The bank approach to a credit obligor – a farm business – in the context of credit risk and capital adequacy

Pohled banky na úvěrového dlužníka – zemědělský podnik – v kontextu úvěrového rizika a kapitálové přiměřenosti

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Abstract: The objective of this paper is to enable a bank's view towards a credit obligor. Banks are subject to a lot of financial risks. Credit risk is the most important one. Banks also have to manage the objective of maximum profit on one hand, the prudential rules on the other hand. Recently, the Bank for International Settlements submitted a new concept of prudential rules (The New Basel Capital Accord) that should be accepted by national regulators and applied from 2006/7. This concept brings relatively strict conditions which should improve bank management of credit risk but which are unpleasant for loaning of small and medium enterprises including agricultural ones that are mostly part of this category. Very important role will be still played by non-market supporting instruments, especially guarantees provided by sovereigns. They can improve the competitiveness of agricultural enterprises in the credit market.

Key words: financial risk, financial institution, credit risk, banks, banking regulation, capital adequacy, Capital Accord, risk-weighted assets, credit default, internal rating, collateral, guarantees, credit risk mitigation, farm business, small and medium enterprise

Abstrakt: Cílem příspěvku je umožnit pohled banky na úvěrového dlužníka. Banky podstupují při svých činnostech řadu finančních rizik. Úvěrové riziko je z nich nejzávažnější. Banky se nadále musí vypořádat s cílem dosažení maximálního zisku a s pravidly obezřetného podnikání. Nedávno Banka pro mezinárodní platby předložila návrh nové koncepce obezřetného podnikání (tzv. Novou basilejskou kapitálovou dohodu), která by měla být akceptována národními regulátory a aplikována od roku 2005. Tato koncepce přináší poměrně tvrdé podmínky, které by měly zlepšit řízení úvěrového rizika bankami, ale které jsou nepříznivé zejména pro úvěrování malých a středních podniků, včetně zemědělských, které z velké většiny do této kategorie patří. Významnou úlohu proto budou nadále hrát netržní podpůrné nástroje, zejména záruky státních nebo veřejnoprávních institucí, které mohou zvýšit konkurenceschopnost zemědělských podniků na úvěrovém trhu.

Klíčová slova: finanční riziko, finanční instituce, úvěrové riziko, banky, bankovní regulace, kapitálová přiměřenost, Kapitálová dohoda, rizikově vážená aktiva, úvěrové selhání, interní rating, kolaterál, záruky, zajišťování úvěrového rizika, zemědělský podnik, malý a střední podnik

The aim of this paper is to explain the assessment of a corporate borrower from the position of a bank as a creditor providing financing. The bank's credit risk and capital adequacy is taken into account including the recent tendencies in the banking regulation. This view may enable a corporate (e.g. farm business) and state administration to understand the conditions under which a bank is making its decisions.

BANKING RISKS

Banks and financial institutions are exposed in their business to a lot of risks that are not relevant (or only partially relevant) to other businesses. In principle, these risks may be divided into the three following categories:

1. Credit risk – e.g. the risk that the borrower may default (does not fulfil the contract terms and causes a loss to the creditor). The case of bankruptcy is just one of the (excessive) cases of default. Credit risk is embodied in credit activities as well as in business and investment activities, payments and securities settlements. It is the oldest and still the most material risk.
2. Market risk – e.g. the risk of changes in market prices of financial or other instruments as a result of negative market development. Market risk includes interest rate risk, equities risk, commodity risk and currency risk.
3. Operational risk – e.g. the risk caused by mistakes, inobservance of procedures and fraud.

The prosperity of a bank depends materially on its ability to balance the aim of maximum profit on one hand (or maximum shareholder value), with the prudential rules stipulated by the regulator and by internal rules on the other hand.

BANKING REGULATION AND CAPITAL ADEQUACY

Financial risks generally cause the instability of financial markets and, therefore, it is widely accepted (and practically executed) that regulation of these risks is necessary, especially with reference to the following possible negative impacts:
- the security of clients and public creditworthiness of banking system,
- running of the banking system,
- running of the economy as a whole and prevention of contagion effects,
- monetary stability support.

However, there are some objections against this assumption but we will slur over them.

The concept of financial regulation in many countries does not include only banks, but also securities firms and insurance companies. Due to the global character of financial markets and constant development of new products, the international consistency and co-operation between regulators is necessary. These facts led a group of G-10 countries to the establishment of the Basle Committee on Banking Supervision (BCBS) in 1975.

BCBS releases a lot of documents as regulatory recommendations. These documents are widely accepted in most of the countries of the world including the European Union and the Czech Republic.

One of the important regulations is the so-called capital adequacy adopted in 1988. In 1993 this concept was introduced in the Czech Republic. The original concept of capital adequacy for *credit risk* is based on the following formula:

$$\text{capital adequacy} = \text{capital/RWA} \geq 8\% \qquad (1)$$

RWA = risk weighted assets
capital = bank capital[1] (= equity, provisions, subordinated debt)

The capital should create a protection against potential losses connected with current risks that a bank might face in the future.

However, the existing losses should be embodied in the net earnings.

The RWA (for balance sheet assets) are calculated:

$$\sum_{i=1}^{n} RWA_i = \sum_{i=1}^{n} (E_i - Op_i) \cdot w_i \qquad (2)$$

E_i = i-exposure (balance sheet asset)
Op_i = specific provisions for i-exposure
w_i = risk weight of i-exposure (borrower)

According to the current regulations, there are four discrete risk weights: 0; 0.2; 0.5 and 1.0. The risk weight 1.0 is for all corporate exposures. The risk weight 0 is mainly for sovereign exposures. The higher the risk weight the more capital bank has to keep.

The concept of capital adequacy is often criticised because it causes banks to substitute corporate exposures by sovereign exposures. The risk weight 1.0 for all corporate exposures is also disputable because it is not risk sensitive enough and does not take into account the specific risk of a borrower and the form of credit risk mitigation (e.g. guarantees, mortgages etc.).

Capital adequacy itself is not a full prevention of bank failures or bank crises but it can mitigate the impacts of potential crises and motivate banks to improve risk management. Large banks often believe they are too big to fail and in case of any problems their non-performing exposures are taken over by the state. Generally, capital adequacy may be in some cases only formal or even tricky and not reliable. However, there are a lot of other prudential rules to be followed (e.g. pricing policy rules, provisioning). The legal environment and enforceability of claims are also very important factors.

THE NEW CONCEPT OF CAPITAL ADEQUACY

The BCBS is currently preparing new rules for capital adequacy, the so-called New Basel Capital Accord (NBCA). These rules are expected to come into effect in 2006/2007. There is no doubt these changes will effect not only banks but also bank clients.

Concerning calculation of capital requirement for credit risk, NBCA proposes two alternative approaches:
- the standardised approach that is based on current approach described above with some amendments e.g. the strengthened role of external rating assessment;
- internal ratings based (IRB) approach according to the stipulated conditions.

Generally, new approaches should be more risk sensitive and should improve the credit risk management and as a result they should stabilise banking sector.

INTERNAL RATING

Banks have already developed different internal rating systems for assessment the overall quality and risk of exposures. The system of internal rating according to the NBCA has to meet a lot of fixed criteria and approximates regulatory approach and internal credit risk approaches of the bank. Risk weights for each exposure under the IRB approach are based on a continuous function and depend on the assigned rating grade. Capital requirement is hence derived from risk-weighted assets (see formula 1).

The system of internal ratings, once it is applied, has to be used in all aspects of credit risk management:
- to inform management about the quality structure of the credit portfolio and range of risk exposure to individual rating grades,
- as a basis for provisioning and allowances,

[1] The exact rules what can be included into the capital are set by the regulator.

– as a basis for credit pricing and for bank profitability analysis.

The definition of credit default according to the NBCA is relatively wide. A default has occurred when one or more of the following events has taken place:
– the obligor is unlikely to pay debt obligations in full,
– a credit loss event (charge-off, specific provision, restructuring etc.),
– the obligor is past due more than 90 days,
– the obligor has filed for bankruptcy or similar protection from creditors.

In assigning ratings to exposures, banks have to take all relevant information into account, as a minimum they have to look at these factors for each borrower:
– historical and projected capacity to generate cash to repay debts and support other capital requirements;
– capital structure and the likelihood that unforeseen circumstances could exhaust its capital cushion and result in insolvency;
– quality of earnings (degree to which revenue and cash flow emanate from core business),
– quality and timeliness of information about the borrower, including audited financial statements, applicable accounting standards and conformity with the standards;
– degree of operating leverage and impact of demand variability on profitability and cash flow,
– financial flexibility resulting from access to resources (debt and equity),
– depth and skill of management to effectively respond to changing conditions,
– position within industry and future prospects,
– risk characteristics of the country it is operating in.

Out of this brief survey, it is obvious that traditional financial ratios are just one of the characteristics in the general risk assessment of a borrower. The overall financial flexibility, market position and prospects and other "soft" criteria are very important for slotting exposures into rating grades. Generally, banks should apply conservative view.

CREDIT RISK MITIGATION

The regulator stipulates the recognised (eligible) forms of credit risk mitigation. They can decrease the level of risk and, therefore, they can decrease the level of capital requirements. Banks can contractually accept any type of credit risk mitigation (e.g. collateral or guarantees) but unrecognised forms of credit risk mitigation do not decrease capital requirements. Banks appreciate clients who can provide high quality collateral, guarantee or any other form of mitigation.

Collateral is a widely used form of credit risk mitigation in the Czech environment. Current rules and the NBCA standardised approach rules recognise financial collateral only. Hardly any farm business can provide sufficient amounts of this collateral. For the IRB purposes the range of collateral will be widened and will include also commercial and residential real estate.

Guarantees represent another efficient form of credit risk mitigation. The guarantee has to be direct, explicit, irrevocable, unconditional and enforceable. The range of eligible guarantors includes sovereigns, public sector entities, banks with a lower risk weight than the obligor and corporations rated A or better.

Credit risk mitigation has a direct impact on pricing loans. It was confirmed e.g. in a recent empirical study from Czech banking sector environment (Buchtíková 2001). The study showed that credit risk mitigation has a stronger impact on pricing than enterprise financial results. Financial results are more important in the process of selection clients.

THE PROBABLE IMPACT ON FARM BUSINESSES

To sum up the above-mentioned conditions arising from regulatory and market environment in the banking sector, we can conclude that the access of farm businesses will probably remain limited in the future. The farms do not have sufficient profitability, are subject to strong market competition, are small in comparison to businesses in other industries and do not have strong parent companies. In most cases, they cannot provide any high quality forms of credit risk mitigation. Their access to capital markets is almost eliminated for many reasons (mainly the size, legal form and economic results). This contrasts with the need of modernisation and investments into new technologies, which necessitates capital sources.

Numbers can document these facts: foreign direct investments in agriculture represented only 1% of total foreign direct investments in the Czech Republic (in 2001). The share of credits to agriculture represented about 2% of total corporate credits (in 2001) with declining tendency.

Banks, on one hand, have to follow their own criteria, preferably market and regulatory. If they want to do efficient business they need preferably good clients with low level of risk. Farm businesses, on the other hand, will have to look for other sources of capital.

CONCLUSION

The access of farm businesses to credits will most probably remain difficult and is determined by several factors. The new regulatory banking environment, which is being prepared, is one of them. This issue is not specific only to farm businesses and is general for small and medium enterprises. Some countries (like Germany) are very reluctant to introduce this regulation because of the disadvantage for small and medium enterprises that play an important role in the economy. There are also some fears about the pro-cyclical effect of the new regulation.

The competitiveness of farm businesses in credit market may be increased by guarantees provided by state and/or public sector entities. Their role may be important.

The farm businesses are also forced to seek for other types of market financing (e.g. leasing, pooled sources from several enterprises, venture capital) or non-market forms (governmental programmes, the EU funds).

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