LOSS CARRYOVER – RIGHT OR PRIVILEGE[1]?

In December 2001 the Verkhovna Rada considered a draft law on amendments to the Law of Ukraine On the Enterprise Profit Tax. The draft law has suggested reducing the timespan during which the losses of an enterprise may be carried over to the next taxation periods, to stop adjusting those losses for inflation, and to ban carrying over for those losses that resulted from barter operations and operations conducted at lower-than-market prices. This draft law was voted down and sent for revision. The discussion about carrying the losses over to other periods, however, still continues and the absence of consent on this issue remains to be one of the stumbling blocks in the process of the Tax Code development. Moreover, the very idea of taking past losses into account in calculation of current net profit is usually set aside because of misapprehension of this compensation mechanism. (For example, many share a wrong idea that this mechanism allows an entrepreneur not only partially but also in the full amount compensate losses at the cost of the budget, and the entrepreneur bears no financial responsibility for his or her risky decisions that resulted in losses.) Therefore, with the view of better understanding of this problem, this article discusses some practical and theoretical aspects of developing legislative procedures to regulate the process of carrying the losses over to other periods.

Theoretical Model

It is difficult nowadays to find a person who would get surprised by the idea of having enterprises transfer part of their net profit to the State budget through paying some kind of the corporate income tax. Obviously though, such transfers can only occur in cases when an enterprise receives the above-mentioned profit. But what happens if an enterprise suffers a loss?

Consider a simplified example where two entrepreneurs are required to pay a 10 percent enterprise profit tax each period. The activity of the first entrepreneur (call her
ongoing profits whereas the activity of the second one (entrepreneur Â) is less stable and generates both profits and losses. Table 1 shows financial results of the two businesses during the three periods. The assumption behind this example is that, despite the differences in the type of business activities, the aggregated profit for the three periods for each entrepreneur is the same[2].

Table 1

	Entrepreneur À		Entrepreneur Â		
				Case	
				1	*2*
Net profit over the 1st period:	100		100		
of which 10 percent is paid as EPT		*10*		*10*	*10*
Net profit over the 2nd period:	100		-4**00**		
of which 10 percent is paid as EPT		*10*		*0*	*-40*
Net profit over the 3rd period:	100		600		
of which 10 percent is paid as EPT		*10*		*60*	*60*
Total net profit over all the three periods:	**300**		**300**		
total EPT paid		***30***		***70***	***30***

The situation of entrepreneur À is rather simple. Each period after she has received the profit, 10 percent of it is transferred to the budget as a tax payment. Over the three periods entrepreneur A will

[1] By Yuriy Dzhygyr.
[2] No account for inflation.

pay a total of UAH 30 as a tax on UAH 300 of the gained profit. The situation of entrepreneur B is somewhat more complicated because of the losses that she meets in the second period. If the losses are not taken into account in the estimation of tax liabilities (case 1) then over the three periods entrepreneur Â will pay UAH 70 as tax on UAH 300 of the profit gained. Thus, in the "long-term" the only
reason that cash flows are not so fluctuating.

An alternative case considered in Òable 1 (case 2) describes a situation where losses incurred by entrepreneur Â over the second period are not ignored but accounted as a negative profit and treated symmetrically to regular profits. Under symmetrical treatment, negative profits induce negative tax liabilities in the size of 10 percent of the loss. In other words, entrepreneur B receives a tax refund equal to the amount of 10 percent of the losses that he has suffered during the month. As shown in Table 1, in this case total amount of taxes paid by entrepreneur B to the budget at the end of three periods is equal to that paid by entrepreneur À.

There are numerous arguments suggesting that a taxation system must be designed so that it remains neutral towards any legal activity and so that all legal entrepreneurs are eligible to bear the same tax burden, regardless of the type of their activity. From this formal perspective, since all entrepreneurs are required to pay taxes on the profit they gain, in case of losses they must be eligible to some sort of "loss refund", otherwise the taxation system would discriminate those entrepreneurs whose activities are connected with higher risks or considerable sporadic investment.

Tax legislation in the majority of countries recognizes the need to somehow account for the losses in the calculation of tax liabilities. The above-described treatment of positive and negative tax liabilities where an entrepreneur receives a tax refund in case of losses remains an ideal that would ensure absolute neutrality. It is, however, obvious that such a mechanism of loss reparation works at the cost of budget funds and causes direct reduction of budget revenues. Besides, when applied to the real world, the above-mentioned theoretically ideal model brings about strong incentives and numerous opportunities for fraud by way of declaring fictitious losses. Administrative costs of preventing such fraud are normally very high. For these reasons, the above-described mechanism of ideal loss reimbursement usually lacks political support.

Generally, tax legislation permits carrying losses forward by allowing to take them into account in calculation of the net taxable profit during future taxation periods. Thus, an entrepreneur may reduce his or her net profit for an accounting period by the sum of the losses that the business has incurred during some previous period and, respectively, to reduce his or her tax liabilities. With this type of compensating mechanism, tax liabilities of entrepreneur B for the three periods will be UAH 30, which equals 10 percent of the EPT set (see Table 2). In this case, entrepreneur B will bear the same tax burden as entrepreneur A.

Table 2

	Entrepreneur Â		
	Profit gained	Taxable profit	Tax (10%)
1st period	100	*100*	*10*
2nd period	-400	0	*0*
3rd period	600	*600+(**-400**)=200*	*20*
Total over three periods:	**300**	**300**	***30***

This example shows that entrepreneur B, having carried UAH 400 of losses forward to the next period, reduced his tax liabilities by only UAH 40; i.e. indirectly compensated only 10% of the losses incurred. Thus, the carry-over procedure allows only a partial compensation of losses within the percent frames of the tax rate in effect.

In some countries tax legislation also permits to carry losses back rather than forward. This regulation, however, may be difficult to administer, as it requires reassessment of tax liabilities that a taxpayer has developed during the previous periods.

Practical Limitations to Carrying Losses over to Other Periods

Effectively, the model of carrying the losses to other periods described above provides an opportunity to avoid direct payments from the budget to refund negative tax liabilities. But since this type of regulation reduces taxable profits of future periods it leads to a respective reduction of the future budget revenues. Thus, the ultimate achievement of the model is in that it helps to modify the form in which the compensating payments are done and to scatter them over a certain period in future.

At the same time, the described model, to some extent, protects the budget from the potential losses as a result of financial violations on the part of taxpayers inclined to fraud as it reduces the related stimuli and possibilities. Temptation to involve in fraudulent tax behavior is much stronger; indeed if the final gain is real money rather than a probability of reduction in tax liabilities during a certain time span in the future.

Nonetheless, tax legislation is generally used to establish additional preventive mechanisms to ensure more reliable protection of the budget from uncontrolled decreases in government revenues and easier administration of corporate tax. The variety of such mechanisms depends on the government policy and the goals of the taxation system in particular. Most typical regulative decisions of this kind can be organized in several groups discussed later in this paper.

One group of mechanisms includes legislative rules that regulate the duration of the period through which the loss carry forward or back is permitted. Another important category consists of norms that regulate the procedure of carrying over the losses in cases of changes in ownership of a business company (e.g. merger or takeover). Less common regulative tool is restriction on the amount of losses permitted to be carried over to other periods and restriction on loss carry over depending on the type of business activity.

Restrictions on the length of period through which the losses can be carried over. Theoretically, a taxpayer may be entitled to loss carry forward or back during a non-restricted timespan. Moreover, this theoretical model has its followers in the real world. Such countries as Belgium, Germany, Ireland, Luxembourg, and Sweden do not constrain the term for loss carry forward. In this case, however, some practical difficulties arise and they must be taken into account.

Firstly, it is rather difficult to faultlessly define the tax base and thus to fully insure against fraud on the part of the taxpayers. There is always a possibility that an entrepreneur having declared fictitious losses receives a legal opportunity for open-ended tax dodging. Another significant problem with open-ended loss carry forward is that such system would require considerable administrative resources, which are not always available to a tax service. It is for that primary reason that most countries prefer loss carry forward rather than loss carry back (Burns, L., Krever, R. 1998).

From the practical point of view, it is very convenient when the permitted loss carry period concurs with the period over which the tax administration can easily reassess tax liabilities (it is logical for this period to be consistent with the one during which entrepreneurs are supposed to keep financial documents)

Source: Dale Chua, Loss Caryforward and Loss Carryback. Tax Policy Handbook. (P. Shome ed. 1995).

But even if there are no time constraints, the above-described mechanism of carrying the losses over to other periods provides an opportunity to only partially reimburse negative tax liabilities incurred by the businesses. The reason is that the present discounted value[3] of the future tax credit will be lower than the amount of money, which an entrepreneur could receive in case of direct reparation in accordance with an "ideal" model (Chua, D. 1995). On top of that, this discrepancy is strongly influenced by the inflation. Inflation means that the real value of the future tax credit will be lower (or, in case of deflation, higher) than the compensation which an entrepreneur could have theoretically received today. With account for that, tax legislation may specify the procedure of adjustment of losses carried over to other period by a particular coefficient for better accounting for temporal distortions. The currently effective Ukrainian law on the enterprise profit tax provides for adjustment of losses in accordance with the official inflation rate (although this adjustment is abolished in the draft Tax Code of Ukraine, recently approved on second reading).

Restrictions on loss carry over in cases of enterprise restructuring (Vanistendael, F. 1998). Tax legislation of most countries of the Western Europe and Northern America strictly regulates carrying of losses over to other periods if the owners of the loss making company change. If there is no restrictions, a sale of a loss-making company or its merger can give the new owners an opportunity to reduce their taxed profit referring to the losses of the acquired company. Hence, there appears a strong temptation of buying loss-making companies with the only intention to purchase their losses effectively. In order to prevent the formation of such a peculiar market for loss-making companies, there must be a strict regulation of the procedure of carrying losses over to other periods in each case when the owner of a loss-making company changes.

Restriction on carrying of losses over to other periods for specific types of economic activity (Cosyns, E. 2001). The requirement for the tax system to be absolutely unbiased towards risky business activities can be viewed as a debatable statement as such. Theoretically, introduction of a differentiated set of rules for loss reparation that would depend on the type of economic activity based on its public value or desirability can make sense. Here, however, a tax policy designer is immediately trapped by practical difficulties resulting from the need to clearly define activities that would serve the public good and so should be encouraged. Thus, the major problem of the use of different compensation rules for different types of economic activity is the fact that such a practice makes administration of the corporate tax extremely complicated since in this case gains and, respectively, losses of one type of activity must be differentiated from gains and losses of another type. To some extent, this approach may be illustrated by an example of the United Kingdom. In that country, tax legislation permits carrying losses forward only by way of reducing future tax liabilities on those profits that would be generated from the same type of activity that has led to the appearance of current losses. Applying current negative tax liabilities to future profits from any other types of activities is thus prohibited.

Restrictions on the amount of lose carried over (Cosyns, E. 2001). Another regulation method is to restrict the amount of losses, which can be carried forward. In the Tax Code of the Russian

[3] The concept of the ***present discounted value*** of the future income is based on the assumption that the same sum of money has different value at different times. Apparently, even if there is no inflation the value of 100 hryvnias in future is lower than that of today because one can get annual interest on today's 100 hryvnias having put it, say, in a bank. So, in order to get today's value of the future income it must be adjusted for the sum which could have been received based on the existing interest rate.

A mathematical formula for calculation of the present discounted value of the future income is as follows: $PDV = R_t / (1+r)^t$, where *PDV* – present discounted value, R_t – future income, t – the number of periods before receiving income, r – interest rate over the period.

Federation, this approach is applied in practice: the relevant Article[5] specifies that the sum of carried losses in each accounting period cannot exceed 30 percent of the taxable profit.

Making the amount of losses that can be carried forward dependent on the size of the gained profit creates a very strong incentive for a taxpayer to manipulate the declared profit. Such legislative decisions, therefore, may result in significant practical difficulties with controlling tax accounting reports and failure to overcome those difficulties may quickly make this process uncontrolled. For that reason, the mechanism of limiting certain percentage or absolute sizes of the losses carried forward is rather unpopular in the practice of the corporate income tax administration.

One angle of looking at the policy of imposing restrictions on carrying the losses over is to view it as an instrument for the government to discourage risky investments and encourage more sustainable types of economic activity (Cosyns, E. 2001). Since any restrictions on carrying losses over, to some extent, discriminate activities dealing with higher risks, then the government may stimulate less risky types of economic activity by way of limiting the possibilities for carrying losses over.

Loss Carryover in Ukrainian Tax Legislation

In 1997 Ukraine enacted a law establishing the procedures for carrying the business losses over which are in effect as of today[7]. The law permits to carry the losses forward during five future years and requires adjusting the amount of the losses carried forward for the official rate of inflation.

Nonetheless, the government considers that financial fraud dealing with violations of the acting provisions on loss carry forward considerably reduces the tax base. For that reason the government has repeatedly attempted to restrict the possibilities for carrying the losses over. The draft law mentioned in the introduction to this article[8] suggests that the loss carry forward timespan shall be limited to 2 or 3 years for most entrepreneurs, adjustment for price fluctuation shall be cancelled and carrying of losses caused by barter operation and operations carried out at prices lower than market ones shall be prohibited. The draft law has also proposed that entrepreneurs shall provide tax authorities with detailed information about the factors, which have caused the losses. The Parliamentary Committee on Banking and Finance did not support this draft law but the discussion on legislative regulation of the procedure of carrying losses for other periods continues.

An essential drawback of the acting law and the Tax Code approved on second reading is the unregulated procedure of carrying losses in case of restructuring or merging of a lossmaking company. Thus, it enables reparation of losses of one company at the cost of profits of the other one, which owns or controls the former one. As a result, profitable companies may buy lossmaking enterprises to reduce their tax liabilities.

The latest version of the Tax Code[9], approved on second reading, specifies an open-ended loss carry forward and abolishes adjustment for inflation. The previous version of the Tax Code (approved on first reading), however, has restricted carrying losses forward to 4 years.

At the moment the question of carrying of losses over to other periods brings about numerous discussions among all the parties in the legislative process and is one of the main stumbling blocks to the refinement of the Tax Code.

[5] Tax Code of the Russian Federation, Article 283.
[7] Law of Ukraine "On Enterprise Profit Tax", Article 6. (#334/94 – VR of 28.12.1994).
[8] Draft Law "On Amendments to the Law of Ukraine "On Enterprise Profit Tax". (#34-3065/4 of 15.09.2001).
[9] Draft Tax Code of Ukraine, Article 2036. (#3266-1 of 20.06.2000).

Conclusions

The task of designing a system of tax legislation that would be economically efficient and, at the same time, politically sustainable requires considering a variety of conflicting factors. On the one hand, legislative rules regulating the procedure of loss carry over are based on the principle of economic neutrality towards all taxpayers. On the other hand, these rules may reflect an intention of the lawmakers to account for potential difficulties in implementing these theoretical principles into the real world and to shield against possibilities of fraud. This intention implies a tradeoff between the ideal solution to the problem and a solution that is feasible and realistic. The number of alternatives in between the two extremes – the ideal model and a rigid politically shaped neglect of theoretical principles – is infinite. In this situation, a balanced decision must be based on transparent and precise formulation of strategic social priorities.

A lawmaker's dilemma in this uneasy situation and the logic of taking the most adequate decision may be vividly described using a simple statistics analogy. The theory of statistics distinguishes two types of statistical errors – type one and type two, as will be briefly explained below. In the social sciences where information about the subject of analysis is usually incomplete it is normally impossible to define the true values of the unknown parameters with full certainty. For this reason, the goal of the statistician is to use the limited sample of data in order to make some estimates of the unknown parameters with as high precision as possible. The researcher can only make assumptions about these parameters and then justify his or her decisions about accepting or rejecting those assumptions supplementing such conclusions with some information on the potential level of their reliability. Thus, there always remains some probability that the conclusion that was made does not reflect the true state of things and is, therefore, false.

Here the researcher is trapped between two potential dangers: on the one hand, it is the danger of rejecting the conclusion, which is in fact correct, and, on the other hand – the danger of accepting the wrong one. This idea underpins distinction between first and second type errors: an error of the first type occurs when a true assumption is denied and an error of the second type – when a false assumption is accepted. Choosing from alternative methods of statistical analysis each of which is related to certain probability of errors of both types a researcher may try and minimize the probability of one of the errors but this automatically increases the probability of the other one. This is why the choice of the strategy of statistical analysis always relies on a well-defined statement of a conscious decision made by the researcher regarding the type of error, which he or she sees to be more dangerous for the research.

Although this classification is a specific tool of statistical theory, the errors of first and second type may occur in any situation, which requires making a decision with no opportunity to first establish whether this decision is right or wrong[10]. Since a lower probability of the first type error leads to a higher probability of the second type error, there appears a tradeoff between higher risk of denial of a forethought decision, which ultimately will turn out to be correct or higher risk of accepting of the forethought decision which will, however, be false. A vivid example of this dilemma is the problem of giving sentence when unambiguous evidence related to the suit under consideration is absent. In such a case there is always a risk to acquit a guilty person (first type error) or sentence an innocent one (second type error). Judicial authorities usually try to reduce the probability that an innocent person would face false charges, which immediately causes an increase in probability of excusing a guilty person in case where unambiguous evidence is lacking. Similar to this, any time when a risky decision

[10] For an example of the use of the notion of 1 and 2 type errors for the analysis of policy on bankruptcy of enterprises see article "Double or nothing". The Economist (Dec 13th, 2001).

is considered, there appears a need for a deliberate choice of accepted tradeoff between the first and second type errors.

When tax legislation is elaborated, a similar problem arises. In practice, it is rather difficult to form up an ideal taxation system that would be strict towards dishonest taxpayers and at the same time liberal towards the honest ones. That is why in administration of taxes, first and second type errors occur very often. In this case the first type error implies a liberal attitude towards "dishonest" taxpayers and second type error entails severe attitude towards "honest" taxpayers. Attempts to minimize the risk of discrimination of honest entrepreneurs (by way of aiming at the ideal theoretical model) automatically increase the danger of fraud and unreasonable budget losses. Amplification of restrictions of the possibilities of loss carry over, on the contrary, may lead to the reduction in the number of tax frauds and, thus, protect the budget; this outcome, however, would be achieved at the cost of the discriminating against honest entrepreneurs. Despite the fact that the frequency of both types of errors in levying of taxes may be reduced by way of more thorough administration or legislative regulation, there always remains some probability for both of these errors. Success in searching for a legislative decision to this problem always remains relative and depends on those priorities, which are set by the country at a specific period of time. This is why, like in Statistics, an optimal decision is the one that rests on a conscious decision concerning the strategic standpoint of the government and on clear definition of those economic and social goals that are regarded highly enough to legitimate consequent risks. The role of the theory of public finance is to make this decision as informed as possible.

One convenient application of the suggested analogy is to use it to receive better understanding of the standpoints taken by the key stakeholders in the process of designing tax laws and to asses those standpoints more rationally. For example, since the task of compliance control in the tax system is a primary responsibility of the tax administration, when having to take a legislative position, representatives of this institution are normally inclined to those laws, which leave minimum opportunities for fraud. In other words, the role of the tax administration makes it prone to the second type errors and more careful of the first type. At the same time, the government and the Parliament are called upon to advocate strategic social priorities directly and, thus, their position may be different. For the government the goal of economic development and the philosophy of market reforms may outweigh the danger of fraud and prioritize an unbiased attitude towards all entrepreneurs. Liberal strategy of this type, a budgetary parallel to the presumption of innocence in jurisprudence, may appear attractive for the Parliament in a special additional way – if we assume that the probability of future economic development and resulting increases in budget revenues are higher than the probability of the first type error, that is, of the cumulative budget losses caused by tax fraud.

So, what is the answer to the question set in the heading to this article: loss carry over – is it a right or a privilege for the taxpayers? Ideas related in this article testify in favor of loss carry over being a right of entrepreneurs resulting from the principle of even tax burden for any legitimate activity. Nevertheless, this right may be sacrificed for the sake of protecting other interests, which are considered to have bigger social importance. In any case, however, restricting this right must result from a conscious and transparent decision that balances competing consideration.

Bibliography:

1. Burns, L. and Krever, R. Taxation of Income from Business and Investment. Tax Law Design and Drafting (Ch. 16). International Monetary Fund, 1998.
2. Chua, D. Loss Caryforward and Loss Carryback. Tax Policy Handbook (P. Shome ed. 1995).
3. Cosyns, E. SEFR Policy Memorandum. 2001.
4. Vanistendael, F. Taxation of Corporate Reorganizations. Tax Law Design and Drafting (Ch. 20). International Monetary Fund, 1998.