December 2017, from https://www.questia.com