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**INCOME TAX ON INFLATIONARY PROFIT**

**- A THREAT TO A COMPANY’S FINANCIAL LIQUIDITY**

*Inflationary profit is a phenomenon that can significantly affect the level of companies’ financial liquidity. Studies carried out in the past have shown that under conditions of high inflation as much as 40% of the total profit recorded by a company may not be the result of the efficiency of its business activities, but only of changes of the nominal value of prices and costs. These profits, sometimes called ‘fictitious profits’ or ‘phantom profits’, distort the real picture of profitability and can also lead to an increase in the tax burdens on companies. The economy of the Republic of Belarus can be a fertile area for empirical studies on corporate behaviour in an inflationary environment and on the financial implications of taxation of inflationary profits generated in such an environment. These studies could become a valuable source of knowledge applicable in the future in other European countries if there is significant growth in inflation there.*

Introduction

According to a study by Piotr Boguszewski (Boguszewski P., 1988) “An annual price movement of only 5%-8% deforms economic calculation to a large degree, negating the effectiveness of tax systems, and distorts the reporting system”. It is quite an extreme opinion on the impact of inflation on the results achieved by a company, as well as on the benefits and losses that it may entail for public finances. However, like any opinion, even an extreme one, it contains an element of truth. Inflation is an objective and inherent phenomenon in today’s global economy. Although currently the level of inflation is not high on a global scale, history shows that inflation is a phenomenon that can grow considerably even in a short time, sometimes several dozen times within a period of just one year. Moreover, even today there are economies, including some in Europe, where the level of inflation exceeds the 5-8% level indicated by Piotr Boguszewski. One of these is the economy of the Republic of Belarus.

Inflation in the Republic of Belarus

The Republic of Belarus is a good example of an economy that has long been in a state of relatively high inflation. Moreover, a sharp increase in its level, similar to the phenomenon mentioned above, occurred not long ago, when inflation increased from around 10% to over 100% within a year. Although the current monetary policy has led to a steady decline in the inflation rate over the past two years and forecasts confirm the maintenance of this good trend, the road to a non-inflationary economy may still be long. In Poland, the decay of hyperinflation of the late 1980s and 1990s to less than 5% per year took over 10 years. The level of inflation in Belarus in the last few years is shown in the graph below.

Graph no 1 Inflation in Belarus during last 10 years (in %)



Source: http://pl.tradingeconomics.com/belarus/inflation-cpi

The concept of inflationary profit in Polish and worldwide literature

In Polish literature on this subject, the term ‘inflationary profit’ is most often used to describe differences between the nominal and real values of recorded costs and prices, which occur in an inflationary environment[[1]](#footnote-1). In the words of Szejna S. inflationary profit is “...the result obtainable by a company due to changes in prices caused by inflation, which is also an integral part of the nominal financial result” (Szejna S., 1991).

 The scholars still do not have a common opinion on inflationary profit. There is an ongoing debate about its sources, as well as the effects of inflationary profit on a company’s finances and the capabilities of companies to hedge against these effects. In specialist literature, however, there is a well-established notion limiting the sources of inflationary profit only to some of the company’s assets – the non-monetary assets such as fixed assets and stocks. Remaining assets (monetary assets) such as receivables and cash, according to these authors do not contribute to the creation of inflationary profit because they do not change their nominal value in an inflationary environment (Alchian A. A. and Kessel R. A., 1959). According to this opinion, during inflation, monetary assets will decline in their real value while their nominal expression remains unchanged. In this situation any profits (real or only inflationary ones), according to these authors, are out of question. However, this view could be considered to be incorrect. The possibility of creating an inflationary profit from monetary assets can be proved in many examples (Sobkow R. 2008).

The most commonly given example of how inflationary profit is created in an enterprise is the purchase and consumption of raw material stock for production. In an inflationary environment, after the specified period of time, an increase in the nominal expression of the real value of these stocks occurs. According to the First In, First Out (FIFO) accounting principle of consumption of stocks, which is most commonly used in Polish and foreign enterprises, when handing them over to production, the value of cost will be calculated according to their purchase price, starting with the oldest purchases. In connection with the increase of prices in the economy, the nominal value of stocks, lower than their real value on the day of their consumption, will be added to the costs. FIFO procedure of stock valuation will therefore cause the cost of sold products (goods) to be underestimated by the rate of inflation for the period which elapsed between the purchase of a given stock item and its consumption (or sale). The result is clear – the underestimating of costs will cause the overesti-mating of the financial result of production and trade, and thus the company will reach a higher profit than accrued for similar transactions in an inflation-free environment. This additional profit arises only as a result of changes to the nominal expression of the stock item value which occur in an inflationary environment. The value remains actually unchanged in real terms, so the profit must be called an inflationary profit. Even the use of the Last In, First Out (LIFO) procedure to value stocks will not change much. The occurrence of an artificially inflated profitability has been confirmed by empirical studies. For example, A. Young (Young, 1980) studied companies in conditions of inflation using the FIFO and LIFO stock valuation methods. In the first group, 100% of them had overstated the result compared to the standards of a non-inflationary economy, while in the second group, the percentage was 90% (Holland, 1984).

Inflationary profit is also formed in a company, among other reasons, due to underestimated depreciation in conditions of inflation, overvalued financial income in nominal terms, and overvaluation of the nominal value of sales in the application of deferred payment (Sobków R., 2008).

The tax effects of inflation and inflationary profit

The tax effects of inflation and profit formed in inflationary conditions are ambiguous and depend on various factors. On the one hand, due to the emergence of inflationary profit, the value of the tax base increases. The result is clear – a higher tax is levied than would have been the case in an inflation-free environment. Consequently, a company will record an increased outflow of cash, and thus its financial liquidity will deteriorate.

On the other hand, inflation has a soothing effect on the range of tax burdens of businesses. The term of payment of taxes accrued for a given period is usually deferred by a few weeks. For example, in Poland the payment of income tax falls on the 20th day after the end of the settlement period. In conditions of inflation, the real value of the tax burden paid by the company will be therefore decreased by the rate of inflation recorded in the period of deferment. The company therefore will benefit from this, improving its financial liquidity.

Attempts to estimate the scale of the negative effects of inflationary profit on the finances of companies

How much of a threat to the financial liquidity is posed by the taxation of inflationary profits can be demonstrated by research conducted by economists from Morgan Guaranty Trust in the mid-1970s. The results showed that in times of high inflation in the U.S., inflation was responsible for almost 40% of the profits reported by companies (Hazlitt, 1977). The amount of income tax paid from those so-called “phantom profits” according to current prices amounted to tens of billions of dollars a year. In addition, companies paid out dividends to their shareholders from these fictitious incomes, further impairing their financial liquidity.

Unfortunately, research on the magnitude of this negative phenomenon in Poland in the years 1985-1995, when inflation reached a level even as high as several hundred percent per year, has not yet been carried out.

Opportunities for protection against the negative effects of inflationary profit

There is a wide range of activities that companies or state services may undertake to protect companies from the negative effects of inflationary profit. First of all, steps can be taken to diminish the scale of inflationary profit creation. Enterprises may rebuild their assets to increase the participation of those components that are less affected by the creation of inflationary profits. Also, legislation can aim to exclude from taxation at least part of such “phantom profits”. The best possible example would be periodic, mandatory revaluation of fixed assets of enterprises – a tool used in Poland in the early 1990s, as well as in Hungary in the same period (Illes, 2010). Another option used in many countries is to exclude from taxation profits from the sale of property or stock market gains to the extent of the inflation rate which appeared during the period of holding these assets. Such possibilities were envisaged by the tax laws of Israel and Brazil, countries that struggled with high levels of inflation for a long time ([www.natlaw.com](http://www.natlaw.com), www.worldwide-tax.com).

Companies can also shape their liabilities properly to counteract the effects of inflationary profit’s creation, e.g. through an increase in the size of so-called “inflationary losses” resulting from financial costs and short-term liabilities. In this way, the Fisher effect can positively influence the state of a company’s finances (Sobków, 2008).

Summary

Inflation is a subject rarely tackled by today’s economic journalism and literature. The average low level of inflation in the world’s economies is not conducive to broad interest in inflation in the academic world. However, given that inflation is a constant phenomenon and is characterised by periodic outbreaks, we can say that it is now a subject that is underrated, if not to say neglected, by the academic community.

Inflationary profit can have a serious impact on the solvency of companies. Although a company has a limited impact on the formation of inflationary profit, it is not defenceless either. It may take a number of safety measures against this negative phenomenon. State tax law can play also a significant role.

Belarus is today one of the few countries in Europe reporting a significant level of inflation. This provides a unique opportunity to conduct empirical research on this phenomenon and its implications for companies’ finances. It can be a positive lesson for other economies, preparing their decision-makers (both on a macro- and microeconomic scale) to respond to the challenges that an unpredictable future can bring.

Literature

1. A.A.Alchian, R.A.Kessel, ‘Redistribution of Wealth through Inflation’, Science, nr 4 September 1959.
2. P. Boguszewski, ‘Dyskusja o polskiej inflacji w latach 1980-1985’ [Discussion on Polish inflation in the years 1980-1985], Instytut Gospodarki Narodowej, [Institute of National Economy], Warsaw 1988.

A.S.Holland ‘Real Interest Rates, What Accounts for Their Recent Rise’, Federal Bureau of Economic Research, Cambridge (MA), December 1984.

H. Hazlitt, ‘Inflation Versus Profits’, The Freeman, 01.11.1977.

1. M.Illes, ‘The Effects of Inflation on Business Profits and Business Assets’, European Integration Studies, University of Miskolc 2010.
2. S.Jagiełło ‘Jeszcze o rachunkowości przy inflacji’ [Still about Accountancy under Inflationary Conditions], ”Rachunkowość” [Accountancy], nr 11/1986.
3. W. Pacho, ‘Wpływ stóp inflacji i opodatkowania na wartość przedsiębiorstwa’ [The impact of inflation rates and taxation on the value of a company], *Ekonomista*, nr 2/97 [Economist, No. 2/97].
4. R. Sobków, ‘Zysk inflacyjny a wartość poznawcza wyników analizy finansowej przedsiębiorstw’ [Inflationary profit and the cognitive value of the results of the financial analysis of companies], Juris [Juris Publishing], Poznań 2008.
5. S. Szejna, ‘Rachunkowość w warunkach inflacji’ [Accounting in conditions of inflation], In: A. Jarugowa (ed.) ‘Współczesne problemy rachunkowości’ [Contemporary issues in accounting], PWE, Warsaw 1991.
6. A.Young, ‘Financial Reporting and Changing Prices: A Survey of How 300 Companies Complied with FAS 33’, Business and Economics, August 1980.
7. www.natlaw.com.
8. www.worldwide-tax.com.

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1. Some Polish authors also called inflationary profit as “phantom profits” or “fictitious profits” (Jagiełło S., 1986, Szejna S., 1991). [↑](#footnote-ref-1)