



Research Center of  
the Institute for Privatization and Management



German Economic Team in Belarus

PP/08/03

## First-Time Sovereign Bond Issues: A Conceptual Framework

### Contents

<b>1. Introduction</b> .....	<b>2</b>
<b>2. Benefits and Risks of Capital Flows: A General Perspective</b> .....	<b>2</b>
2.1. Benefits .....	3
2.2. Risks .....	4
<b>3. Foreign Borrowing as a Funding Tool: The Government's Perspective</b> .....	<b>5</b>
3.1. Domestic versus External Debt .....	6
3.2. Sources of Sovereign External Finance .....	6
3.3. Considerations in Efficient Deployment of Foreign Funds .....	7
3.3.1. <i>Investment Project Selection Criteria</i> .....	7
3.3.2. <i>Foreign Exchange Reserve Accumulation</i> .....	8
3.4. Expected Costs of Default on External Debt .....	9
<b>4. Effects on Financial Sector Development</b> .....	<b>10</b>
4.1. Why Develop Domestic Bond Markets .....	10
4.2. Impact on Corporate Issuers of External Debt .....	11
4.3. The Domestic Bond Market .....	11
<b>5. Ensuring a Successful Foreign Bond Issue – Selected Issues</b> .....	<b>13</b>
5.1. Types of International Bonds .....	13
5.2. The Rating Process .....	13
5.3. Inclusion in Emerging Market Bond Indices .....	15
5.4. Basic Features of Bonds .....	16
5.5. Timing of the Issue .....	19
<b>6. Conclusions And Policy Lessons</b> .....	<b>19</b>
<b>References</b> .....	<b>21</b>

### List of tables

Table 1: S&P Sovereign Ratings Ramp, 2002 .....	14
---	----

## **1. Introduction**

Availability of adequate financial resources, whether provided by domestic or external sources, is a key requirement for a rapid economic development of every emerging market country<sup>1</sup>. In most of these countries, the internally available resources are clearly limited and insufficient to meet expected demand. The possibility to attract foreign capital in such cases has indeed become a prerequisite for economic development and prosperity in those countries.

Most emerging markets have therefore participated in the global increase in capital flows, especially in the 1990s, when flows to this group of countries increased considerably. Whereas in the 1970s foreign bank loans were the dominant source of private financial inflows to emerging financial markets, beginning in the early 1990s equity and bond investors became the most important source. In recent years, debt securities have become an increasingly important form of international borrowing. An increasing number of emerging market governments have been tapping international bond markets; many sovereigns rely now on external investors to hold a significant proportion of their debt.

In deciding whether or not to access international bond markets, the government as issuer has to go beyond a simple fiscal perspective and to consider the short and long-term implications of foreign borrowing for the economy as a whole. By establishing a sovereign benchmark in international bond markets, the government's choice can affect the cost of foreign borrowing for the economy as a whole, the country's creditworthiness, and the foreign currency exposure of the government. Finally, developing external debt markets may also have positive benefits for the development of domestic bond markets, which are central to the process of financial intermediation.

The aim of this paper is to develop a conceptual framework for analyzing a potential first-time bond issue by Belarus in international capital markets. It is therefore meant to identify the key points the government goes through in the decision process prior to announcing an international bond issue. In the following section, the basic rationale for accessing international capital markets from an emerging market's point of view is reviewed; the focus hereby is on the associated benefits and costs of different forms of capital inflows into the domestic economy. Section 3 deals with the bond issuance solely from the perspective of the public sector, i.e. the government's budget and the central bank: in which cases is external borrowing preferable to domestically issued debt, and how should the acquired funds be used in order to maximize welfare and ensure capacity to service the debt in the future. The following section 4 broadens the scope of analysis beyond a fiscal point of view; accessing successfully international bond markets can exhibit several positive external effects on domestic bond market development, which is considered of crucial importance for financial sector development. Section 5 reviews selectively some of the main issues that arise when the decision to issue a bond has been taken. Even though a complete analysis of the terms and conditions of the bond is beyond the scope of this paper, some critical points can be identified that will determine the market success of a first-time issue and ensure a smooth and successful floating in the international bond market when appropriately handled. The last section concludes by establishing some key implications for policymakers.

## **2. Benefits and Risks of Capital Flows: A General Perspective**

The rapid increase in the degree of integration of financial markets around the globe that started during the last decade has been accompanied by a growing amount of private capital flows to emerging markets, where usually financing needs (both from the private and public sector) exceed available domestic savings. A key factor underlying these developments has been that many countries encouraged these inflows of capital by deregulating domestic financial markets, and improving their economic system through the introduction of market-friendly economic policies.

---

<sup>1</sup> Broadly defined, the term "emerging market" describes lesser-developed countries, which are beginning to experience rapid economic growth and liberalization. Currently, countries with a per capita income of less than U.S. \$ 9,206 are often referred to as "emerging markets" (WORLD BANK, 2003).

Economic theory leaves no doubt about the potential benefits of global capital markets for the welfare of all economic agents involved. The aim of the following analysis is to give a brief overview of the benefits and costs of capital inflows to emerging markets solely from a recipient country's point of view. Integration into the international financial markets is a process that must be carefully managed by the authorities in order to ensure that the large benefits resulting from these inflows outweigh possible short-run costs.

## **2.1. Benefits**

According to Agénor (2001) four key benefits of capital inflows can be distinguished:

### *Investment and Growth*

Economic theory suggests that reasonable levels of borrowing by an emerging market are likely to enhance its economic growth when used for investment (i.e., gross fixed capital formation). Countries at early stages of development have usually small stocks of capital and are likely to have investment opportunities with rates of return higher than those in advanced economies. Capital inflows from developed countries can supplement the relatively low level of domestic saving and boost investment in the recipient country, leading to enormous economic and social benefits. An increase in domestic investment will have a significant positive influence on long-run economic growth and help to raise general living standards.

In order to assess the full benefits of capital inflows for investment and growth, it is necessary to distinguish among different types of capital inflows. Typical forms of private capital inflows are foreign direct investment (FDI), portfolio, and other financial flows. FDI is a typical long-term investment of a "parent" company from abroad into a subsidiary or affiliate domestic company. The crucial distinction of FDI as opposed to other sources of capital is that it involves not only a transfer of resources but also an acquisition of control (usually investment in more than 10% of a company's capital or voting rights). Other types of foreign investment include portfolio investment (shareholder investment in less than 10% of a company's capital or investment in fixed-income securities) and loans from foreign banks. In addition to the benefits discussed, which in principle apply to all three types of private capital inflows, gains to host countries from FDI are particularly large and can take several other forms (Loungani and Razin, 2001):

- FDI provides a mechanism for transferring technological know-how – in particular in the form of new capital goods – that cannot be achieved through purely financial investments or trade. It may also create spillover effects to the structure of supplier industries and lead to further investment.
- The labour force in target companies of FDI often experiences an improvement in its skills. Apart from investment in formal employee training as a by-product of operating the new businesses, "learning by doing" effects and on-the-job training may significantly increase the formation of human capital in the host country. In general, new investment is more productive in countries with a skilled workforce and a well-developed physical infrastructure.
- Since FDI is predominantly concentrated in the tradable sector (producing goods that are traded across borders), it has a significant positive effect on the net exports of the country and its ability to generate foreign exchange earnings.
- Profits generated by FDI contribute to domestic corporate tax revenues.
- FDI has proved to be relatively resilient during periods of global financial crises. In sharp contrast to other forms of (particularly short-term) private capital flows – portfolio investments and bank loans – which were subject to large reversals during periods of crisis, FDI was remarkably stable during that time.

There is significant empirical support for the view that private capital flows are associated with an increase in domestic investment. The exact relationship depends, however, on the type of capital flow. It appears that FDI brings about a one-for-one increase in domestic investment, whereas there is virtually no statistically significant relationship

between portfolio inflows and domestic investment. The impact of bank loans falls between those of FDI and portfolio inflows (Loungani and Razin, 2001).

#### *Consumption Smoothing*

Borrowing in the international capital market can be used to partially shield consumption from temporary adverse shocks to national income (e.g., a natural disaster or a temporary recession), thereby smoothing consumption. The focus is here on temporary shocks, however; if the drop in national income is perceived to be permanent, other mechanisms must be used and much less reliance on capital inflows is justified. This development in "bad" times can be reversed in "good" times when its economy is expanding and the country engages in lending abroad. An international capital market therefore allows residents of different countries a more efficient risk sharing than purely domestic arrangements (Obstfeld, 1998).

#### *Increased Efficiency and Stability in the Banking Sector*

A general argument in favour of capital inflows in particular into the banking system is that they tend to increase the efficiency of the process of financial intermediation, thereby lowering the costs of capital and improving resource allocation. By increasing the degree of competition and the introduction of more sophisticated international banking techniques and technologies the quality and availability of financial services in the domestic market can be considerably improved. Furthermore, due to the close relationships with their parent banks abroad, local foreign banks tend to have easier access to funds in foreign currency than domestic banks and can thus enhance a country's access to international capital.

#### *Increased Macroeconomic Discipline*

The global mobility of capital limits the ability of governments to pursue unsound economic policies like excessive government borrowing or inadequate regulations. Any step in that direction would initiate capital outflows leading to higher domestic interest rates and hurting the domestic economy. In that sense, it disciplines policymakers by reducing the frequency of policy mistakes and could ultimately lead to higher macroeconomic stability and economic growth.

## **2.2. Risks**

Despite the strong theoretical case for the advantages of capital inflows to emerging market economies, open financial markets are associated with potential risks to the recipient country, at least in the short run. Macroeconomic management based on sound principles requires therefore a detailed knowledge of the dangers of large and abrupt reversals in pro-cyclical, short-term inflows of capital. Agénor (2001) identifies, inter alia, four main areas of risks for a recipient country:

#### *Lack of Access*

It is a stylized fact that many countries can borrow in world capital markets only in an asymmetric fashion: whereas access in "good" times is possible, they suffer from foreign credit constraints and reversals in the direction of capital flows in "bad" times. One of the above-mentioned advantages of international capital inflows, the ability to smooth consumption and share global risks in the presence of temporary adverse shocks, is therefore relatively limited in practice.

#### *Misallocation of Capital*

It was mentioned above that capital inflows should be mainly used for productive investment, thereby contributing to long-run economic growth. If such inflows are primarily used for consumption (e.g., import of luxury cars or other consumer goods) or to finance low-quality investments (e.g., speculation in the real estate sector), the impact on growth will be limited.

#### *Loss of Macroeconomic Stability*

Large capital inflows can have undesirable effects on macroeconomic stability: under fixed exchange rates, it can lead to a rapid monetary expansion if not appropriately sterilized, resulting in inflationary pressures in the domestic economy. Under flexible

exchange rates a nominal appreciation of the domestic currency is the most likely outcome. In both cases, a real exchange rate appreciation results and an existing current account deficit is widening. Whereas under flexible exchange rates such persistent deficits can be self-correcting by a depreciation of the domestic currency, in the case of fixed exchange rates a growing loss in competitiveness can erode confidence in the sustainability of the peg and precipitate a currency crisis.

#### *Pro-Cyclicality and Volatility of Capital Inflows*

It has been mentioned before that there is evidence that access to international capital markets tends to be pro-cyclical in relation to domestic economic developments. An important source of this behavior is due to external factors, for example an increase in the risk perceptions of foreign investors related to both actual and expected movements in economic fundamentals, which will magnify the impact of a negative shock.

The high volatility of capital flows is a manifestation of these frequent and abrupt reversals in especially short-term capital flows. This volatility can be further exaggerated by herding behaviour of less-informed investors, who don't fully understand the impact of economic shocks but tend to follow larger and (supposedly) better-informed investors. Other reasons for volatile capital flows can result from indirect contagion effects. Negative developments elsewhere (e.g., in neighboring emerging markets) can trigger massive capital outflows due to a general loss of confidence among investors because of an increased degree of uncertainty for the economic prospects of emerging markets. Other examples of contagion focus on the existing linkages among emerging markets of similar size and structure. A devaluation of the currency of one of our main competitors in the world market implies a relative loss of competitiveness for the home country and hence an increase in vulnerability from capital outflows.

The foregoing analysis has highlighted the fact that there are important benefits for the domestic economy resulting from inflows of capital, while at the same time identifying potential risks that can be associated with these flows. One of the key lessons for emerging markets policymakers is that capital inflows can come in different types which differ with respect to their relative merits for the domestic economy. There is a clear case for inflows in the form of FDI, as they lead most likely to a pick-up in investment and a higher long-run economic growth while at the same time being the most stable source of foreign capital. The question for policymakers is therefore not the choice between financial integration or autarky but rather the design of economic policies that maximize the welfare effects of financial liberalization while at the same time avoiding the associated short-term risks (Agénor, 2001).

### **3. Foreign Borrowing as a Funding Tool: The Government's Perspective**

This section focuses on the optimal and noninflationary<sup>2</sup> financing of a given government budget deficit primarily in the context of using domestic or external funds. An adequate strategy for debt issuance must therefore include the proper consideration of a number of questions:

- How much public debt should be issued internally, i.e. in the domestic markets, and how much externally, i.e. in international capital markets?
- If the decision to borrow abroad has been taken, how can the most efficient use of the borrowed funds be ensured? This sets foreign borrowing apart from domestic borrowing (in local currency) as external debt has to be paid back ultimately in foreign currency.
- What are the possible consequences of the inability to repay, i.e., to default on these external liabilities, on the future development of the country?

---

<sup>2</sup> This means that borrowing from the central bank with its potentially damaging effects on monetary and economic stability is excluded from the subsequent analysis.

### **3.1. Domestic versus External Debt**

Governments in emerging markets are often able to choose between borrowing in local currency in domestic bond markets and borrowing in foreign currency in international markets; some have also issued debt linked to foreign currencies in domestic markets. The Mexican tesobonos are an example of the latter type of security (BIS, 2000). Given comparable liquidity conditions in both markets, domestic and foreign, the government will most probably face a supply of funds that is upward sloping, i.e., is an increasing function of the rate of return on government debt. This reflects general market conditions and compensation of investors for the rising risk of default with increased borrowing. In addition, in case of the domestic market, a limited supply of savings is likely which at the same time tends to be more short-term. The optimal choice between domestic and external borrowing is complex and is influenced by a number of factors (BIS, 2000):

#### *Costs of Borrowing*

The level of interest rates in emerging economies normally exceeds international levels for the reasons given before. Therefore, a main incentive for governments to make use of foreign currency debt is simply that it minimizes current interest payments. However, external borrowing in the form of a first-time issue in international bond markets is subject to a higher degree of uncertainty than repeated issues. For first-time issuers, there is no track record established, the sovereign credit spread (i.e., the borrowing costs for the sovereign in addition to a well-established benchmark like the yield on sovereign U.S. or Eurozone bonds) can only be estimated and not derived from existing outstanding instruments.

#### *Avoidance of Crowding-out*

In the short term, local government borrowing tends to push up domestic interest rates, thereby crowding out private sector borrowing. A strategy of foreign borrowing tends to avoid this crowding-out effect completely and reduces the cost of capital for the economy.

#### *Debt Service and Repayment of Principal*

In order to service foreign debt and repay the principal, the sovereign must obtain foreign exchange, usually by purchasing it in the foreign exchange market. This can sometimes become a binding constraint. A further point to note is that a devaluation of the domestic currency makes foreign debt more expensive to service in terms of the own currency. On the other hand, the sovereign's ability to service domestic currency debt is supported by its power to tax the domestic economy, with tax revenues in local currency.

### **3.2. Sources of Sovereign External Finance**

It is important to realize at this stage that borrowing in the international capital market represents just *one* of the possible approaches to financing major government expenditures. Two broad categories of potential sources of external funds can be identified, namely official sources and private sources.

Official financing inflows can be bilateral or multilateral. Bilateral flows are government-to-government transactions, whereas multilateral sources are international organizations like the World Bank, the European Bank for Reconstruction and Development (EBRD), or the European Investment Bank (EIB). These sources provide recipients in general with more favourable terms than private or commercial sources; however, they are often subject to certain conditions. If these conditions do not coincide with national objectives, the relative advantage of lower debt service is likely to diminish.

The private sources of foreign funds normally work on commercial principles; hence the costs of borrowing will be higher here. While there is in principle a wide variety of ways to borrow funds open to the sovereign, the question where to borrow typically narrows down to two distinct models: borrowing from foreign commercial banks or issuing bonds in the international markets. Up to the 1980s, the main share of developing countries' external borrowing was in the form of bank loans. However, several debt crises in the past and the introduction of tougher capital adequacy standards for international banks have made bank lending relatively unattractive. The alternative model, which is also the

model, most widely followed today, is issuing bonds which are usually held by a wide range of foreign investors like pension funds, insurance companies, and mutual funds. While bond markets might provide a cheaper source of financing than traditional bank loans under certain circumstances, they are however not open to every issuer. Experience has further shown that a certain minimum amount of borrowing is needed otherwise transaction costs will be too high.

### **3.3. Considerations in Efficient Deployment of Foreign Funds**

The process of importing foreign capital by an emerging market sovereign needs to be handled very carefully since proper deployment of foreign capital is crucial to the nation's progress and prosperity. Due to its long-term consequences it is absolutely necessary that Belarus follows proper, well thought out and well planned policies in the matter of borrowing from abroad. A sound borrowing policy may lead to long-term economic growth, social development and prosperity of the country. An approach that should be completely avoided in this respect is to first look for the foreign capital and then to design the projects according to the available capital. Belarus should instead assess the total requirement of foreign capital first and then proceed with the issue. An excess import of foreign capital may prove detrimental to the national interest and may result in undue and excessive burden on the government's resources, especially in the long run. Thus, the amount borrowed should be proportionate to the absorption capacity of the domestic economy (UNITAR, 2001).

The proceeds from a bond issue in the international markets, as mentioned before, may increase either domestic consumption or investment, or they may principally increase the country's foreign exchange reserves<sup>3</sup>. Therefore, the decision to invest or to consume (like importing luxury items such as cars and consumer goods, etc.) from borrowed funds is the most fundamental one. It is at the same time of crucial importance to possible creditors, since the debt service and the repayment of principal is strongly associated with the proper deployment of foreign funds.

#### **3.3.1. Investment Project Selection Criteria**

As long as the government uses the borrowed funds for productive investment and does not suffer from unforeseen macroeconomic instability or sizeable adverse shocks, economic growth should increase thereby allowing for prompt debt servicing. Further, anything that increases the resources available for debt service enhances the borrower's creditworthiness in the international markets. From the creditor's viewpoint, specific investment projects or schemes should be efficiently designed to yield large expected returns on capital employed; these adequate returns mean to foreign creditors that interest payments and the repayment of principal of the bond can be serviced as long as the returns can be transferred abroad. A point that deserves special consideration is the optimal timing of project returns vis-à-vis debt service payments. Major questions arise concerning how a credible link between the funds borrowed and their subsequent use could be established. One possibility would be to form a separate legal entity that oversees and takes full responsibility for the investment process. By seeing that their funds will be used solely for the intended purpose, investors' confidence could potentially increase. A further option would be to collateralize the bond issue against the proceeds flowing from the investment entity over time (in particular in the case of export earnings). An example of the latter strategy is the case of Mexico, which collateralized loans from the U.S. against future export earnings (from the sale of oil; BIS, 2000) several times in the past.

The relevant share of national output in which to invest is therefore tradable output. The main reason is that external debt must ultimately be serviced by selling traded goods in the world market. The term "tradable" covers in this context both export goods, which can be sold abroad in return for foreign exchange, as well as import-substituting goods, i.e. domestically produced goods that compete with imported goods, thereby saving foreign exchange. Goods and services that are not traded in the world market (including much of the output of the public sector that is meant mostly for the domestic economy)

---

<sup>3</sup> Of course, the foreign funds could also be used to refinance existing foreign liabilities with improved conditions, a possibility that is not further examined in the following analysis.

cannot generate much needed foreign exchange earnings. It can therefore not be recommended to expand production of non-tradable goods with the proceeds of an international bond issue. These sectoral considerations have sometimes been ignored by countries that borrowed extensively abroad for infrastructure projects that do not directly generate foreign exchange (Cuddington and Smith, 1985). However, there are cases where indirect incentives for the production of tradables could be set by financing public investment, for example by improving physical infrastructure like roads and air transportation. As long as these investments improve productivity in the tradable sector, this could result in higher exports, i.e. foreign exchange inflows; again this crucially depends on the exact nature of the relationship between investment in public infrastructure and tradable production and is subject to a certain degree of uncertainty.

Thus, special emphasis has to be placed on the export sector since expanding foreign exchange earnings is critical for the country's future ability to meet external debt-service requirements. In that sense the goods markets of advanced countries are the best source of foreign exchange earnings. A detailed analysis of the export sector has to answer two important questions (Vine, 1997):

- What is the exact composition of exports? Does the country export primarily commodities, or value-added products? Heavy reliance on commodities that are subject to sharp price fluctuations in the commodity markets would result in volatile foreign exchange earnings. A diversified export sector, on the other hand, that is based on the production of value-added goods and is well integrated into the markets of more advanced economies may be much less concerned.
- The question of sustainability of the exports addresses the reasons for exporting goods. Is the export based on relatively cheap labour or high productivity gains or an undervalued currency (Vine, 1997)? Especially the latter point raises doubts about the sustainability of the export performance whereas productivity gains should lead to a rapid and sustainable growth in exports.

Beside its immediate effect on the generation of foreign exchange, which helps to service foreign debt, the stimulation of exports brings more benefits to the country, especially in the long run. An increase in long-run growth of real income through the promotion of exports would gradually raise long-run domestic savings and hence reduce Belarus' dependence on foreign savings. The strategy of building a large and diversified export sector could be further combined and supplemented by encouraging FDI in this sector. As has been discussed above, the benefits that are associated with FDI should have established a clear preference for this type of capital inflow.

An obvious way for the government to attract FDI is to make it a cornerstone in its privatization policy. By selling preferably export sector assets to foreign investors (especially to strategic investors in the form of FDI) the government can generate immediate foreign exchange earnings and signal a commitment to economic reform. The long-term gains of these asset sales will be a highly productive and world market-oriented export sector that is enjoying the mentioned benefits of FDI and drives domestic real economic growth.

### 3.3.2. Foreign Exchange Reserve Accumulation

Another purpose of the bond issue could be motivated by the wish of the authorities to expand the official foreign exchange reserves. Although almost all countries hold foreign reserves, typically managed by the central bank, it is no easy matter to determine the optimal level (and composition) of foreign exchange reserves for a country. In practice, several rules of thumb are used to decide reserve adequacy.

Broadly, there are at least two reasons why countries choose to accumulate foreign exchange reserves. First, even in the context of a purely floating exchange rate, reserves can be regarded as a form of insurance policy against the impact of unforeseen shocks. These shocks could be domestic, for example some form of natural disaster, or external, like turmoil in the global financial markets leading to a temporary shut-off from international capital markets. In such events, reserves can act as a liquidity buffer and offer insulation against the negative impacts of economic distress. By providing the



necessary liquidity if serious liquidity problems arise and restoring order in the foreign exchange market, further damage to the domestic economy can be limited. Especially in emerging markets, reserves further act as a source of comfort to foreign investors (and rating agencies), limiting the serious consequences of a possible lack of access to international financial markets. The optimal level of reserves under a floating regime will therefore most likely depend on the volatility of the economy (likely to be higher in emerging markets than in advanced countries). When the balance of payments is dominated by trade, holding the equivalent of three months' imports is usually regarded as adequate. Other rules state that reserves should be sufficient to meet all payments (repayment and interest) on external debt falling due over the next year (the so-called "Guidotti rule"; BIS, 2000), especially in cases where capital flows dominate trade flows.

A second reason for holding a part of the national wealth in form of foreign exchange reserves concerns countries that try to maintain exchange rate stability either by announcing a fixed peg or by some implicit form of exchange rate targeting in order to prevent the erosion of external competitiveness. Countries, which are particularly vulnerable to large swings in the exchange rate, tend to need more reserves in order to support the exchange rate by direct intervention in the foreign exchange market. However, it has to be kept in mind that continued pressure on the domestic exchange rate by market forces will result in a rapid deterioration of the reserves level, leading ultimately to a confidence problem in the maintenance of the peg. Eventually, under the worst-case scenario of a speculative attack, the peg has to be abandoned and a floating rate established.

Apart from the benefits described above, holding reserves also entails certain costs and is subject to different risks. The rationale for holding reserves determines at the same time the type and nature of these reserves. First, there are usually direct financial costs of holding reserves since they have to be invested in internationally accepted liquid securities. The dominant foreign reserve currency in the world is currently the U.S. dollar, even though an increasing share of the reserve assets of central banks around the world is denominated in euro. The relevant return on these assets is therefore best proxied by the yield on U.S. Treasury bills and bonds or comparable Eurozone securities. However, this is much less than the cost of international borrowing or the opportunity cost of those reserves (e.g., the productivity of imported foreign industrial equipment) for an emerging market country. In addition to the (relatively) low yields on low-risk U.S. treasury securities, U.S. government-sponsored agency bonds or Eurozone sovereign bonds the costs of borrowing for Belarus include the already mentioned sovereign spread.

Judged from simple return considerations it may therefore be wasteful for the public sector to simultaneously raise foreign debt and hold (at least a major part of) this amount as foreign exchange reserves, as the return on the reserves is likely to be well below the cost of the debt. This will lead undoubtedly to the question of the ability to repay the external debt to foreign investors and decrease confidence in the bond issue. Even more problematic is the use of the acquired reserves for actively managing the exchange rate. If reserves are used for resisting a prevailing weakness in the domestic exchange rate, this will lead to continuing reserve losses. In such a case, the goal of temporary exchange rate stability will be more than offset by the problem of repaying the debt, and default is likely if no other sources of foreign exchange can be found.

#### **3.4. Expected Costs of Default on External Debt**

Borrowing from foreign investors establishes in fact a legal contract between the government and its creditors, be they banks or holders of issued bonds. In either case the government is obliged to pay regular interest and repay the principal when it is due according to the terms and conditions originally agreed in the contract. Any attempt to change these conditions unilaterally, or to suspend or postpone part of the payments (interest or principal) on its due date will result in a default. Adverse movements in global economic prospects or negative shocks hitting the domestic economy can ultimately lead to the inability to service the external debt. Since a default can have severe consequences for the country in question, its impact has to be analyzed in form of a "worst case scenario" before the actual issuance of external debt.

Although there is general agreement among economists that defaults are very costly for the country in question, it is difficult to identify the exact nature and extent of the costs that are directly attributable to the sovereign's decision to stop payments on its external debt. One reason for these difficulties is that default costs are highly sensitive to the outcome of possible rescheduling agreements with the creditors. Quick renegotiations between creditors and debtors with a limited loss in net present value terms to the creditors will have a more limited impact than a long and painful restructuring process with large losses to the investors. Possible penalties for default that play an important role in economic models of sovereign default include for example (Worldbank, 2003) the restricted access to future external finance, a foreign seizure of domestic assets (usually, only a small part of the state's assets are available to foreigners, thus limiting the impact of such a seizure), and a creditor run that will most likely accompany such a crisis with further spillovers into the real economy (leading to a loss in domestic output). Another consequence of a default on external debt is that it will impair overall confidence in the government and the banking system (especially for a first-time borrower), thereby imposing large economic and welfare costs on the country.

#### **4. Effects on Financial Sector Development**

It would certainly not be appropriate to narrow the focus of this analysis only on the government's budget. A successful first-time issue of international sovereign bonds also opens up interesting perspectives on financial sector development in Belarus. Bond issues not only allow governments to optimize their expenditures across time, they also imply positive externalities that help to develop financial markets for the benefit of all economic agents. This point has recently been stressed several times in the relevant literature (IMF/Worldbank, 2001; BIS, 2002)

There are two main channels of how external government borrowing can lead to positive externalities that are highlighted in the following discussion: its likely impact on external borrowing from large private sector corporations, and the influence on the development of a domestic bond market (both from public and private issuers) in local currency. Both Chile and Mexico are examples of such a strategy. They have first established an external sovereign bond market, which was subsequently followed by corporate issuers. In the last stage, the local bond market was developed (IMF, 2003). Before I will discuss the particular external effects of the bond issue in detail, the basic rationale for developing a bond market will be briefly analyzed.

##### **4.1. Why Develop Domestic Bond Markets**

The process of financial intermediation in many emerging markets, especially in countries in transition, is still dominated by banks. Nonbank intermediation based on capital markets compared to bank intermediation is relatively underdeveloped. Even though capital markets are not likely to substitute for bank lending, even in the long run, they can help to make the financial sector more complete. There are several reasons why a developed domestic capital market in form of a bond market is useful in mobilizing long-term funds for investment (BIS, 2002):

- **Allocation of resources:** the bond market's main purpose is to select and monitor productive investment opportunities. The market interest rates determined in the bond market reflect the opportunity cost of funds at any maturity, which is a prerequisite for efficient investment and financing decisions. Especially in above-average growing emerging markets many firms sooner or later need additional capital to finance expansion, which also implies a positive relationship between real economic growth and the size of debt markets.
- **Dispersion of systemic risk:** another benefit of bond markets is the associated dispersion of risk. Bond markets help to avoid concentrating intermediation uniquely on banks (which are highly leveraged institutions and therefore vulnerable to crises). However, banks will play a major role in capital markets by getting involved in the process of underwriting and selling capital market products. Furthermore, they can

repackage loans and sell them as bonds (for example, mortgage-backed or other asset-backed securities) to other investors.

- **Lower cost of capital:** bonds are by definition instruments that can be bought or sold in the secondary market. Therefore, they have a lower liquidity premium than commercial bank debt for which normally no secondary market exists. For a certain group of borrowers, intermediation costs are thus lower for bonds than for bank loans, leading to a decrease in the cost of capital.

Apart from these aforementioned reasons, which focused on the process of financial intermediation, a well functioning bond market with its wide range of instruments can have additional benefits, for example with respect to the operation of monetary policy. Information important for the smooth transmission of monetary policy – e.g., expected policy rates and expected inflation – can be extracted from the market-determined yield curve.

#### **4.2. Impact on Corporate Issuers of External Debt**

It is beyond dispute that also borrowers in the private sector need access to long-term corporate finance; this is usually established by either direct borrowing from investors in capital markets or by obtaining loans from banks. Firms need to finance their fixed investment projects that are expected to yield returns only in the long-term, however, international investors usually know only very little about the general economic prospects of emerging market countries or firms within those countries.

The issuance of sovereign debt securities in emerging market countries could therefore generate potentially large spillover effects on corporate debt securities. Government borrowing will certainly improve the familiarity of international investors with the country and its economy and establish a much-needed benchmark. This benchmark can in turn be used to price corporate bonds more efficiently since they are normally priced relative to the benchmark set by the sovereign as the borrower with the lowest risk profile. Therefore, borrowing by the government may ultimately lead to a reduction of the cost of capital by the private sector.

A more recent example for such a strategy is Chile. The government of Chile returned to the international bond market after an eight-year absence by issuing a US\$500 million ten-year global sovereign bond in 1999, followed by further issues in subsequent years. This took place against the background of continued fiscal surpluses in the years before. The purpose of this placement was not to fund any existing fiscal deficits, but to reestablish Chile's presence in international bond markets. Before the sovereign debt was issued, there was no reliable measure of sovereign country risk for foreign investors. With the issuance of the bond the government established such an important missing benchmark, in order to facilitate the further placement of corporate debt securities in the international bond markets. The overall objective of the issue was thus to improve the access and financing of Chilean corporations in the international capital markets (Yuan, 2001; BIS, 2002).

#### **4.3. The Domestic Bond Market**

A successful international bond issue broadens the investor base and helps to recognize the country as an investment opportunity internationally. Global fixed-income investors who seek to hold a well-diversified international portfolio are a steady source of demand for governments bonds issued both externally and domestically. Attracting them can play an important role in broadening the investor base, thereby also enhancing liquidity in domestic markets. Furthermore, the range of foreign investors purchasing emerging market bonds has broadened over the recent years. Specialized investors like hedge funds and mutual funds, who accounted for the majority of the inflows to emerging bond markets up to the mid-1990s have been followed by investors who traditionally invested only in highly rated mature bond markets. In particular, institutional investors like pension funds and insurance companies have added bonds (and other assets) from emerging markets to their portfolios (Worldbank, 2003).

One of the most significant developments in emerging market finance is the shift away from sovereign bond issuance in the international markets in favour of issuance in local

currency bond markets. Over the past years, emerging local bond markets have grown considerably, and they are gradually becoming an alternative source of funding for both governments and corporates. The efforts to develop such markets have been motivated by a number of considerations, in particular the desire to self-insure against sudden losses of access to international markets (also referred to as “sudden stops”) or periods of capital flow reversals (IMF, 2003). This rotation from external to domestic debt has already occurred in some of the major emerging economies (among them Brazil, Chile, Hungary, India, the Republic of Korea, Malaysia, Mexico, Poland, South Africa, and Turkey). One recent estimate suggests that the total trading in emerging market domestic debt is now larger than trading in international bonds issued by emerging markets, even though international bonds are still much more liquid instruments due to their specific characteristics (BIS, 2002).

There are a number of advantages of local bond markets as an alternative source of funding for domestic borrowers. The debt burden is now denominated in local currency, making it therefore easier to conduct debt service and principal repayment. Existing currency (and possibly maturity) mismatches associated with external borrowing can be therefore reduced. Local-currency markets provide a natural hedge for domestic borrowers whose revenues (in case of governments: taxes) are tied to local currency. Another motivation is the desire to stimulate domestic savings by offering new financial products that allow for a better diversification of savings. Moreover, the local government bond market provides an avenue for domestic funding of budget deficits other than that provided by the central bank and, thereby, can reduce the direct and potentially damaging monetary financing of budget deficits.

However, the switch to local currency markets is not free of any risk. The problem of crowding-out other domestic borrowers was already mentioned in section 3. Encouraging participation of foreign investors in the domestic market will certainly lead to higher liquidity and lower interest rates. Nevertheless, disadvantages of such a move could be seen in the fact that foreign investors tend to manage their portfolios more actively (since they are now subject to exchange-rate risk), thereby making the relatively small domestic market more volatile and vulnerable. This can in turn have severe consequences for asset prices like bond prices and exchange rates (for example, sudden capital outflows may lead to a crash in the bond market and a subsequent exchange rate crisis).

Given that it is beyond the scope of this paper to develop a detailed strategy for domestic bond market development, only some very basic prerequisites for a successful development of bond markets can be reviewed. A stable macroeconomic and financial framework is certainly the key to an efficient market. Low and stable inflation has been identified in the literature as an essential precondition for the development of debt markets; like sound government finances, low inflation is important for facilitating the development of bond markets. Therefore, sound and credible monetary and fiscal policies are crucially important for a successful bond market. The financial framework concerns, among other things, exchange rate and capital account policies, effective legal and tax policies, and an efficient supervision and regulation of the financial system. Especially the ability to attract foreign investors will depend on how these issues are handled. Only a fair and non-discriminating access of foreigners to the local bond market can lead to the welfare gains associated with the supply of foreign funds in the domestic market. If a credible macroeconomic and financial framework is established, the problem of sequencing the different steps in the development of government securities markets arises, which is largely country-specific. The issuance strategy of the sovereign as the most important player in the local bond market, whose bonds form the basis of every modern financial market is clearly a cornerstone in that respect. A natural progression of markets is to start with a money market and then move on to short, medium, and long-term maturities. Benchmark-issues have to be carefully designed with respect to maturity (e.g. 2, 5, and 10 years) and instrument (e.g., fixed rate or floating rate; linked to inflation or the exchange rate) chosen in order to maximize liquidity in individual bonds.

## 5. Ensuring a Successful Foreign Bond Issue – Selected Issues

### 5.1. Types of International Bonds

International bonds are issued in foreign currency and targeted at foreign investors from the issuer's point of view. Even though there exists no rigid classification system at present, and market forces will continue to blur any distinctions between these bonds, they can be further divided into three main categories: eurobonds, foreign bonds, and global bonds (Steward and Greshin, 1997):

- **Eurobonds** are foreign-currency denominated bonds (mainly in U.S. dollar or euro; the former is called "eurodollar bond") that are issued directly into the international ("offshore") bond market intended for global investors. Generally, they are not sold in the primary market to investors in the country of the currency of denomination. Their crucial feature is therefore that they are traded outside of domestic markets and are not governed by the security laws of any single country. Eurobonds are typically underwritten by an international syndicate of investment and commercial banks and subsequently offered simultaneously to investors in a number of countries. In order to make them attractive to institutional investors, which are often required to invest only in exchange-listed securities, eurobonds are routinely listed on a national stock exchange (the most common being the Luxembourg, London or Zurich exchanges; Merrill Lynch, 1998) but actual trading is done mainly in the over-the-counter-market. Eurobonds are in (unregistered) bearer form and pay interest annually.
- **Foreign bonds** are securities that are issued by nonresidents in a given country in its domestic currency. Because they are issued in the country's currency and follow the same registration and listing procedures like domestic bonds, they are intended primarily for domestic bond market investors. Apart from the credit spread between the foreign bond and sovereign or corporate domestic bonds these instruments trade like any other domestic bonds. Many foreign bonds have nicknames that indicate the country of issuance. The most important market for foreign bond is the U.S. bond market. These "Yankee bonds" issued here by nonresidents follow therefore the same registration procedure for public securities that is also required for U.S. issuers (i.e., registration with the Securities and Exchange Commission (SEC) ). In addition, the coupon is paid semiannually (similar to U.S. bonds) and the securities are registered with the issuer (not in bearer form). Other foreign bond markets consist of "Samurais" (issued in Japan by nonresidents) and "Bulldogs" (United Kingdom).
- **Global bonds** are hybrid instruments, designed to trade and settle in both the eurobond and foreign markets (for example, in the U.S. as "Yankee"). These bonds are usually issued by a sovereign or a multinational agency of high quality on a regular basis and in large sizes. The first global bond was issued by the World Bank in 1989 simultaneously in both the U.S. and eurodollar market.

Due to its flexibility and low regulatory environment, the eurobond market accounts for the lion's share of international bond issues. Many emerging market borrowers made use of the relatively low costs to the issuer and have tapped international capital markets by issuing eurobonds. Additionally, issuers can possibly take advantage of an expansion of the investor base, and international name recognition.

### 5.2. The Rating Process

Borrowers generally seek credit ratings in order to ease their access to international capital markets where rated securities are generally preferred over unrated ones; this is in particular true for the U.S. bond market, where credit ratings are a de facto requirement. But also in international bond markets ratings have developed into a prerequisite for broad market acceptance. A sovereign credit rating „indicates the capacity and willingness of rated governments to repay commercial debt obligations in full and on time“ (Vir Bathia, 2002, p.4) and is provided by at least one of the major credit rating agencies Moody's, Standard and Poor's, and Fitch Ratings. Multiple ratings from at least two agencies, however, are the norm rather than the exception in the international markets. Before a rating agency is approached by a potential issuer, the help of a rating advisor (i.e., international commercial or investment banks) can be

deployed. This may lead to a better preparation of the issuer and hence a more successful outcome.

Ratings are an important part of the bond market, as they help to reduce investor's uncertainty about risk exposures. In this context of particular importance are sovereign ratings, because credit rating agencies use them normally as a reference point for rating other issuers from the same country like corporates. The main determinants of a country's credit rating are from a general point of view its economic and political fundamentals. It is nowadays common for new sovereign issuer to arrange for at least one rating from a major agency before the first public bond issue in the international markets. There are only a few countries that have tapped international markets without a rating – exceptions tend to be issues with very small sizes and short maturities (Ammer, 1998).

The major rating agencies have developed detailed analytical frameworks, by which credit ratings are determined. These methodologies are relatively subjective concepts, which do not follow an exact scientific formula and are more an appraisal of the sovereign's overall creditworthiness that has both quantitative and qualitative aspects (Beers, 1997). The quantitative part of the analysis focuses on certain measures of economic and financial performance of the country. Usually a number of macroeconomic variables are considered, with a particular emphasis on fiscal and external sector indicators. These data are normally considered public information; however, a detailed and thorough analysis by the rating agency implies for the domestic statistical office and the central bank the ability and willingness to provide the required data in a timely fashion. A refusal to cooperate will most likely result in a suboptimal rating. Since a rating measures future debt service capacity, which is a function of both the ability and the willingness to pay, the analysis has to be supplemented by quantitative criteria that measure the willingness to pay. Political risk, i.e., the structure and stability of the political system, the social environment, and international relations is a fundamental qualitative criteria. An important part of the rating process, which can last for several months, are therefore regular conversations with representatives of the issuer. This is also an opportunity where an issuer might be able to influence the rating decision directly (Ammer, 1998).

**Table 1: S&P Sovereign Ratings Ramp, 2002**

<b>Ramp category</b>	<b>Key risk factors</b>	<b>Key comparator variables</b>
1. Political Stability	Political event risk	--
2. Economic prospects I: structure	Economic prosperity, diversity and resilience	- Nominal US\$ GDP per capita
3. Economic prospects II: growth	Economic growth trends	- Growth of real local currency GDP per capita
4. Fiscal flexibility I: revenue, expenditure and balance performance	Budgetary flexibility	- General government fiscal balance/GDP
5. Fiscal flexibility II: debt and interest burden	Strength of government balance sheet	- General government net debt/GDP - General government gross interest payments/Gross revenue
6. Fiscal flexibility III: off-budget and contingent liabilities	Unreported and contingent claims on sovereign balance sheet	- Estimated off-budget and contingent liabilities/GDP
7. Monetary stability	Sustainability of monetary and exchange rate policies	- Core inflation
8. External flexibility I: liquidity	Reserve adequacy and market access	- Gross external financing requirement/Gross usable reserves
9. External flexibility II: public sector net external debt	Strength of public sector external balance sheet	- Public sector net external debt/Current account receipts
10. External flexibility III: private sector net external debt	Strength of financial system and nonfinancial private sector external balance sheet	- Financial system net external debt/Current account receipts - Nonfinancial private sector net external debt/ Current account receipts

*Source:* Vir Bahtia (2002); "Ramp" is an industry term alluding to the scoring slope

Even though the rating process is different within each agency, it seems useful to consider a disaggregated example in order to gain better insights into the key aspects of

the process. The ratings “ramp” presented in table 1 shows the methodology used by Standard and Poor’s (as of April 2002).

Each of the above-mentioned categories is assigned a score on a specific scale (from one to six), representing its value in relation to other rated sovereigns. After some “sense checks” when compared to the relevant peers, the scores are used in a second step to determine the overall rating of the issuer, even though no exact formula is used.

It has to be kept in mind that the relation between rating and the costs of borrowing is of crucial importance. The market yield of sovereign debt is empirically highly correlated with the corresponding credit rating; a good rating therefore reduces the burden of debt service for the issuer. Furthermore, the rating can also have an impact on international bank lending to the country, as major international banks take the sovereign rating in their respective internal credit ratings into account.

### **5.3. Inclusion in Emerging Market Bond Indices**

There is a growing number of international institutional investors who diversify their portfolio holdings from traditional domestic government bond holdings into higher-yielding assets like emerging market bonds. Most of these investors benchmark their asset allocation decisions on particular emerging market bond indices, which reflect the total-return of a passive portfolio invested in emerging markets bonds. Whereas passive emerging market asset managers replicate the relevant benchmark almost identically (and hence stimulate demand for the bonds included in the index) active fund managers try to beat the benchmark set by the index by holding a portfolio with a different composition. In both cases, the index and its constituents attract attention from investors around the world. By tailoring the terms of the issue according to the mentioned requirements set by the relevant index provider, the issuing country can maximise the chances of an index inclusion and the corresponding increase in demand from international investors. This increased investor support in a country’s international bonds could lead to lower sovereign spreads and make international investors more receptive for further issues.

The first emerging bond market index, which has been calculated and published by the global investment bank JP Morgan since the early 1990s, was the Emerging Markets Bond Index (EMBI). It was designed to track the market for U.S. dollar-denominated sovereign restructured bonds (mainly so-called “Brady bonds”) by providing an accurate and objective benchmark of returns on a passive portfolio of emerging market bonds. Due to the narrow focus of the EMBI which covers only restructured debt, several extensions have been subsequently developed and published. The EMBI<sup>+</sup> extends the EMBI by including several other foreign-currency denominated securities thereby providing a better benchmark for strategic investments in the emerging fixed-income markets. A further extension of the EMBI<sup>+</sup> came into place with the introduction of the EMBI Global in 1999, which uses a set of relaxed inclusion criteria regarding the country selection and the liquidity of the instruments included. This index is so far the most comprehensive emerging markets debt benchmark (JP Morgan, 1999). Since all the above-described indices cover only instruments denominated in U.S. dollars, they do not allow for the inclusion of the steadily growing share of euro-denominated emerging market bonds. In response to growing investor demand, an exclusively euro-denominated benchmark has been created with the EURO EMBIG, which follows in most respects (apart from the currency of denomination and the types of instruments eligible<sup>4</sup>) the rules for the EMBI Global (JP Morgan, 2001).

In order to be included in one of the above-mentioned indices by JP Morgan, certain country and general instrument admission criteria must be met. The following discussion focuses on the current flagship index, the EMBI Global due to its importance and the similarity to the EURO EMBIG<sup>5</sup>. To be considered for inclusion in the EMBI Global, a country:

---

<sup>4</sup> Bonds included in the EURO EMBIG must be fixed-coupon straight bonds (i.e. not callable or puttable) whereas instruments included in the EMBI Global can have these additional features.

<sup>5</sup> A sovereign bond issue by Belarus could, in principle, be eligible for admission in the following indices, if admission requirements are met: EMBI<sup>+</sup>, EMBI Global, and EURO EMBI Global.

- has to be classified as an emerging market according to the World Bank definition (Worldbank, 2003). This definition is based on having a low or middle per capita income for at least one of the past three years, or,
- regardless of the income level, it must have either restructured external or local debt during the past 10 years, or some form of restructured external or local debt currently outstanding.

Once the countries are defined, the eligible instruments can be selected. Only sovereign and quasi-sovereign issues, which meet all of the following requirements, are considered:

- U.S. dollar-denominated issue (issue in EUR for the EURO EMBIG),
- a minimum face amount outstanding of US\$ 500 million (EUR 500 million for the EURO EMBIG),
- the instrument must be able to settle internationally (e.g. through Euroclear),
- it must have at least 2.5 years to maturity. Once added, it remains in the index until 12 months before it matures.
- the cash-flow structure of the bond must allow the calculation of a verifiable daily return.
- daily bid and offer prices from interdealer brokers or JP Morgan must be available.

#### **5.4. Basic Features of Bonds**

##### *Fix versus Floating Rates of Interest and Contingent Payment Terms*

The usual choice regarding the coupon the bond is carrying is between a fixed coupon or a floating one. A fixed-coupon bond promises to make regular interest payments that are fixed over the maturity of the bond and known in advance. In contrast, for a floating-rate bond, the coupon is periodically reset based on some reference interest rate (like the 6-month LIBOR) plus a spread (due to, among other things, differences in risk between the borrowers). The floating-rate bond ensures a debt service that is always tied to current market conditions but can never be known in advance. This makes it a more risky instrument for borrowers, who can only estimate their future interest rate payments. In case of adverse movements in the bond markets floating-rate coupons can create serious problems to ensure timely and full debt service and should therefore be avoided.

Over the past years, several proposals of including contingent payment terms in bond contracts of emerging market borrowers have been put forward (BIS, 2000). Examples of such "exotic" bonds (as opposed to standard fixed or floating-rate bonds) are bonds indexed to the development of GDP or commodity exports (e.g. oil or copper). These features improve the capacity to service the debt in case of an economic downturn, or negative terms-of-trade shocks but come at the expense of a higher interest burden when the economy is thriving. Due to the highly complex structure of such bonds many practical and conceptual difficulties arise. Among other things, the pricing and hedging of such bonds will be more complicated for investors than standard ("plan-vanilla") issues, which are generally preferred. There are to date only a couple of bonds with contingent payments like certain issues from Mexico (oil-indexed) and Bulgaria (GDP-indexed). Especially in the case of first-time issuers, where uncertainty is already comparably high, it is doubtful that such a structure would gain the necessary acceptance from foreign investors. Here, a simple fixed-coupon paying bond will be most likely superior to more advanced instruments.

##### *Maturity*

Maturity is an important characteristic of bonds and can generally range from one year (the usual dividing line between money and bond markets) to a few decades (up to a maximum of normally 30 years). However, for emerging market borrowers with more risky economic prospects, the long part of the maturity spectrum is normally non-existent (i.e. 15-30 years). Even if available, long-term bonds with maturities of more than 10 years will be very expensive to issue, i.e. need to offer a high yield to investors as compensation for the increase in risk. On the other hand, bonds with a maturity that is too short face a significant roll-over risk for the borrower at maturity. Therefore, taking



into consideration the aforementioned bounds, it seems attractive to issue bonds ranging from 5 to 10 years to maturity. A further lower bound for the optimal maturity is set by the inclusion criteria for emerging market bond indices, which normally require at least 2.5 years to maturity.

#### *Currency of Denomination*

The majority of international bonds are denominated in the major currencies, i.e. the U.S. dollar and the euro. Other currencies of denomination seem to play only a minor role in the international bond markets; hence they can be neglected for our purposes. Choosing the optimal currency of denomination of the issue should be influenced by a number of both financial and political considerations. The targeted foreign investor base and the nature of the country's foreign exchange earnings play an important role in this respect. Prevailing market conditions in the Europe and the U.S. should be taken into account in order to minimize the cost of borrowing. Since these conditions can change very rapidly, the choice of the currency should be taken as late as possible. Apart from these financially motivated considerations, the question of the currency also entails a political dimension. Against the background of the current process of Eastern European integration, the choice to issue euro-denominated bonds could serve as a positive signal to investors about the intention of Belarus to strengthen links with the European Union.

#### *Size*

There are two main determinants of the optimal size of the issue: the required amount of funds that can be deployed efficiently and the need for a liquid bond issue that also qualifies for inclusion into the main emerging market bond indices. If profitable projects are available to the government to that extent, the minimum size of the issue should not be less than U.S. \$ or EUR 500 million, which is the standard minimum requirement for the EMBI<sup>+</sup>/EMBIG/ EURO EMBIG indices (see section 5.3).

#### *Redemption scheme*

Typically, the repayment of principal can be performed in several ways, which can be classified into one of two categories:

- Repayment of principal is done at the stated maturity; that is, the bond runs for a number of years, and then becomes due and payable. Most bonds issued by emerging market borrowers are in this form, which is called "bullet bonds".
- Principal repayments are spread throughout the term of years the bond is running or the principal is repaid before its stated maturity. This can be performed in several ways in practice:

**Callable bonds** give the issuer the right to redeem the entire amount of the issue, or a part thereof, at a predetermined price on a date before maturity. This option specified in the bond's indenture is attractive to issuers since it allows them to benefit from falling levels of interest rates by retiring the bond and replacing it with another issue carrying a lower coupon. Since call provisions are a disadvantage to bond investors, they will accept them only if the bond yields a higher return (the "call premium"). From the issuers point of view, calling a bond before maturity can be in some cases disadvantageous too. The decrease in the amount of an outstanding issue will lead to a less liquid market in the remaining bonds, resulting in higher yields. Furthermore, if thereby certain eligibility criteria of emerging market bond indices are violated (see section 5.3), the issue will be excluded from the index. Knowing this in advance, investors will demand an additional compensation for that risk.

**Puttable bonds** are also bonds with embedded options and in some respects similar to callable bonds. In this case, the investor has the right to sell the bond back to the issuer at par value before maturity. Thus, this advantage for investors leads to a reduced yield of the bond. The ultimate consequences for an emerging market borrower can be severe, however, due to the uncertainty surrounding the date of principal repayment. If it is not possible to obtain foreign exchange at the time the bond is sold back, a default is inevitable.

**Sinking fund provisions** specify in the bond's indenture that the issuer must retire a predetermined amount of the issue periodically, leading automatically to a successive decrease in the amount of bonds outstanding. The same problems due to a decrease in liquidity and possible index-exclusion will arise, making this provision not an attractive provision.

#### *Collective Action Clauses (CACs)*

Collective action clauses are part of international sovereign bond documentations that specify certain procedures for selecting bondholders' representatives in debt restructurings and provide for the modification of terms of the debt contract by a substantial majority. There are two general types of CACs (Gugiatti and Richards, 2003):

- **Majority restructuring clauses;** they allow a qualified majority of bondholders (e.g. 75%, which is the most common threshold) to agree to changes in the terms of the debt, thus binding all bondholders to the new terms. They specify further, among other things, rules related to bondholder meetings and voting rules.
- **Majority enforcement clauses;** they allow a majority of bondholders to constrain the ability of individual creditors to enforce its rights against the issuer (e.g. to initiate litigation) in the case of default. They also require that any funds recovered through litigation are distributed between creditors on a pro-rated basis.

Even though CACs are already widespread in bond documentation (in particular in bonds governed by English, Luxembourg, or Japanese law) they are still not included in around half of outstanding international bond issues; for example, bonds issued under New York law or German law typically lack the above-described CACs. This has just recently begun to change with the path-breaking issue of a global bond with CACs by Mexico on 26 February 2003 into the U.S. market, which attracted much attention. Since then, other emerging market borrowers like Brazil and South Africa have followed the example set by Mexico and included CACs in their U.S. issues as well. The recent interest in the use of CACs can be attributed to a large extent to increased encouragement from G7 governments (especially the U.S. administration). Proposals to improve the framework for a predictable and orderly restructuring of sovereign debt are up to a certain degree motivated by the wish to limit official sector support packages in the event of a financial crisis.

The important question whether CACs can affect the yields of bonds containing them and hence borrowing costs is not clear from a theoretical point of view. Proponents of CACs argue that they will increase the probability of a smooth restructuring thereby raising the expected recovery rate in the event of default and hence should lower yields on bonds with CACs. Opponents, on the other hand, like to point out that it is now easier to restructure a bond and that therefore a sovereign might be more likely to default. This should increase yields and raise the costs of borrowing. Empirical evidence is thus needed to decide which of these possible effects is the dominant one. Research conducted on this subject has not been definitive so far. However, much of the evidence presented up to now suggests that CACs do not have a statistically significant impact on bond yields and the terms of borrowing for the issuing sovereigns (Worldbank, 2003)

Several conclusions regarding Belarus's potential bond issue can be drawn from the discussion so far. The overall aim must be to stimulate investor demand as much as possible, also by ensuring that the bond is included in emerging market bond indices. A fixed-coupon bond with a bullet maturity of 5 – 10 years seems to be the instrument most likely to succeed in the international euromarkets. Such a straight eurobond (including CACs), which does not have any options attached is particularly well suited for first-time issues due to its simplicity that helps investors to concentrate mainly on analyzing credit risk. Apart from the terms of the bond, it has to be ensured that the minimum size of the bond is large enough to guarantee a liquid trading in the secondary markets and index inclusion (that is, U.S. \$ or EUR 500 million). In particular institutional investors demand large, liquid issues of bonds that can be traded in large quantities in bond markets without any impact on the market price of the bonds.

## **5.5. Timing of the Issue**

Many emerging market borrowers face certain periods of time, where access to international capital markets is restricted. Such situations are typically characterized by a loss of foreign investor appetite for emerging market assets and higher borrowing costs. In order to avoid the issuance in such adverse conditions, the right time to enter international bond markets is a key consideration that deserves much attention since it can influence the debt service significantly. There are two major determinants that will affect the costs of borrowing (i.e., the bond's yield) for Belarus: the external environment like emerging market credit spreads (with a special emphasis on the regional situation) as well as the developments in mature bond markets, and the domestic environment.

The most relevant measure for the current costs of borrowing for an emerging market sovereign issuer is the sovereign credit spread. This spread is the difference between yields on bonds issued by the sovereign and those of a reference country (e.g., the yields on U.S. Treasury or Eurozone bonds of comparable maturity). In the case of a first-time issuer who has no other issues outstanding, spreads can only be estimated by looking at spreads from similar sovereigns. In the case of Belarus, credit spreads from comparable Eastern European or Central Asian borrowers (e.g. Ukraine, Russia, Kazakhstan) can serve as a point of reference. However, spreads of emerging market borrowers have to be monitored closely since they can change rapidly, thereby making the costs of borrowing considerably volatile. Thus, issuance in times of relative tranquillity, with low and stable emerging market spreads should be given clear priority. A second factor affecting the costs of borrowing for emerging markets are developments in the bond markets of the major industrialised countries. Since emerging market credit spreads are defined relative to a certain benchmark they express only the relative costs of borrowing (in comparison to the reference country). If yields in the major financial markets are rapidly rising (for example, as experienced in the middle of 2003 due to an expected pick-up in global growth) this will most probably translate into higher total costs of borrowing for emerging market debtors. Therefore, actual developments both in mature and emerging bond markets have to be followed closely in order to ensure an optimal timing of the bond issue.

Apart from external financial conditions, there are also domestic factors that should be considered for the right timing of the issue. Since investors generally prefer stable political and economic domestic environments, it is not advisable to issue a bond in times of high political and/or economic uncertainty. Around the time of major political decisions that could have potentially adverse impacts on the bond (e.g. budget debates in the parliament), such uncertainties could be especially large and result in a failure to stimulate investors' interest.

## **6. Conclusions And Policy Lessons**

The purpose of this paper has been to build a conceptual framework for Belarus as a potential first-time borrower in international bond markets. A first issue addressed in the paper is the view that capital inflows can result in potentially large gains for the domestic economy when appropriately handled. The benefits in emerging market economies can be particularly large for some types of capital inflows, most notably foreign direct investment (FDI). Through various channels discussed, FDI will contribute to investment and long-run economic growth in the domestic economy. The key issue for policymakers is therefore to design policies that allow to exploit long-run economic gains of capital inflows while at the same time minimizing the risks associated with them.

As the title of the paper suggests, its remaining part is devoted to considerations regarding a special case of capital inflows, namely government borrowing from foreign investors. If the decision to borrow from abroad has been taken, the fundamental issue in this context concerns the appropriate use of the foreign funds. The ability to service debt and repay the principal crucially depends on the intended use of the funds. Investment projects should be given clear priority over consumption and foreign

exchange reserve accumulation. For practical policy purposes, the following recommendations can be derived from the analysis:

**Recommendation 1: Foreign funds should be intended primarily for high-yielding investment projects, with special emphasis on the tradable sector.**

Another issue that was discussed in the paper concerns external effects of a bond issue on financial sector development. By setting a sovereign benchmark and attracting foreign investors, the government can indirectly lower the cost of capital for corporates and stimulate the parallel development of domestic bond markets, which are an integral part of financial intermediation:

**Recommendation 2: Maximize the external effects of an international bond issue by giving the development of domestic sovereign and corporate bond markets special consideration.**

Returning to the general discussion about the pros and cons of capital inflows, one of the key considerations for domestic policymakers should be the attraction of FDI, for instance during the privatization process. In this respect, the bond issue could serve as a signal for further private capital inflows when accompanied by credible long-term structural reforms:

**Recommendation 3: Take the bond issue as a starting point for encouraging further capital inflows. Consider the complementary issue of attracting FDI a central cornerstone of the privatization process.**

Once the decision to float a bond issue has been taken, it is necessary to set the terms of the bond in order to make it a success in the international bond markets. Especially first-time borrowers with no established track record should adhere to commonly used structures that help to stimulate foreign investors' interest and lead to overall lower costs of borrowing. Therefore, the analysis concludes with the following recommendation:

**Recommendation 4: Issue straight bonds with terms that allow a liquid trading by foreign investors and make the inclusion in emerging market bond indices likely.**

R.K., Lector: R.G. Potsdam, December 2003

## References

- Agenor, Pierre-Richard (2001). Benefits and Costs of International Financial Integration: Theory and Facts, Working Papers in International Economics. Trade, capital flows. No. 2699, World Bank: Washington, DC.
- Ammer, John (1998). Sovereign Credit Ratings and International Debt Markets, mimeo, Federal Reserve Board.
- Beers, David T. (1997). Standard & Poors's Sovereign Ratings Criteria, in: Fabozzi, Frank J. and T. Dossa Fabozzi, eds., *The Handbook of Fixed Income Securities* (Fifth Edition), Burr Ridge, IL: Richard D. Irwin, pp. 460 – 472.
- BIS (2000). Managing Foreign Debt and Liquidity Risks, BIS Policy Papers No. 8, Bank for International Settlements, Basle.
- BIS (2002). The Development of Bond Markets in Emerging Economies, BIS Papers No. 11, Bank for International Settlements, Basle.
- Castellanos, Jorge (1998). Developing Government Bond Markets, Inter-American Development Bank Technical Paper No. IFM-111, Washington, DC.
- Cuddington, John T. and Gordon W. Smith (1985). International Borrowing and Lending: What Have We Learned from Theory and Experience?, in: Smith, Gordon W. and John T. Cuddington (eds.) *International Debt and the Developing Countries*, The World Bank: Washington, DC.
- Grigorian, David A. (2003). On the Determinants of First-Time Sovereign Bond Issues, IMF Working Paper No. 03/184, Washington, DC.
- Gugiatti, Mark and Anthony Richards (2003). Do Collective Action Clauses Influence Bond Yields? New Evidence from Emerging Markets, Reserve Bank of Australia Research Discussion Paper 2003-02.
- IMF (2003). *Global Financial Stability Report*, March Issue, International Monetary Fund: Washington, DC.
- IMF/Worldbank (2001). *Developing Government Bond Markets: A Handbook*, Chapter 1, Washington, DC.
- JP Morgan (1999). Introducing the J.P. Morgan Emerging Markets Bond Index Global (EMBI Global), 3 August.
- JP Morgan (2001). Introducing the J.P. Morgan Euro Emerging Markets Bond Index Global (EURO EMBIG), March.
- Loungani, Prakash and Assaf Razin (2001). How Beneficial Is Foreign Direct Investment for Developing Countries?, *Finance & Development*, Vol. 38, No. 2.
- Merrill Lynch (1998). Size & Structure of World Bond Market 1998, September.
- Obstfeld, Maurice (1998). The Global Capital Market: Benefactor or Menace?, *Journal of Economic Perspectives*, Vol. 12, No. 4, pp. 9-30.
- Steward, Christopher B. and Adam M. Greshin (1997). International Bond Markets and Instruments, in: Fabozzi, Frank J. and T. Dossa Fabozzi, eds., *The Handbook of Fixed Income Securities* (Fifth Edition), Burr Ridge, IL: Richard D. Irwin, pp. 327 – 345.
- UNITAR (1999). The "Building Blocks" of Effective Government Debt Management, United Nations Institute for Training and Research (UNITAR) Document Series, No. 8: Geneva.
- UNITAR (2001). Best Practices in the Field of External Borrowing, United Nations Institute for Training and Research (UNITAR) Best Practices Series in External Debt Management, Document No. 1: Geneva.
- Vine, Allen A. (1997). High-Yield Analysis of Emerging Markets Debt, in: Fabozzi, Frank J. and T. Dossa Fabozzi, eds., *The Handbook of Fixed Income Securities* (Fifth Edition), Burr Ridge, IL: Richard D. Irwin, pp. 473-498.

Vir Bhatia, Ashok (2002). *Sovereign Credit Ratings Methodology: An Evaluation*, IMF Working Paper No. 02/170, Washington, DC.

Worldbank (2003). *Global Development Finance 2003*, The World Bank: Washington, DC.

Yuan, Kathy (2001). *The Liquidity Service of Sovereign Bonds*, unpublished, University of Michigan Business School.