

# The state and development of financial structure in agricultural co-operatives

## *Stav a vývoj finančnej štruktúry poľnohospodárskych družstiev*

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**Abstract:** The main idea of the paper is to evaluate the state and development of financial structure of selected agricultural co-operatives in accounting periods from 1994 till 2001. Assets financial stability constitutes an ability of an enterprise to create and balance an accurate relation between assets and their financial sources. The results of the research work document a positive tendency in financial structure in favour of equity capital (Table 1). On the other hand, there have been problems with borrowed capital mainly with the liabilities from business relation. An increasing level of earnings can be assessed positively as well as the participation of new loans in the financial basis of enterprises (Table 3).

**Key words:** assets, equity capital, borrowed capital, indebtedness, financial structure, equity stake

**Abstrakt:** Obsahom príspevku je zhodnotenie stavu a vývoja finančnej štruktúry v súbore poľnohospodárskych družstiev v účtovných obdobiach 1994–2001. Majetkovo-finančná stabilita predstavuje schopnosť podniku vytvárať a udržiavať správny bilančný vzťah medzi majetkom a jeho zdrojmi financovania. Štruktúra zdrojov a jej úroveň vývoja v poľnohospodárskych podnikoch je poznačená procesmi vlastníckej, organizačnej a výrobnjej reštrukturalizácie. Výsledky práce dokumentujú pozitívnu dynamiku vývoja finančnej štruktúry v prospech vlastného imania (tab. 1). Problém dlhodobo pretrváva v cudzích zdrojoch, najmä v položke celkových záväzkov, osobitne z obchodného styku. Pozitívne možno hodnotiť úroveň vývoja výsledku hospodárenia ako aj účasti nových úverov vo finančnej základni podnikov (tab. 3).

**Kľúčové slová:** majetok, vlastné imanie, cudzí kapitál, zadlženosť, finančná štruktúra, majetkový podiel

## INTRODUCTION

Determination of the financial structure is one of the fundamental decisions of business subjects. They significantly determine economic prosperity. From the long-term financial strategy point of view, the determination of financial structure is a dynamic problem, that influences future approach of commercial subjects to financial sources.

The financial structure of agricultural companies is marked with property, administrative and production restructuring processes. It depends on results of the transformational process, particularly from insolvency, deficiency of long-term financial sources and restrictive financial policies. Deciding of agriculture subjects in determination of the financial structure, in so-called transformational period, was determined by limited accessibility of financial sources. The primary problem was not the rating of capital costs and option of optimal structure, but finding necessary financial sources themselves. We can approach to qualification of financial structure from different point of views, especially from ownership relation (own, outside financial sources) or time disponibility (short-term and long-term financial

sources) point of view. From financial managing point of view, there is important reaching their reciprocal ratio. The state and development of financial structure in agricultural co-operatives was described also by the authors – Bielík (2001), Hacherová (2002), Hulík, Pribilovičová (2002). Belica (2000), Šebo (2002) and Košovská (2003) focused on bank loans provided to the agricultural co-operatives.

## MATERIAL AND METHODS

The analysis of the financial structure is based on the complex of data gathered from the Information Letters, which are a part of the central databank of the Ministry of Agriculture operated by the Research Institute of Agricultural and Food Economics. In connection with a thematic goal of the paper, author's computations have been worked up. The calculation per ha of agricultural land and a comparative method of the parameters during the selected time period is the basic method. The results represent selected partial outputs from the research project, which correspond with the orientation of this paper. Entry data set for analysis is created from the selected ag-

gregated data of agricultural enterprises from 1994 till 2001. By the evaluation of a particular indicator, the extent is not decisive but dynamic, which reflects the tendency of the financial structure development. The analysis is focused on the evaluation of the financial structure in the agricultural co-operatives in the period of transformation and its influence on assets-financial stability. The conclusion of the paper indicates aggregate subject-matters and cognition from the solved problems.

## RESULTS AND DISCUSSION

A significant indicator of an economic stability is equity capital. The nominal value of the equity capital, its structure and portion of the total capital are an important information for internal and external users of accounting information. The time comparison of the equity capital development in term of interim indexes refers to increasing or decreasing business property. The value of equity capital was increasing during the analysed period (the basic index 2001/1994 = 110.64) and it represented 34 993 SKK/ha in 2001. The equity capital development was influenced by the process of transformation as well as by business results and level of provided investment subsidies from the state budget or state funds. In connection with the adjustment of property relation and settlement of claims to property within the ambit of transformational process, the equity capital of agricultural co-operatives was defined as a difference between business property and liabilities, the value of which was divided into equity stakes from transformation towards entitled persons.

The legislative regulations enabled entitled persons to deal with the mentioned equity stakes in the following way:

- Entitled persons could request consignment of their equity shares, if they had decided to run a business as self-employed individual farmers.
- For the purpose of membership in a co-operative, entitled persons could put their equity stakes into agricultural co-operatives. In that case, the equity stakes from transformation were considered as the membership's equity stakes, which consist of so-called basic membership's equity stakes and (additional) optional membership's equity stakes according to the Commercial

Code or the Statute of the agricultural co-operative. The given process has a direct impact on the value of the share capital, which represents a decisive part in the equity capital structure. Consequently, share capital also consists of both basic membership's equity stakes (stated in the Commercial Register) and optional membership's equity stakes (not registered).

- Entitled persons who decided not to become members of the co-operative, could leave their equity stakes from transformation in the co-operative. In that case, the equity stakes were recognised as the liabilities from transformation towards entitled persons. The title to capital stake issue from transformation was legislatively fixed by the transitional seven years period in order to avoid selling out and segmentation of the property.

The problem of settling transformation shares after the transformation period was legislatively solved by the means of mutual fund shares issued in favour of entitled persons. This fact caused the decline of long-term liabilities towards entitled persons and simultaneously an increase of the amount of other capital funds in the financial structure. From the point of transformation, other capital funds of agricultural co-operatives represent an equity interest of members or non-members in a business running in case, if their equity interest does not increase the volume of share capital.

The development of equity capital is significantly affected by other capital funds. Their level depends on the compensation of transformational liabilities and on the amount of received investment subsidies from the state budget or state support funds. The capital funds were participating in average 34% in the equity structure. The amount of the capital funds in 2001 represented 17 132 SKK/ha of agricultural land. From the creation point of view, the capital funds increased by 13 833 SKK/ha in agricultural land rating (index 2001/1994 = 519.32).

In connection with provided investment subsidies, there was asserted capital approach of their clearance up to 1999. According to this, subsidy is assigned to owners profit, that means to profit from equity. In 2000, changing accounting methods of investment subsidies have come out from the income method of accounting. According to this, the received investment subsidies are dissolved for benefit of deferred income in accruals with accounted amortisation from long-term asset, for purchasing of which subsidy was provided. From the finan-

Table 1. The structure of the equity (in SKK/ha)

| Indicator                           | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Equity                              | 28 819 | 27 654 | 29 990 | 31 629 | 32 746 | 34 098 | 33 839 | 34 993 |
| – share capital                     | 24 162 | 22 857 | 19 730 | 18 903 | 18 430 | 17 763 | 16 413 | 15 546 |
| – capital funds                     | 3 299  | 3 586  | 9 692  | 11 680 | 13 192 | 15 071 | 16 157 | 17 132 |
| – funds created from the net profit | –      | –      | 3 000  | 2 964  | 3 047  | 3 200  | 3 224  | 3 380  |
| – net profit before tax/loss        | –1 060 | –1 023 | –820   | –546   | –914   | –1 012 | –830   | 59     |

Source: Information Letters CD of Ministry of Agriculture

Table 2. The structure of business result (in SKK/ha)

| Indicator                               | 1994   | 1995   | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|--------|--------|------|------|------|------|------|------|
| Profit/loss from operating activity     | 23     | -60    | -175 | -90  | -291 | -457 | -412 | 335  |
| Profit/loss from financial activity     | -1 296 | -1 171 | -863 | -877 | -893 | -755 | -551 | -455 |
| Profit/loss from extraordinary activity | 214    | 208    | 218  | 421  | 270  | 201  | 129  | 173  |

Source: Information Letters CD of Ministry of Agriculture

cial structure point of view, it comes to the temporary increase of outside financial sources. That means temporary accounts of liabilities (deferred revenues) in favour of equity.

The funds created from net profit accounted in average to 9% of equity structure. Their development was addicted to gained earnings in the selected period and a slight increasing tendency can be seen there (index 2001/1996 = 112.66). From the agricultural co-operatives point of view, the most important fund created from net profit is so-called indivisible fund. This can be considered as a security fund with full range of functions. The withdrawal of these funds is not legislatively determined but the primary function is to overrun an unfavourable economic period and to remove the obstacles in financial performance.

The equity capital development was mainly influenced by earnings, as it is shown in Tables 1 and 2. The positive tendencies resulted in reducing loss from business activity from 1994 till 1997. Compared with the year 1994, agricultural co-operatives reported a lower loss by 514 SKK/ha of agricultural land in 1997 (index 1997/1994 = 51.5). The total loss has been increasing since 1997 and it represented -1 012 SKK/ha of agricultural land in 1999. An interim comparison of earnings before the tax shows a decreasing tendency of loss (index 2000/1999 = 82.02).

There was a noticeable change in 2001, when agricultural co-operatives turned into the net profit 59 SKK/ha of agricultural land. The analysis of the business result structure according to the certain activities calls attention to different level of its creation. The opposite development can be seen in business results from operating activity. The net profit turned into the loss, which culminated in 2001. From the point of the business result structure, the loss from current activities was to a great extent influenced by the results from financial activities. The loss from financial activities went down by 841 SKK/ha in comparison with the year 1994. The basic index 2001/1994 was 35.10. The stable net profit was achieved only from extraordinary activities despite of unexpected events, which can influence the total business activity.

As the Figure 1 shows, the development of financial independence refers to an evident change in relationship of debt to equity. The structure of financial sources indicates an overcapitalisation of agricultural co-operatives. The values of financial independence were increasing dynamically. In 1994, 1 SKK of borrowed capital covered 1.30 SKK of equity capital and in 2001 it was almost 2.8 SKK of equity capital (index 2001/1994 = 214.62).

The equity capital development was influenced by two opposite tendencies. On the one hand, equity capital was decreasing in consequence of unfavourable economic

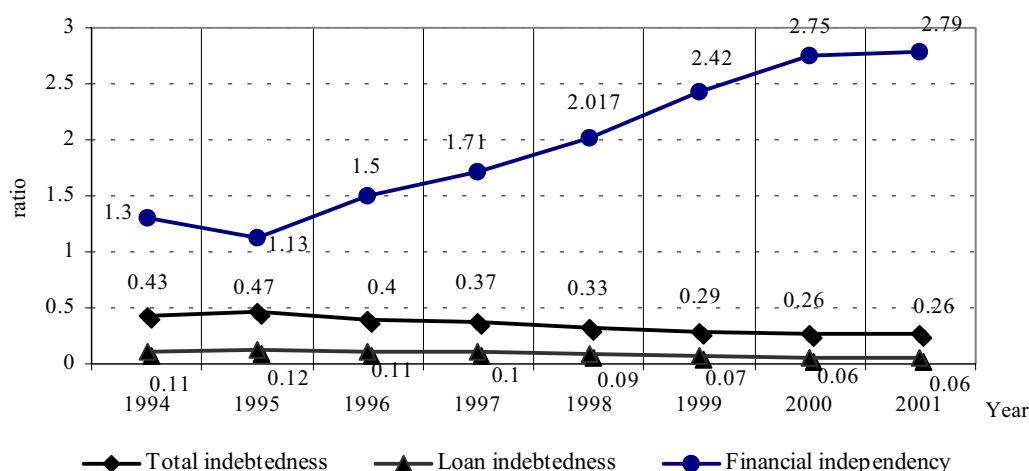


Figure 1. The indicators of indebtedness

Source: Authors computation

Table 3. The structure of outside (borrowed) capital (in SKK/ha)

| Indicator                  | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Outside (borrowed) capital | 22 168 | 24 574 | 19 968 | 18 478 | 16 233 | 14 064 | 12 307 | 12 541 |
| – long-term liabilities    | 9 111  | 10 698 | 7 229  | 6 417  | 5 361  | 4 563  | 3 807  | 3 535  |
| – short-term liabilities   | 7 017  | 7 441  | 7 061  | 6 753  | 6 442  | 5 981  | 5 515  | 5 628  |
| – bank loans               | 5 867  | 6 324  | 5 573  | 5 164  | 4 219  | 3 274  | 2 741  | 3 006  |
| Other liabilities          | 194    | 258    | 294    | 334    | 377    | 400    | 947    | 1 621  |

Source: Information Letters CD of Ministry of Agriculture

results. On the other hand, the increasing value of equity capital was a result of used capital approach of investment subsidies accounting according to accounting procedures for businesses as well as the clearance of liabilities from transformation. The effect of these two tendencies causes that equity capital is dubious what distorts the relative financial stability of agricultural co-operatives.

The total volume of borrowed capital was reduced by 9 627 SKK/ha of agricultural land (index 2001/1994 = 56.57). Borrowed capital as a percentage of financial structure was decreasing continuously within the selected period (Figure 1). The total indebtedness of agricultural co-operatives fell by 40% (index 2001/1994 = 60.47). Agricultural co-operatives were able to finance with 0.26 SKK of borrowed capital 1 SKK of assets in 2001. The reducing indebtedness was mainly affected by both settling property matters from transformation and by absent loans.

An average share of liabilities accounted to 73% of the borrowed (outside) capital. The total sum of liabilities was 9 163 SKK/ha of agricultural land in 2001 and in comparison with the year 1994, it decreased by 6 966 SKK/ha of agricultural land (index 2001/1994 = 56.81). The decreasing tendency can be seen also in long-term as well as short-term liabilities but with different dynamics. Since 1997, there has been a substantial change in the struc-

ture of liabilities. The short-term liabilities achieved a decisive share on the liabilities structure. The development of long-term liabilities was mainly influenced by the clearance of liabilities from transformation towards entitled persons. A similar tendency is indicated in the case of long-term liabilities after the due date. These decreased by 2 229 SKK/ha of agricultural land compared to the year 1994 (index 2001/1994 = 64.51).

The development of the insolvency indicator I., defined as the rate of receivables to liabilities, reflects remaining primary insolvency of agricultural co-operatives. The entire volume of liabilities was decreasing faster compared to the development of receivables. The entire liabilities were in average 2.4 times higher than receivables (index 2001/1994 = 63.41). On the other hand, the rate of rendered liabilities and receivables from trade dealings after the due date, (insolvency II.) points out to the secondary insolvency (index 2001/1994 = 81.08). This indirectly points out to reciprocal linkage or dependence of the primary and the secondary insolvency.

In the monitored period, the development of bank loans provided to agricultural co-operatives (Table 3) was distinguished by a decreasing trend (index 2001/1994 = 51.24). The entire volume of loan principal sum culminated in 1995. In that year, the loan charge per 1 ha of agricultural land was 6 324 SKK. To compare with year 2001,

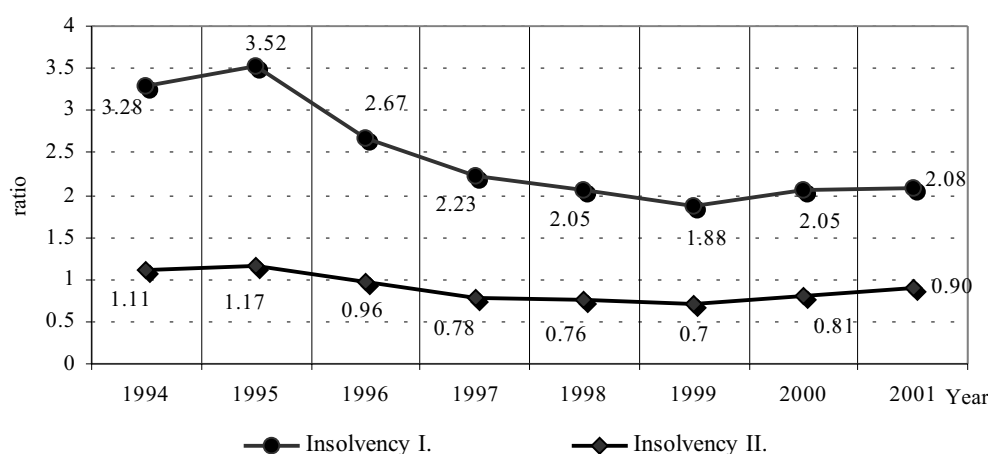


Figure 2. Insolvency

Source: Authors computation

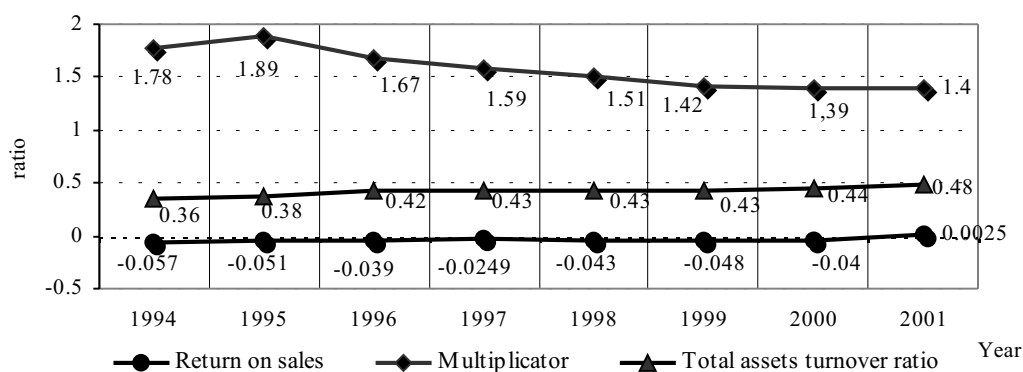


Figure 3. Du Pont diagram

Source: Authors computation

loan charge was 3 006 SKK/ha of agricultural land. In the analysed period, redemption and reduction of newly provided loans caused decreasing of loan principal sum. In consequence of this, loan charge of co-operatives was evidently reduced. The analysis of the insolvency indicator supports the tendency of inter-annual decreasing of bank loan share in the total financial sources (Figure 1). From the time structure point of view, there is a predomination of short-term loans in the agriculture primary sphere. This reflects preference of the short-term special – purpose loans for operating needs. The absence of long-term loan sources caused stagnation of technological development.

The financial performance of agricultural co-operatives was negatively determined by the notability of loans repayment in accordance with repayment schedule. The reason for that was an inappropriate creation of own sources as well as problems with cash flows. In consequence of that, the liabilities after the due date form a substantial part on the loan charge. A special problem of agricultural co-operatives represents so-called old block of loans. That means those operating loans that were provided up to year 1990 and those for investments that were provided up to 1992. The old block of loans took away a considerable volume of financial sources because of the redemption of the principal sum and loans and so it deepened their total deficit. In pursuit of consolidation of financial performance, it was decided about restructuring of the old block of credits, by postponing the due date to the later period.

Interest rate is an important factor that influences demand for bank loans. The amount of interest rate, via financial costs from the paid interests, has a direct impact on profit/loss of business units. In important measure, these participate in non-profitability of the financial activities. Up to year 2000, the general commercial interest rate was between 20–26% p.a. Despite the decrease of the interest rate in the following periods (10–16% p.a.), it is still evidently higher than the level of agricultural subjects profitability.

The impact of financial structure on return on equity is indirectly explained by Du Pont's schemes (Figure 3).

The basic criteria for usage of the outside or borrowed financial sources from the optimum financial structure point of view are capital costs and return of capital.

With increasing indebtedness, there grows return on equity that can be positive up to the level, where credit is the difference between return on assets and interest rate level. In the analysed period, the negative level of profitability assets (affected by decreasing incomes and low productive efficiency of assets) and high interest rates of outside or borrowed financial sources logically end up in negative values of return on equity. The average value indicator of return on equity capital considering the remaining loss does not reach positive rates (index 2000/1994 = 66.75). Theoretically, it is possible to state, owing to the negative rate of return on assets, that increasing indebtedness did not cause increasing of return on equity, but contrariwise it endangered the financial stability of agricultural co-operatives. This fact results from absence of the outside long-term financial sources. In consequence of this, it is possible to characterise the structure of outside or credit sources with high percentage of short-term credit sources. Those were in many cases used for financing development demands of the company. In their financial activity, agricultural co-operatives paid more attention to providing liquidity, than to the questions of capital effectiveness. From the long-term asset – financial stability point of view, this approach of financing is indefensible. Not respecting the time disponibility of financial sources and charged property in reproductive process causes financial difficulties, the characteristic feature of which is insolvency.

## CONCLUSION

Optimal financial structure and guarantee of company asset-financial stability is a complicated and complex problem. The actual structure and price of financial sources determines all important financial activities of company. The financial performance of agricultural subjects is intimately related to the achieved economic results. Owing to the proved results of operation agricultural co-

operatives are not able to accumulate enough financial sources for the necessary renovation and technological development at the appropriate rate. It is the main obstacle in the restructuring process. The difficult access to outside financial sources consecutively depends on weak creation of own sources. The productive power is expressed mainly by the profit/loss volume of economic activity. In general, it is determined by price disparity, which eliminates the price covering function. Non-profitability of current activities of agricultural companies deepens the financial profit/loss. Its "red numbers" are strongly influenced by financial expenses from paid interests. The great problem of the financial structure is insolvency. That influences increasing of the indebtedness among enterprises, and also the indebtedness towards the bank sector. The sustained problems of financial performance have a negative impact on both assets and investment activity of enterprises.

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