Special Study

The EBRD's response to the 2008-09 crisis

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Evaluation Department
(EvD)

European Bank
for Reconstruction and Development

PREFACE

This Evaluation Report

This report is an evaluation of the EBRD's response to the crisis of 2008-09. The report has been executed by Chris Olson (Senior Evaluation Manager) with assistance from Millard Long (ex-World Bank financial sector specialist), Douglas Smee (country risk assessment expert) and IFCL (regional banking credit expert). Members of the Study Team are the consultants and EvD staff members: Rafael Alcantara, Rebecca Atkinson, Olesya Kerridge, Elena Loukoianova and Victoria Millis.

The operation teams and other relevant Bank staff commented on an early draft of this report. Information on operations was obtained from relevant teams and departments of the Bank and its files as well as from external sector and industry sources. Appendix 1 presents a list of contacts. EvD would like to take this opportunity to thank those who contributed to the production of this report.

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THE EBRD'S RESPONSE TO THE 2008-09 CRISIS

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Abbreviations

BD	Banking department
ED	Environmental department
EIRR	Economic internal rate of return
EvD	Evaluation department
FIRR	Financial internal rate of return
IFI	International financial institution
MDB	Multilateral development bank
OCE	Office of the Chief Economist (EBRD)
OGC	Office of the General Counsel (EBRD)
OL	Operation leader
OPER	Operation Performance Evaluation Review
OpsCom	Operations Committee
OT	Operation team
TC	Technical cooperation
TOR	Terms of reference
USD	United States dollar
XMR	Expanded monitoring report

Defined terms

the Bank	European Bank for Reconstruction and Development.
the OPER Team	Staff of the Evaluation department and the independent sector consultant who jointly carried out the evaluation.
the Operation Team	The staff in the Banking department and other respective departments within the Bank responsible for the Operation appraisal, negotiation and monitoring, including the XMR.

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THE EBRD'S RESPONSE TO THE 2008-09 CRISIS

Executive summary

1. Introduction and summary of the study approach

In the autumn of 2008, the EBRD announced an initiative called the "Crisis Response" as part of a number of actions taken by the G-20 governments and international financial institutions to changed market conditions after the bankruptcy of Lehman Brothers in the US. This study focuses on the crisis response from an EBRD perspective and is grounded in the the EBRD's unique mandate and instruments. The study makes observations and offers recommendations on possible adjustments to the Bank's future activities in the light of the study's finding. The evaluation necessarily leaves some important matters outside of its scope. Among these are the *ex post* transition impact of crisis response projects (CR projects) and their conditionality with respect to transition impact. A future study could examine these matters in more detail, once a critical mass of crisis response projects has undergone in-depth project evaluation.

2. Development and reactions during key phases of the crisis

The study focuses on three time periods:

- the pre-crisis period 2006 to August 2007
- the period of rising instability September 2007 to third quarter 2008
- the period of crisis response from fourth quarter 2008 to the end of 2009.

In 2006, the EBRD entered the period of the Third Capital Resources Review (CRR3) 2005-10. Reports from OCE indicated an essentially benign scenario with strong growth forecast. However, the boom gradually led to a build up of vulnerabilities among the EBRD's countries of operations (COOs). Current account deficits and rising debt created a strong need for external financing, while real estate booms and FX borrowing left banks highly exposed to asset price declines and currency fluctuations.

During 2007 and the first half of 2008, despite tumultuous conditions in the financial markets in developed countries, the COOs seemed to remain relatively unaffected. Banks in Kazakhstan and Russia were affected in late 2007 and the economic cycle in certain transition economies started to turn down before September 2008. The EBRD's internal documents noted that the "credit crunch" began to slow the syndicated loan markets from August 2007. At the same time, the EBRD's new signings were achieving rising margins. The EBRD's treasury and equity valuations were affected in the first half of 2008, while the EBRD's business volume targets remained unchanged. In November 2007 the EBRD's internal vulnerability assessments changed the list of countries regarded as vulnerable to external shock, doubling the share of the existing portfolio exposure to vulnerable countries. Exposure continued to grow more rapidly in vulnerable countries than elsewhere through the period of rising instability.

3. The EBRD's reaction to the deepening crisis post-Lehman

After the collapse of Lehman Brothers in September 2008, the EBRD's President proposed to move up the planning for CRR4 by one year. The 2009 draft Business Plan and Budget published in October 2008 for Board approval noted greater uncertainty and volatility in the environment, resulting in a move to ranges instead of point estimates for annual business volume (ABV) and other targets. By October it was evident that the financial and trade shock would affect the EBRD's countries of operations (COOs) and the need for a response by international financial institutions (IFIs) was becoming clear. The response was discussed at the IMF–World Bank Annual Meetings in October and the 2008 G-20 Summit in November, where a general agreement was reached. A G-7 Five-Point Plan was issued in October 2008. The President circulated a letter to Directors on 17

October, calling for a determined EBRD crisis response and urging "home" authorities to consider the impact on the region of their actions to stabilise EU banks. This theme would evolve into the Vienna Initiative, which worked to stabilise regional support for the subsidiaries of internationally active, European headquartered banks.

At the Bank retreat in November, the EBRD's Board discussed the EBRD Operational Response to the Crisis (ORC) and an increase of €1 billion to the 2009 Budget, of which half would flow to EU-7 countries scheduled for graduation in 2010. The EBRD carried a high degree of commercial risk exposure to the region compared with other IFIs, and it took courage and leadership to commit the Bank to take further private sector risks in response to the crisis. At this time, the Bank still expected a slow-down, not a recession, in its COOs.

The EBRD was already operating and planning to operate at full capacity, well above the CRR3 target of €3.8 billion per year. It aimed now to "maintain its level of activity across regions while at the same time doing its utmost to add a sizeable crisis response". As volume was increasing more quickly than staffing, the planned increase would be delivered mainly through increasing the size of projects. The EBRD was also already facing a capital constraint, exacerbated by the planned volume increase and by reported losses in 2008, which it addressed in the short term by releasing reserves and changing the method of calculation of the capital utilisation ratio.

The ORC document anticipated the types of problems likely to develop and outlined an EBRD response that took into account the strengths and limitations of the institution. It noted that the EBRD was a project lender and did not have the resources to respond at the macro level. It laid out the following elements of an approach:

- standard project-level interventions driven by client demand
- “strategic response packages” addressed to the financial and corporate sectors
- enhanced policy dialogue
- enhanced coordination with other IFIs
- fortnightly updates to the Board of Directors on crisis developments and the pipeline
- clear and forceful external communication.

The initial focus would be on existing customers found to be creditworthy but in need of liquidity or capital support, and could go to any of the COOs regardless of their graduation status. Protecting the Bank's portfolio was an explicit element. Over one-third of the EBRD's portfolio was exposure to banks, many of them subsidiaries of regional banks but often without parent guarantees for the EBRD's loans. Therefore it was in the EBRD's interest to secure support from the parent banks and this logic bore fruit in the form of the EBRD's strong supporting leadership role in the Vienna Initiative. Alongside other IFIs, central banks and central governments, the EBRD would support selected banks and enjoy the benefits of that support for its portfolio.

The EBRD crisis response went well beyond the EBRD's typical practices. Instead of providing funds for new investment, it provided funding to replace money that was no longer available from other sources. An addendum to the ORC defined several criteria for classifying a project as a CR project, including recapitalisation, working capital, debt refinancing, material revisions of the scope of existing projects, replacement of commercial co-financing by IFIs or state-owned institutions, and investments in work-out situations. In practice, the criteria seem to have been used mainly to classify projects for reporting purposes. Analysis showed that the classification, which ceased at the end of 2009, did not always correspond to an intuitive view of which projects were directed at the crisis, and project approval documents did not refer to the criteria. A review of 41 CR projects and 31 pre-crisis projects supported this conclusion, while finding that CR projects that referred to the CR initiative scored higher in crisis responsiveness and impact than those that did not.

4. Implementation of the ORC

The financial shock of late 2008 was compounded by a trade shock. Commodity prices fell around 60 per cent and there was a substantial decrease in remittances, a significant source of income in some COOs. When global risk aversion increased, foreign inflows of funds were curtailed. COOs were especially sensitive to the dry-up of liquidity as a result of their high demand for external financing. The outcome was very severe. Transition countries fell short of GDP projects made in October 2008 for the year 2008 by around 1 per cent. In 2009 output declined by 4.1 per cent, compared with the EBRD's projections, in line with other IFIs, of 3.5 per cent growth.

In February 2009 there was concern over the capacity of EU parent banks to support their CEE subsidiaries. The President signed a joint announcement with the WBG and EIB (the "Vienna Initiative") announcing €25 billion of financing for the region's banking system over two years. Communication had been identified as a component of the ORC. The EBRD's participation in the Vienna Initiative, together with announcements on specific crisis response projects, contributed to increasing confidence.

The Bank made its first CR commitments before the end of 2008. By the end of 2009, €5.5 billion had been committed and €3.2 billion disbursed. Only €0.9 billion was disbursed by the end of the second quarter of 2009, so most of the EBRD's finance was more relevant to the recovery rather than to the most critical illiquidity period in the last quarter of 2008 and the first quarter of 2009. The revised budget for 2009 had added €1 billion for crisis response and a further €1 billion was added in late 2009. The total volume of CR projects significantly exceeded this, forming the dominant part of the EBRD's 2009 commitments. The number of new commitments did not increase significantly, but the average size of CR projects was approximately three times that of 2008 projects and non-CR projects in 2009. The proportion of senior debt remained unchanged but the EBRD made greater use of subordinated debt at the expenses of equity and guarantees. This was most marked in the financial sector.

The sectoral distribution of projects did not show any major change over 2008, although the EBRD had initially expected the financial sector to require the majority of the increase in finance. The EBRD's leading role in the Vienna Initiative was significant in this sector and was complemented by the EBRD's provision of finance to banks without a foreign parent such as Parex and OTP. The EBRD also sought to finance SMEs through banks, but there was little disbursement in the early crisis period and the pricing of the credit lines proved controversial. The Trade Facilitation Programme was earmarked for a large expansion, but the collapse in trade actually reduced demand in the first three quarters of 2009.

CR projects were signed in 19 of the 30 COOs. Russia and Ukraine were the largest recipients. Overall, about one-third of CR finance was directed to EU countries, one-third to Russia and one-third to other countries. This constituted a large increase in finance to Central Europe and the Baltics, which rose from 6 per cent of business volume in 2008 to 21 per cent in 2009. The EU-8 (the first wave of EU entrants) had been expected to graduate by 2010 and the Czech Republic had already done so. The EBRD was already closing resident offices in these countries. The ORC allowed the EBRD to act "without questioning graduation", and the subsequent CRR4 said that the remaining EU-7 would graduate during 2010-15 with a post-graduation policy in place.

The ORC referred to a need for technical cooperation to support the crisis response. In March 2009 the EBRD Shareholder Special Fund (SSF) was replenished by €30 million, of which €4 million was allocated for crisis response through strengthening risk management in the financial and corporate sectors. In October 2009 the use of resources was broadened and some MEI and energy efficiency activities were presented for approval. Actual commitments by June 2010 totalled €2.9 million. Outside the SSF it is difficult to reliably identify crisis response TCs, but there was support to certain banks which clearly falls within this category.

In the EBRD region a key vulnerability was excessive levels of foreign borrowing. Replacing one foreign currency loan with another did not reduce this. However, the EBRD's finance did lengthen loan maturities and shore up enterprise capital, helping to balance short-term liquidity issues with longer-term solvency issues.

5. Crisis impact on the risk of the EBRD's portfolio

The crisis impacted on the assessed risk of the EBRD's loan portfolio in three main ways.

- The Bank changed the risk ratings on many loans in response to the worsening outlook.
- The Bank changed its provisioning policy to increase the loss given default.
- The Bank allocated crisis response projects signed in 2009 to higher risk countries.

These changes led to higher expected loan losses and to higher loan loss provisions in 2008-10, with direct relevance to the Bank's capital adequacy and its ability to respond to the crisis. Analysis of the "expected loss" on the loan portfolio according to signing date found that loans signed during the period of rising instability had the highest rate of expected loss at June 2010, and that this rate had risen much more than that of loans signed in the pre-crisis period. An analysis of "expected loss" by country showed a huge concentration in Russia and Ukraine. Crisis response projects in Ukraine made up 62 per cent of the expected loss in the financial institutions portfolio at June 2010.

The Study Team reviewed some aspects of country vulnerability analysis, resulting in a set of country vulnerability indicators that have been shared with management.

6. Key issues, lessons learned and recommendations

The instruments, skills and staffing constraints on crisis response. While the EBRD can increase the average size of projects to show commitment to crisis response, more project evaluation data is needed to tell if project size was a decisive source of crisis impact. Programme size can help communication of commitment to and confidence in the region, as project size can show the same for a customer. But they also brought more risk. The EBRD may not be able to do more because it cannot expand, in the short run, its instruments, skills and staffing to design and implement more new projects that are more expertly responsive to crisis needs. Nor can it be confident that using ordinary instruments in extraordinary situations will produce hoped for results. Only a prolonged commitment to crisis response work could make progress in that direction. That would seem to be outside of the EBRD’s mandate and vocation.

Recommendation: **The Bank should carefully review and consider the impacts of the crisis response on the Bank’s portfolio, capital structure, and operations.** It could consider to what degree responding to a future call for crisis response should again be met with an increase in volume targets, average project size, and a flow of nominated crisis response projects. It could consider anchoring the Bank’s response even more deeply and conservatively in the Bank’s mandate and proven capacities. Future evaluations of the projects affected by the crisis, as well as the crisis response projects themselves, could provide input to the review.

Recommendation: **Alternatives to increased volume in crisis response: the role of restructuring**. Rescheduling and restructuring is a valuable form of crisis response and one that falls squarely within the experience of banking professionals. In lieu of providing new money to repay old, which carries a number of risks, the Bank can renegotiate the terms of the old money. When the Bank soundly renegotiates the terms of a loan in response to the urgent crisis issues, that action can be equally responsive to the crisis. Future crisis response plans could consider the role of forbearance and restructuring, which could benefit many more of the EBRD’s customers than new projects can reach. The Bank could report such restructurings as part of its crisis response.

The need for the Bank to be ready to respond to a crisis. While it is true that crisis response was not part of the EBRD's mandate, the Bank decided nevertheless to increase output and incur large risks to respond to the crisis. Therefore, the Bank should retain this lesson and maintain an updated strategy and capability to respond to future crisis.

Recommendation: **Maintaining crisis response readiness.** Staying ready to respond to a crisis could reduce the scope for debate about the role of the Bank in a crisis, and could allow for even quicker and more effective response in future than was achieved in 2008-09. A management committee, comprising staff from Banking, Finance and Risk Management, could lead periodic exercises in reviewing crisis scenarios and updating the Board on the Bank's capacities (capital, human resources, and so on) to respond to a financial or other crisis impacting on the Bank's countries and portfolio. Annual business planning could identify and reserve capital and liquidity for an increase in risk and volume in response to crisis, if they are again to be parts of the crisis response.

Clarity about the capital impacts of events. Changes to planned and actual business performance have impact on the Bank's capital utilisation. Measuring the capital impact requires a constant capital rule. It is important to present the changing performance, whether planned or actual, against the background of a constant capital rule. When proposing to change the capital rule, it is important to show the effect of the change by illustrating the application of the new and old rules side by side, both for planning purposes, and to measure actual compliance with both the prevailing and proposed capital rule. This is to reduce the risk of losing direction for lack of a stable capital benchmark. It is understood that MDBs must not shy away from risk; however, it is essential that the risks be laid out consistently for decision-makers for the sake of the EBRD's sound banking mandate.

Transition differentiated the vulnerabilities of countries. The EBRD's COOs have diverged greatly in their capacity and performance during the pre-crisis transition years. The 2008-09 crisis tested these capacities, made differences more visible among the COOs, and showed which ones could weather the crisis better than others. It also showed that room existed to more fully appreciate and respond to the differing vulnerabilities to event risk at the country-level.

Forecasting is more art than science. It is an art that failed to provide much useful information about future developments. Indeed, forecasts mainly predicted that the future would continue much like the past. Scenario analysis can provide more value, especially through stress testing of country capacity to weather shocks. Even then, what is most plain from the crisis is how utterly unexpected the outcomes can be. The crisis confirmed an age-old lesson: expect the unexpected. This is why it is important to assess country resilience and vulnerability to unlikely events that cannot be forecast, and to give due weight to unexpected downside scenarios. It is difficult for one department to supply both vulnerability analyses and point forecasts of equal quality and effectiveness. Vulnerability analysis is a matter for risk management, which should not be affected in its managerial effectiveness by the constraints placed on economic forecasting.

Recommendation: **Strengthening country resilience to event risk.** It is important for the Bank to study what caused some countries to perform better than others, to adjust its country vulnerability assessments to take those factors into account, and to explore how country strategies, business plans, and projects could become more consistent with reducing the vulnerability of COOs to event risk.

Country-level developments in the crisis. The crisis brought country-level vulnerabilities to event risk into the limelight and the EBRD's vulnerability to them. The fact that the unprecedented international action mitigated the crisis impact on the EBRD does not mean that the EBRD was well positioned for the crisis. The crisis tested the adequacy and responsiveness of the EBRD's approaches to country risk assessment, business planning, and management of country risk concentrations. It also revealed room to improve country-level strategic, project and risk management work by the EBRD.

Recommendation: **Focusing on vulnerability to event risk and actively limiting exposure to country and sector concentrations.** The EBRD could improve its assessment of country risk and consider approaches to help to focus decisions more proactively on country vulnerabilities, by classifying countries into event risk vulnerability categories, and to actively manage business planning and country risk exposure concentrations accordingly. For business planning purposes, countries could be ranked into different classes of vulnerability irrespective of their country credit risk ratings. The Study Team recommends that the Bank review the effectiveness of its country risk management processes as tools not only for formal reporting purposes, but for alerting decision-makers to key country-level vulnerabilities leading to detectable impact on business plans and volume targets.

The importance of reacting to rising credit risk during the business cycle. When the credit cycle matures, as signalled by rising risks in the market (rising pricing, real estate bubbles, years of buoyant credit expansion), it is prudent to tighten credit underwriting standards as a matter of sound banking. For sound banking, it can be important to slow growth overall, and especially in more vulnerable countries and sectors, to reduce risk of loss, and to preserve capital and operational capacity, in order to avoid unplanned capital calls. Management and the Board can review alternative business plan scenarios and the trade offs between degrees of sound banking and country-level volume targets for transition impact and other strategic purposes.

Bailout versus workout in crisis response. During 2009, the policy preference seemed to lie in favour of quick and widespread intervention both at the national and international level. Fear of contagion and deepening crisis led policy-makers post-Lehman to seek to stabilise the financial system with minimal cost to creditors, in order to avoid worst-case scenarios. Future strategy could aim to balance the two approaches of bailout versus work-out.

Supporting SMEs through risk sharing. For the EBRD to simply extend lines of credit to financial intermediaries for SME financing may not induce sufficient bank lending. Banks need to be both able and willing to lend, and they proved unwilling to lend to SMEs due to the higher perceived risk. The EBRD should consider developing instruments that share repayment risk with institutional lenders, perhaps in teamwork with the EIF, the EIB’s risk sharing institution. That would increase the EBRD’s own risk, but the EBRD may be in a better position to bear the risk than either the SMEs or the local financial institutions.

Capital support for banks. Financial institutions frequently emerge from crisis with impaired capital. The EBRD’s ability and willingness in 2009 to provide capital, both equity and subordinated debt to banks without parents, was useful. Even the offer of capital support without any disbursement can be reassuring to markets. Some element of capital support should certainly be included in the EBRD’s crisis response toolkit. Subordinated debt with equity kickers would balance risk better than straight equity in many cases.

Recovery versus liquidity projects. In a liquidity crisis, speed of financing is of utmost importance; if you are slow to deliver promised funding, effectiveness for liquidity purposes goes down. If the EBRD is to do liquidity crisis financing (as distinct from “recovery” financing) in the future, it will need to consider how to speed up the delivery of funds, possibly through the development of new products. The experience of the 2009 crisis suggests that the EBRD’s mandate and structure are better adapted to meeting recovery needs than immediate liquidity needs.

Crisis response projects and transparency of objectives. Criteria that label projects as responding to crisis conditions could define responsiveness to a shortfall in liquidity, capital, or cash flow caused by the crisis. The approval documents for such projects could cite the eligibility criteria and show how the project will address the urgent symptoms of the crisis.

Pricing of crisis response interventions. The Bank could consider ways to make loan pricing both higher when granted, in light of high risks, and lower once risks recede. One element of a crisis response strategy could be a more flexible interest margin rate regime that would adapt rapidly to changing market conditions. This could help to increase disbursements and reduce prepayments, without damaging the EBRD’s additionality. This is not easily done, but worth further consideration.

The role of the EBRD in developing local currency markets. The institutions with macro responsibilities (the IMF, EC, and the ECB) are better placed to encourage reform than the multi-national development banks that cannot address the structural and policy-induced incentives for foreign exchange borrowing. The EBRD can help, as it tries to do, by offering loans denominated in local currency and support to develop local capital markets. In particular, the EBRD’s FI sector investments could focus on developing the capacity of banks to gather local deposits and manage liquidity risks as the main source of local currency loans.

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1. Introduction and summary of the study approach

In the autumn of 2008, the EBRD announced an initiative called the "Crisis Response" as part of a number of actions taken by the G-20 governments and international financial institutions (IFIs) to changed market conditions after the bankruptcy of Lehman Brothers in the US. This study is based on the Approach Paper (SGS10-156) of May 2010 that was reviewed with management and communicated for information to the Board of Directors. The study focuses on the crisis response from an EBRD perspective and is grounded in the EBRD's unique mandate and instruments. It draws on policy documents, case studies of selected countries, and evaluation fieldwork in Latvia, Hungary, Romania, Ukraine and Kazakhstan. It takes into account what the Bank has said in key documents about the challenges faced before and during the crisis response period and makes independent assessments of relevant matters. The study's purpose is to explore some issues that the crisis has brought into view and to contribute to the debate about lessons learned.

The study makes observations and offers recommendations on possible adjustments to the Bank's future activities in light of the study's findings. With regard to the pre-crisis periods, the report considers risk assessment, particularly in the EBRD's mandate area of sound banking. With regard to the crisis response period, the study offers observations and recommendations about the Bank's future crisis response activities and responses to country and sector vulnerabilities.

This evaluation study considers how the Bank reacted to market developments and events before and during the crisis. The Bank's structure and reactions had consequences that would later shape how the Bank could design and deliver its formal crisis response. The Bank had a limited capacity to take business risk in the service of crisis response. Therefore, the paper looks at events, reactions, and the risk consequences in parallel, rather as a series of independent subjects. Sections 1 through 5 are mainly descriptive, followed by issues, lessons learned, and recommendations in section 6.

The evaluation study necessarily leaves some important matters outside of its scope. Among these are the *ex post* transition impact of crisis response projects, and their conditionality with respect to transition impact. A future study could examine these matters in more detail, once a critical mass of crisis response projects has undergone in-depth project evaluation. The crisis response projects should become ready for project evaluation starting in 2011.

2. Developments and reactions during key phases of the crisis

The study reviews the genesis, design and implementation of the EBRD's crisis response, and sheds light on issues and lessons learned from the EBRD's actions during three time periods:

- the pre-crisis period 2006 to August 2007
- the period of rising instability (September 2007 to third quarter 2008)
- the period from fourth quarter 2008 to the end of 2009, the period of "Crisis Response".

There are two periods within the crisis response period: the liquidity crisis phase and the recovery phase.

Most of the study focuses on the period after August 2007, and refers to the earlier period as necessary for comparison purposes. Reviewing a list of some key dates and events leading up to the "Great Recession" of 2009 refreshes the memory (Appendix 7).

2.1 The pre-crisis period 2006 to August 2007: the credit "boom". In 2006, the EBRD entered the capital resources envelope provided by the Third Capital Resources Review (CRR-3). Both the 2006 Transition Report published in November 2006 and the October 2006 Quarterly Vulnerability Assessment of the EBRD Countries of Operations (the "QVA" written by OCE economists and political counsellors) indicated an essentially benign scenario in the world economy, with international growth in 2007 moderating from 2006 levels but remaining above potential. The EBRD and others forecast strong growth (6 per cent) in the region for 2006 and 2007, which was achieved in excess of forecast (Appendix 2). Credit expanded rapidly around the world, leading to what is now recognised as a credit bubble in many economies worldwide, especially in the EBRD's region.

The credit boom gradually led to a build up of vulnerabilities to economic events among the EBRD's countries of operations (COOs). Much of the domestic credit was either denominated in or indexed to foreign currency (FX). The foreign currency lending had increased through the boom years, leaving countries more exposed to the costs of domestic currency depreciation. Much of the greatly expanded supply of credit was directed towards real estate and construction. Current account deficits and rising debt created a strong need for external financing, while real estate booms and FX borrowing left banks highly exposed to asset price declines and currency fluctuations.[1]

2.2 The period of rising instability (August 2007 to third quarter 2008)

In the summer of 2006, housing prices hit their peak in the US, and rampant global growth led to optimistic forecasts about the future. By the spring of 2007 US housing prices had begun to fall and sub-prime mortgages experienced a wave of defaults. Towards the end of 2007, home foreclosures had become widespread and affected the strength of many financial institutions. Bear Stearns, a US investment bank, became unviable due to sub-prime mortgage exposure. Lending institutions responded by raising lending rates and loan qualifications. Other countries were also affected. In the summer of 2007 the crisis impacted BNP Paribas' sub-prime investment funds due to the collapse of the market for the underlying securities. In September 2007 Northern Rock in the UK was intervened by the Bank of England during a run on the bank in which 5 per cent of deposits were withdrawn. Money centre banks began to lose confidence in each other, disrupting the inter-bank loan markets and the reliability of the LIBOR reference rate. The weakened inter-bank market caused international syndicated loan deals to gradually decrease in both number and size, including in the EBRD's region. The situation had some unprecedented and highly unsettling aspects. It was not clear just what was going on or when the situation would stabilise.

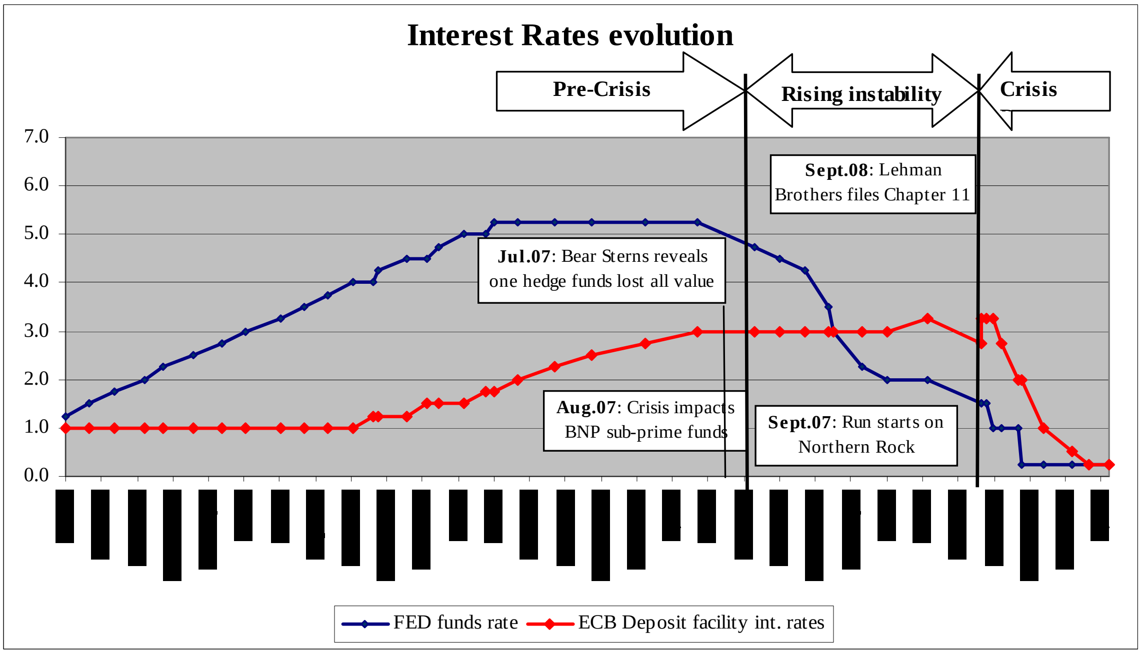
Despite the tumultuous conditions in financial markets in developed countries, especially in the US and the UK money centres through 2007 and the first half of 2008, the COOs seemed to remain relatively unaffected. Credit to the region, supplied in large part by a few EU banks through their regional subsidiaries, continued to expand although syndicated loan markets began to slow down in August 2007 and thereafter. The COOs seemed to be decoupled from the problems centred in the US but which were impacting western Europe as well. Kazakhstan was the first country to be affected, being virtually shut out of the syndicated loan market after August 2007, and Russian banks began to face challenges refinancing maturing foreign debts during 2007. Over the summer months of 2008 there were some signs of weakness in the Baltic states and the market for

[1] It is beyond the scope of this study to assess the causes of the crisis globally and in the region. There are many studies available on the matter, including some excellent ones published by the EBRD. A good example is *Understanding the Crisis in Emerging Europe* by Erik Berglof and others, EBRD Working Paper No. 109, prepared in November 2009.

Hungarian bonds. The economic cycle of certain transition economies started to turn down before September 2008. These countries had overheated and overextended credit during the boom period. Their vulnerabilities were impacted on through three main channels: finance, trade and remittances.

The Federal Reserve signalled its high level of concern after August 2007 by rapidly dropping its key Fed Funds interest rate from 5.25 per cent in September to 2 per cent in April (Chart 1). The key ECB interest rates held steady throughout 2007, however, and even rose by 25 bps one month after the collapse of Lehman Brothers, before rapidly reversing course.

Chart 1: Evolution of Federal Reserve and ECB key interest rates



As is turned out, the US Federal Reserve continued cutting interest rates to try to stave off a disaster scenario. If the Fed would not be successful, what would the consequences be for the US economy, the global banking system, and the US's trading partners? How long was it prudent to wait to begin considering worst case scenarios for Europe and for the EBRD's countries of operations? Questions such as these are easier to ask in hindsight; the meaning and possible outcomes of events are less clear while they are taking place. As it turned out, the ECB changed its policy outlook, beginning in October 2008, quickly catching up with the Fed's easing.

On 15 September 2008, Lehman Brothers filed for bankruptcy and that was followed in short order by a number of other financial firms in the US either failing, being forced into a merger or intervened by government, namely Merrill Lynch, Fannie Mae, Freddie Mac, Washington Mutual, Wachovia, Citigroup and AIG. Around the same time, the Icelandic banks failed and the Irish government chose to provide full deposit guarantees. Fortis Bank was intervened in the Benelux, bringing the crisis home to Brussels with the EU Commission. These events marked the end of the period of rising instability and the beginning of the crisis response period.

2.3 The EBRD's reactions to the rising instability: August 200 to September 2008

The EBRD's internal documents observed increasing market turmoil starting with the sub-prime crisis in August of 2007, a year when the EBRD's annual business volume would reach €5.9 billion, bettering the 2007 business plan by 50 per cent, in line with the rapid GDP growth and credit expansion in the region. Internal reports noted that the "credit crunch" began to slow the syndicated loan markets at an increasing rate starting in August 2007. During the same period, the EBRD's new signings were achieving rising margins on a weighted average basis (Chart 2); in fact, margins were rising across each risk rating level and for all of the EBRD's sectors and geographic regions (Appendix 1). The supply of credit in the region was falling faster than demand, and higher margins likely signalled higher expected losses.

Again, the meaning of the gradual if persistent rise in credit margins was less clear as it unfolded than it may appear to be in hindsight. Still, the pricing turmoil was noticeable enough to be cited as a source of delivery risk in the EBRD's December 2007 business plan for 2008, which set a 2008 budget to match 2007's record-breaking volume achievement.

Chart 2: Pricing of new EBRD loan signings from EBRD Quarterly Risk Reports

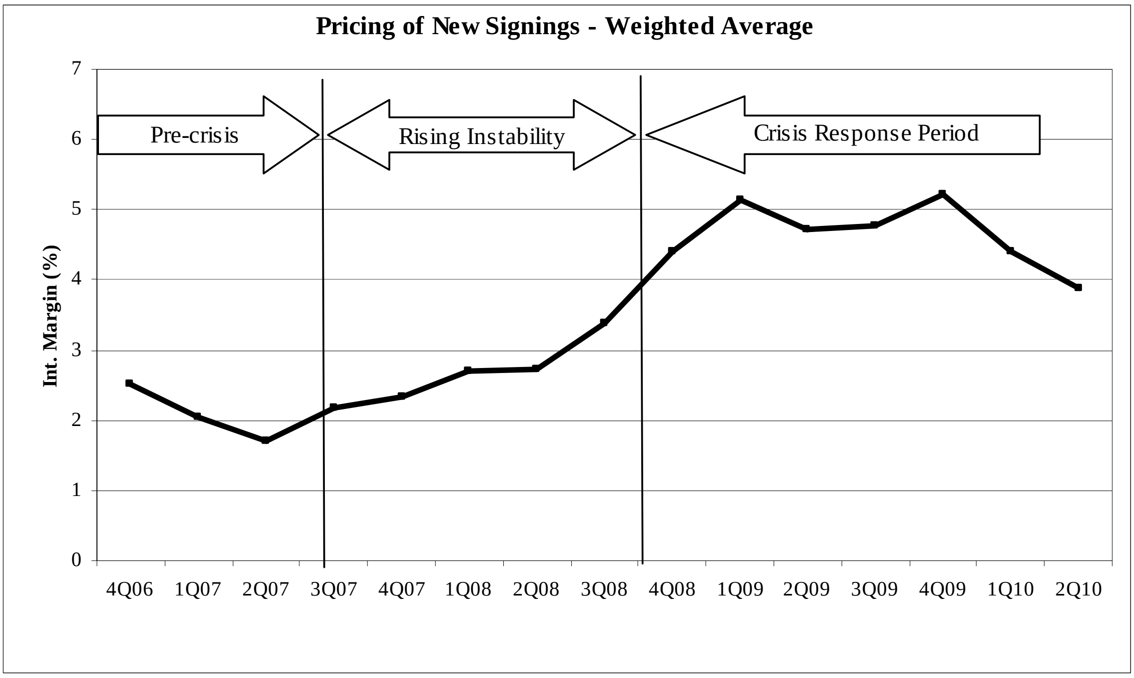
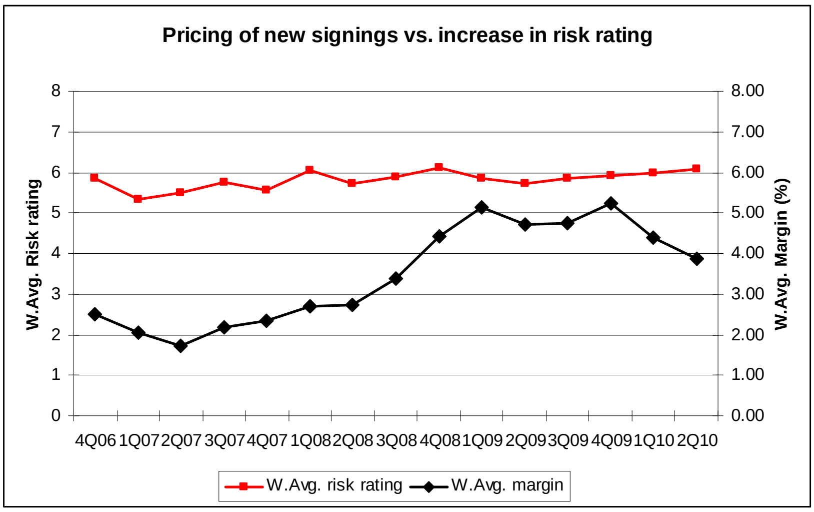


Chart 2a shows that credit margins rose, not risk ratings. Between the second quarter of 2008 and the fourth quarter of 2009 the weighted average interest margin applied increased from 273 bps to 522 bps, but weighted average risk ratings for new projects did not change much. Therefore, margins likely rose due to changing market conditions and a general perception of increased market risk for any given level of risk rating. Loan margins were pointing forward to increased risks for the EBRD, risks that would condition how the EBRD would be able to react to an economic downturn in the region.

Chart 2a Pricing of new signings versus increase in risk rating



Sub-prime market turbulence was affecting the EBRD's treasury and equity valuations in the first half of 2008, but the Institutional Performance Reports did not highlight other crisis effects. The EBRD's Quarterly Risk Reports through August 2008 pointed, however, to rising vulnerability in some countries and in the EBRD's exposure to the banking sector, which was repeatedly reported to be in excess of its portfolio limit, with no detectable effect on business volume targets for the sector. The persistent falls in equity values, which were impacting the Bank's equity valuations and were perhaps a leading indicator of a coming downturn, were attributed to the ongoing crisis in the credit markets. The low rate of credit deterioration in the Banking portfolio, which is not a leading indicator of upcoming events, was the most noted fact.

2.4 The EBRD's portfolio concentrations rose in more vulnerable countries

On the other hand, OCE titled its November 2007 Quarterly Vulnerability Assessment (QVA) as "Growing Financing Needs in Unsettled Capital Markets", and its May 2008 QVA as "Implications of the Slowdown in International Growth and Credit Squeeze". These reports were pointing to another set of risks that would condition how the EBRD would react to an economic shock.

The QVA reports classified countries into two categories: those more vulnerable to external shock, and others. During the pre-crisis period (March 2006 to September 2007), this study estimates that Portfolio Operations exposure rose from €4.7 billion to €5.5 billion in the October 2006 QVA's list of vulnerable countries, a rise of 18 per cent (Table 1). During the same period, Portfolio Operations exposure in other countries rose 7 per cent to €12.5 billion.

The QVAs released beginning November 2007 changed the list of vulnerable countries.[2] The change reacted to the evidence of rising instability due to the sub-prime crisis, calling for a deeper assessment of country vulnerability. One effect of the change was to double (raise by 104 per cent) the share of the existing 2007 portfolio exposure to the list of vulnerable countries (Table 1).

[2] See Appendix 2. The new list of vulnerable countries was Hungary, Latvia, Lithuania, Estonia, Bulgaria, Croatia, Romania, Serbia, Belarus, Kazakhstan, Russia, Tajikistan and Ukraine.

Table 1: Portfolio operations outstanding in vulnerable countries (€ billions)

		QVA 10/06		QVA 11/07 onwards	
QVA category	**3/06**	**09/07**	**Change**	**09/07**	**Change**
Vulnerable	€4.7	€5.5	+ 18%	€11.2	+ 104 %
Other	€11.7	€12.5	+ 7%	€6.9	- 45 %

The change was important. It meant that, according to the OCE's country vulnerability assessment, the banking portfolio was much more exposed to vulnerable countries than it had previously been considered to be. Instead of being allocated one-third in vulnerable countries and two-thirds in other countries, the situation was now the other way around: two-thirds of the banking portfolio was in vulnerable countries. One reason for the increase was the addition of Russia to the list of vulnerable countries. Thus, the EBRD entered the period of rising instability with a predominant exposure to vulnerable countries, as assessed by the QVAs.

From September 2007 to September 2008, during the rising instability period, Portfolio Operations exposure rose from 16 per cent to €12.9 billion in the vulnerable countries noted in the November 2007 and May and November 2008 QVAs. Portfolio Operations exposure in countries of operations other than the vulnerable countries rose during the same period by 14 per cent to €7.9 billion (Table 2). The chief economist and others made regular reports to the Board about country developments. The greatly increased level of exposure to more vulnerable countries, caused by the changes to the list of vulnerable countries, does not seem to have been noted in relevant internal reporting.

Table 2: Portfolio Operations outstanding in vulnerable countries (€ billions)

Country type	September 07	September 08	Change
Vulnerable	€11.2	€12.9	+ 16 %
Other	€6.9	€7.9	+ 14 %

During the rising instability period, as in the pre-crisis period, the EBRD's exposure again increased more rapidly in vulnerable countries than in the Bank's other countries of operations. It seems that the EBRD did not actively limit the rise of its exposure to more vulnerable countries during the periods leading up to the September 2008 crisis due to its mandate priorities.

3. The EBRD'S reaction to the deepening crisis post-Lehman

After the collapse of Lehman Brothers in late September 2008, the EBRD's President proposed to move up the planning for CRR-4 by one year, observing that the Bank had exceeded many of the CRR-3 objectives and that "the utilisation of the Bank's capital suggests that it would be prudent to start early to look beyond the current framework".[3] His note continued:

> "…the drastic deterioration in the global and regional economic context, unforeseen at the time of the last review, requires a close and strategic look at the Bank's capital and operations…"

[3] Proposed approach to the Fourth Capital Resources Review (CRR4), SGS08-212, 26 September 2008.

Thus, the suddenly deepening crisis pointed to increased risks for the capital of the Bank and a need for prudent consideration of the Bank's capital adequacy as an early priority. (See section 3.2.3 on the capital constraint on the crisis response.)

The 2009 business plan and budget was distributed on 27 October 2008 to the Board for approval at the 9 December 2008 meeting. The draft plan noted greater uncertainty and volatility in the environment, resulting in a move to ranges instead of point estimates for annual business volume (ABV) and other targets. The priorities were to remain actively engaged, increase the focus on risk management, and take an adaptive approach allowing for rapid responses to the changing environment. The document assessed the post-Lehman environment to be much worse than expected and noted that a number of countries could be severely affected, mainly in the "vulnerable" countries of Ukraine, Kazakhstan, Romania and possibly Russia. It added Bulgaria and Serbia as countries with large imbalances. It noted that:

> "Whilst this [the shrinking liquidity and sharp reductions in capital flows] will provide additional opportunities for the Bank to play a supportive role, it will not be able, in isolation, to counteract the overall effects of current events given their magnitude and it will not be immune to market and client pressures."

This was as close as the document came to suggesting a crisis response role for the EBRD. It also referred to the Bank's own vulnerability to the crisis, its inability to counteract the crisis by itself, and therefore to its dependence on other actors for a favourable outcome.

Business volume was on track through September 2008 and achieved the budget for the full year. The 2008 business volume momentum increased the EBRD's loan portfolios mainly in some vulnerable countries identified in the 2007 QVAs: Russia (+27 per cent), Ukraine (+55 per cent), Romania (+32 per cent), Serbia (+35 per cent), Kazakhstan (+24 per cent), and Bosnia and Herzegovina (+46 per cent).[4] When Lehman Brothers filed for bankruptcy protection, the EBRD's banking portfolio stood at €20.8 billion (operating assets €14.4 billion) and closed the year at a record €21.5 billion (operating assets €15.1 billion).

The market turbulence during the period of rising instability that started in August 2007 had little impact on the EBRD's business plans or ABV performance, either for the balance of 2008, or in the draft business plan for 2009. The latter set a volume target of €5.2 to €5.95 billion for 2009, in line with the target range for 2008, which would maximise available capital utilisation within the then-applicable capital constraints. The Bank was growing as fast as possible within its approved resource base, and the direction of its growth in vulnerable countries was exposing more of its earnings and capital to a major economic shock.

3.1 The gathering IFI response to the deepening crisis

By the fall of 2008, trouble for the countries of central and eastern Europe and Central Asia was on the horizon and the need for a response by the international financial institutions was becoming clear. By October it was evident that the financial and trade shock would affect the countries of central and eastern Europe and Central Asia. What the response should be was discussed at the IMF–World Bank Annual Meetings in October and then elaborated on at the 2008 G-20 Summit on Financial Markets and the World Economy that took place on 14–15 November 2008. At the meeting a general agreement was reached among the G-20 on how to cooperate in key areas so as to strengthen the economies, to deal with the financial crisis, and to lay the foundation for reform to avoid similar crises in the future. The G-20 announcement specifically called on the IFIs to respond and on governments to ensure their capacity to do so.

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[4] Figures from the annual Financial Report of the EBRD.

3.1.1 The G-7 announcements

The 2008 autumn meetings of the G-7 and the World Bank and IMF that took place in Washington around 10 October 2008 stepped up the EBRD's coordination with other IFIs at the Presidential level.[5] The EBRD's board meeting of 15 October marked a decisive turning point in the Bank's approach to addressing the crisis. Directors noted in the minutes that the IFC had proposed launching an equity fund of last resort in which the EBRD did not plan to participate. Directors also underlined the need for clear communication on the important role that the Bank should play.

The President circulated a letter to Directors on 17 October (SGS08-226). It called for a "determined EBRD crisis response and on sending a clear signal of the Bank's preparedness to support its countries of operations". This letter matched the intent of the G-7 Five Point Plan (Box 1). It also outlined what would become the guiding rationale of the eventual crisis response design: support for the financial sector and the real economy using all of the EBRD's instruments.

Box 1: The G-7 "Five Point Plan" 10 October 2008

• "Take decisive action and use all available tools to support systemically important financial institutions and prevent their failure.

• Take all necessary steps to unfreeze credit and money markets and ensure that banks and other financial institutions have broad access to liquidity and funding.

• Ensure that our banks and other major financial intermediaries, as needed, can raise capital from public as well as private sources, in sufficient amounts to re-establish confidence and permit them to continue lending to households and businesses.

• Ensure that our respective national deposit insurance and guarantee programmes are robust and consistent so that our retail depositors will continue to have confidence in the safety of their deposits.

• Take action, where appropriate, to restart the secondary markets for mortgages and other securitized assets. Accurate valuation and transparent disclosure of assets and consistent implementation of high quality accounting standards are necessary.

The actions should be taken in ways that protect taxpayers and avoid potentially damaging effects on other countries. We will use macroeconomic policy tools as necessary and appropriate. We strongly support the IMF's critical role in assisting countries affected by this turmoil. We will accelerate full implementation of the Financial Stability Forum recommendations and we are committed to the pressing need for reform of the financial system. We will strengthen further our cooperation and work with others to accomplish this plan."

Importantly, the President's letter urged "home" authorities to consider the impact on the region of their actions to stabilise the EU banks, some of which were also the largest banks in the region. This theme would evolve into the "Vienna Initiative", also called the European Banks Coordination Initiative, which worked to stabilise regional support for the subsidiaries of internationally active, EU-headquartered banks. (See Box 7 and Appendix 4 on the Vienna Initiative.)

3.1.2 The G-20 Declaration and the EBRD's mandate

The EBRD prepared its initial business plan and budget for 2009 in August/September 2008, proposing new commitments of €6 billion, in line with the expected result for 2008. But by the time this plan was presented to the Board in October, it was already recognised that conditions in the region were changing rapidly. The President's recommendation for the draft plan noted that:

> "The analysis and objectives set out in this document cannot fully reflect the impact of the current financial crisis which is still unfolding across the region of operations. Accordingly,

[5] Several Bank staff members who were IMF alumni facilitated close coordination with the IMF, one of the key crisis response actors.

> these will be subject to change and modification as the full impact on the economic, financial and business conditions in each country becomes better defined. More than ever, the Bank has to be prepared to adapt and respond to rapidly changing circumstances, which are likely in many cases to affect priorities and activities across and within business segments."

As late as October 27, the draft 2009 business plan did not fully incorporate the nascent features of a crisis response that the President had outlined in his 17 October letter to the Board. While the President sought to cushion the impact of the crisis on the region by applying the full range of instruments and capital, the proposed budget spoke of opportunities to be supportive, the EBRD's limited capacity, and its exposure to risk. After the G-20 called on 15 November for the IFIs to "work to their full capacity in reaction to the crisis",[6] it was agreed in principle at the 18 November Board retreat that the 2009 business plan should be revised. Its final 12 December version incorporated an ABV increase of €1 billion to signal a more vigorous crisis response.

The 15 November G-20 Declaration had said that the G-20 was "working to ensure that international financial institutions (IFIs) can provide critical support for the global economy". It called for a broad range of actions by many actors, among them the multilateral development banks (MDBs) who were "encouraged…to use their full capacity in support of their development agenda", and welcomed the World Bank's introduction of new facilities in trade and infrastructure finance. The G-20 promised to "ensure that the IMF, World Bank and other MDBs have sufficient resources to continue playing their role in overcoming the crisis." Thus, the G-20 Declaration supplied external guidance to the EBRD on crisis response by asserting that the MDBs had a "role in overcoming the crisis". The G-20 Declaration followed closely on the heels of two of the largest IMF programmes ever announced: US$ 15.7 billion for Hungary and US$ 16.4 billion for Ukraine, which sent a clear signal of the severity of expected downturn in those two countries and the region more generally.

3.1.3 The sound banking constraint on crisis response

As the region's specialist IFI focused on the private sector, the EBRD carried a high degree of commercial risk exposure to the region. The IFC's commercial risk exposure to the region did not exceed a third of its total banking portfolio. The World Bank and IMF would face mainly sovereign risk, while the EIB's exposure would run mainly to the stronger banks (whether directly or secondarily via bank guarantees).

The President's October letter to Directors had noted that the EBRD was the largest single investor in the region. The EBRD faced, in fact, great exposure to the negative effects that the crisis could have on its loan and equity portfolios. The crisis was unfolding with alarming speed and threatened the viability of many banks, including systemically important regional banks, which represented a large concentration of the EBRD's Banking department portfolio exposure. It was clearly in the EBRD's interest to support steps that could cushion the impact of the crisis on the region. It was prudent that the 15 October Board meeting had tabled a need to accelerate the upcoming capital resources review.

Therefore, it would have been natural for the EBRD to be risk averse because of its high exposure to the region, the uncertain outlook, and the higher chances for investment losses on the existing portfolio. Increased caution would be consistent with the Bank's sound banking mandate. The EBRD had grown rapidly in recent years, above plan, and had built a large portfolio of loans and equity investments, with large concentrations in Russia, Ukraine and other vulnerable countries. Providing more investment support to the region, especially in the private sector, was soon to become the opposite of what private sector banks would be doing. Although it was expected that the

[6] EBRD press release 20 November 2008.

Bank would not shy away from vulnerable countries, in line with its mandate, nonetheless it took courage and leadership to commit the Bank to take further private sector risks in response to the crisis (Box 2).

Box 2: A climate of panic after the collapse of Lehman Brothers

It is worth recalling that, by October 2008, global markets and the leaders of the industrialised nations had been seized by fear of the unknown. Since August 2007, the US Federal Reserve had dropped its interest rates rapidly, while not preventing a recession that started in December 2007 and persisted. The US government had intervened in several major banks. The G-7 had declared that the leading nations would take "decisive action using all available tools to support systemically important financial institutions and prevent their failure". These and all other extraordinary measures did not forestall a weakening of confidence in banks worldwide. Some of the world's largest and most respected financial institutions had become unviable overnight, including major banks in the US, UK, Belgium and the Netherlands. On 23 October, Alan Greenspan, who for 20 years had guided the US expansion at the head of its central bank, admitted to Congress that he had made mistakes about the way markets worked, and that he was in a "state of shocked disbelief". Only the strongest governments, central banks and banking institutions, such as the EBRD, could still inspire confidence. If the causes of the crisis now seem to be clear in hindsight to some observers, that knowledge came too late to avoid what would become, in the ensuing six months, the sharpest global economic contraction since the Great Depression. Indeed, when the EBRD's President announced the Bank's plan to provide more finance to the region, the situation was such that "the only thing to fear is fear itself". It took courage and leadership to increase the EBRD's economic exposure to the region's private sector during that period of panic, a period that would last for the next half-year and more.

3.1.4 The crisis deepens

The financial shock and "sudden stop" of late 2008 was compounded by a trade shock. Commodity prices fell around 60 per cent from the third quarter of 2008 to the first quarter of 2009, while world trade volume fell 20 per cent. As trade collapsed and GDP contracted, demand for exports declined, which (coupled with a substantial reduction in commodity prices) led to far lower export revenues. A third element of the crisis was a substantial decrease in remittances, a significant source of income in CIS and SEE countries. Beginning in the fourth quarter of 2008, remittances fell over 30 per cent in the Kyrgyz Republic, Moldova and Tajikistan, countries that relied heavily on incomes from those working abroad.

The financial, trade and remittance shocks created a massive perception of risk. When global risk aversion increased, foreign inflows of funds were curtailed, adversely affecting domestic credit conditions. The situation deteriorated quickly from credit crunch to financial crisis. The EBRD nations were especially sensitive to the dry-up of liquidity as a result of their high demand for external refinancing. Lending fell an abrupt 75 per cent to developing nations by the end of the year and the EBRD countries of operations (COOs) found it very difficult to refinance maturing external debt. Currency depreciation occurred in several countries, with the Ukraine hyrvnia falling 25 per cent in December alone.

The shocks that set off the contraction came from outside the region. But the countries that were most adversely affected had their own vulnerabilities. Well before the crisis, the EBRD recognised the potential problems facing many of its member countries, although it seems not to have actively limited its exposure in response to the evolving vulnerabilities (Sections 5 and 6.2). Two decades of transition and integration into the European trading system had promoted growth and integration but had made many of the countries very exposed to an economic downturn in western Europe. Some of the countries, for example Ukraine, were overly dependent on raw material exports, and other countries' exports were concentrated in specific sectors, like autos, which suffered sharp downturns during the recession. Several had had credit booms in consort with construction and property price bubbles. With low levels of domestic savings, but high government and trade deficits, the credit booms had been funded from abroad, creating excess foreign exchange exposure. Even households and small businesses without foreign exchange hedges borrowed in foreign exposure, because of lower interest rates and appreciating currencies. For the most exposed countries, the foreign funding was from the commercial markets on short term. That meant funding could, and in the crisis did, run off quickly, creating extreme liquidity problems. The preponderance of banks in the region were foreign owned, which proved a bulwark during the crisis, but prior to the crisis had enabled countries to obtain foreign funding on easy terms and to grow over-indebted.

The outcome of the crisis was very severe. The transition countries fell short of GDP projections made in October 2008 for year 2008 by around 1 per cent with some export dependent outliers, such as Azerbaijan and Uzbekistan, missing by over 4 per cent. Instead of the expected growth of 3.5 per cent in 2009, output in the region actually declined by 4.1 per cent. The transition countries were not all affected equally. Those with pre-existing vulnerabilities and those that failed to make policy changes in a timely manner suffered a more severe contraction in output.

The Bank's growth forecasts for the region resemble the consensus forecasts year-after-year. Thus, the Bank and most other forecasters missed the period of increasing instability in their economic forecasts during this period. There was little to no forewarning given to Bank management, shareholders or customers of the possibility of anything like the extreme events that were about to unfold in late 2008 and into 2009, despite the country vulnerabilities identified in the QVAs during the pre-crisis periods.

3.1.5 The Bank expected a slow-down, not a recession

In a paper released on 5 September 2008, the OCE wrote:

> "Economic activity in the EBRD region of operations has slowed roughly in line with our expectation one year ago. Systematic crisis has so far been avoided. Behind this gradual adjustment at the regional level, there is significant heterogeneity at the country level, however, including sharp deceleration in some countries – Estonia, Latvia, Kazakhstan – and continued fast expansion in others. These comprise commodity exporters, as well as a group of 'gravity defiers', in which external and internal imbalances have continued to widen on the back of buoyant domestic demand. In the meantime, global economic conditions have continued to deteriorate, financial sector vulnerabilities have increased, inflation has reached double digits, and regional political tensions have sharply risen. In this environment, we expect slower growth across the region with sharp decelerations in several countries, and a heightened risk of systemic crisis."

Included among the "gravity defiers" were Bulgaria, Romania, Serbia and Ukraine, all countries that the QVAs had identified as more vulnerable to event risk.

By November 2008 the crisis had deepened but its impact in the region was still a matter for forecasting. In spite of its concerns, the EBRD still expected reasonable growth for the region in 2009. Table 3 shows the EBRD's growth projections for 2009 made in the autumn of 2008 and subsequent dates. The Bank published its Transition Report of 2008 in November 2008. It noted that, because the global financial system experienced an unprecedented period of turbulence, output in the advanced countries was expected to remain flat or fall during the rest of 2008 and 2009. In turn, after years of buoyant growth and progress in reform, the Report indicated that the region had not faced a more uncertain future since the Russian crisis of 1998. The Report also noted that the risk of a more severe slow-down than projected for the region was much higher than a year ago.

Table 3: GDP forecasts for 2009 made at different dates (percent change)

Countries	EBRD forecast-standard	EBRD forecast-pessimistic	EBRD forecast-pessimistic	EBRD forecast-standard	IMF	Actual
	Nov-08	Jan-09	May-09	July-09	Oct-08	
	2009	2009	2009		2009	2009
Albania	6.0	-1.0	-2.0	1.2	6.3	2.8
Armenia	8.3	3.0	-10.0	-9.0	8.0	-14.4
Azerbaijan	15.0	5.0	2.0	3.0	16.4	9.3
Belarus	7.2	-0.5	-2.5	-3.0	8.0	0.2
Bosnia and Herzegovina	4.5	-3.0	-4.0	-1.0	5.0	-3.4
Bulgaria	3.8	-2.0	-5.0	-6.0	4.3	-5.0
Croatia	2.8	-3.0	-5.0	-5.1	3.7	-5.8
Estonia	-0.2	-7.0	-15.0	-10.5	0.5	-14.1
Georgia	4.0	0.0	-2.0	-4.0	4.0	-4.0
Hungary	0.5	-5.0	-7.0	-6.5	2.3	-6.3
Kazakhstan	4.5	-3.0	-3.5	-1.3	5.3	1.2
Kyrgyz Republic	5.8	0.1	-2.0	0.5	6.7	2.3
Latvia	-0.9	-10.0	-15.0	-17.1	-2.2	-18.0
Lithuania	0.7	-7.0	-15.0	-19.0	0.7	-15.0
FYR Macedonia	5.0	-3.0	-3.0	-1.3	5.0	-0.7
Moldova	4.1	-3.5	-10.5	-10.6	6.5	-6.5
Mongolia	8.0	3.0	N/A	2.7	8.1	-1.6
Montenegro	5.0	-3.0	0.0	-1.0	5.0	-7.0
Poland	2.8	-2.0	-1.5	0.0	3.8	1.7
Romania	4.0	-3.0	-6.0	-7.0	4.8	-7.1
Russia	4.0	-2.5	-10.0	-9.0	5.5	-7.9
Serbia	4.0	-3.0	-6.0	-4.0	6.0	-2.9
Slovak Republic	3.0	-1.0	-4.5	-7.1	5.6	-4.7
Slovenia	3.0	-2.0	-5.0	-7.5	3.7	-7.3
Tajikistan	6.0	-1.0	-2.0	0.5	7.0	3.4
Turkey	N/A	-5.0	-8.0	-6.0	3.0	-4.7
Turkmenistan	12.0	5.0	5.0	9.5	10.3	4.2
Ukraine	1.0	-8.0	-18.0	-16.0	2.5	-15.1
Uzbekistan	7.0	2.0	2.0	5.0	7.5	8.1
Regional average	3.5	-2.1	-5.5	-6.5	5.3	-4.1
Sources	2008 TIR	Jan-09 QVA	May-09 QVA	July-09 Regional Economic Prospects - OCE	IMF GDP Data Oct-08	IMF GDP Data May-10

The growth projections for 2009 released in the Transition Report in November 2008 indicate the EBRD, as with the IMF,[7] did not anticipate how hard the recession would hit its client countries. The forecast of average GDP growth for the region for 2009 was 3.5 per cent as against a realised negative 4.1 per cent. Only two countries were expected to show negative growth as against the 20 that did in fact suffer recession.

Nevertheless, the Report cited several factors that mitigated both the risks that this more negative scenario would occur and its consequences if it did occur. Thus, going into the crisis response period, the Bank was forecasting an important slow-down in the region's economic activity, but noted that it did not think a more negative scenario would ensue and, even if it did, it would not be that painful for the region. As it turned out, the EBRD's region would suffer a sharper downturn than other regions in the world.[8]

Though the Bank recognised the dangers of systemic crisis, prior to the events of the last two weeks of September, it thought slow growth the more likely outcome, though a few countries, particularly the so-called "gravity defiers", might experience a sharp decline in output. In fact it was not until April 2009 that the EBRD realised the breadth and depth of the recession. Unsurprisingly, the EBRD was unable to forecast the timing and the magnitude of the crisis in the region. Other institutions faced a similar problem, although the EBRD was a specialist institution for the region.

3.2 Formulating the Operational Response to the crisis at the Bank retreat

The Bank retreat on 18 November 2008 served to build a consensus for a specific crisis response.[9] The Retreat Background Notes outlined the strengths, weaknesses, opportunities and threats that the Bank faced in preparing a "determined response that is grounded in the Bank's capacity and mandate". The many strengths of the Bank lay in its project vocation, banking skills, and existing customer and official relationships. On the other hand, if raising investment volumes above plan was to be part of the crisis response, the Bank was less able to respond due to a capital constraint:

> "Within the mid-scenario the Bank has limited response capacity and flexibility within the current gearing and headroom interpretation. This reflects the impact of sharply decreased net income projections related to the decline in projected realised equity gains and sharply rising impairment, combined with a potential high level of activity reflecting both pipeline resilience and additional crisis response activity."

At the same time, the credit crunch in the region gave the EBRD an opportunity to fill the financing gap, enjoying high additionality, while it also posed a threat both to the existing portfolio and project pipeline.

Key elements of the Background Notes were distilled into the President's 19 November letter to the Board. Although the Bank's response was to build on its project and country expertise, and not on volume in the first instance, sending a clear signal of support to the region was important. The President proposed to expand the draft business plan by €1 billion, half of which would flow to EU-7 countries that were scheduled for graduation in 2010. The Background Notes, and the new volume target, foreshadowed the analysis, priorities and directions of two documents that are key to understanding the EBRD's crisis response strategy:

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[7] Forecasts made by other agencies were similar.

[8] It may be that the Bank must be circumspect in its public forecasts and risk assessments. The Board depends, however, on frank assessments of the economic outlook and risks, including vulnerability to downside scenarios.

[9] Bank Retreat 2008: Background Notes, SGS08-255, 13 November 2008. These went to the Board on the same day as a letter from the then-Prime Minister of Hungary to the EBRD's Governors requesting IFI support for central Europe (Appendix 8).

- "EBRD Operational Response to the Crisis" (ORC) discussed in a retreat on 17 and 18 November and presented to the Board on 19 November 2008
- the revised "2009 Business Plan and Budget: Crisis Response" (BPCR) presented to the Budget and Administrative Committee on 21 November 2008, finalised in late December.

In these two documents management outlined its approach and the operational implications. The strategic increase in ABV by €1 billion was a "headline" feature that the Bank communicated to the markets. It depended on revising the 2009 business plan. The ORC outlined what the additional volume was meant to accomplish. The next sections review the Crisis Response Business Plan and the ORC in turn.

3.2.1 The Crisis Response Business Plan

The draft 2009 business plan had proposed that the Bank produce ABV, for a third consecutive year, in the range of €5.2 to €5.95 billion, compared with CRR-3's ABV target of €3.8 billion per year. Arguably, the Bank was already operating and planning to operate at full capacity in pursuit of its mandated agenda.

The draft 2009 business plan had warned that asset impairments were low, "for the time being". The final 2009 business plan repeated that assessment, but added:

> "Reflecting shareholder support for a Bank response to the crisis throughout the region, the Business Plan and Budget for 2009 provides for an additional €1 billion of business volume capacity to address the needs of the countries of operations at this difficult time. The Bank's preparedness to step up its operations requires additional resources and a corresponding adjustment of the Budget for 2009."

It added to the top of the list of priorities:

> "aim to maintain its level of activity across regions while at the same time doing its utmost to add a sizeable crisis response".

The Crisis Response Business Plan proposed to increase ABV by €1 billion to €7 billion and to increase the high end range of several key operating parameters (Table 4).

Table 4: Crisis response changes to the 2009 business plan and budget

Business plan	Draft 2009	Final 2009-CR	Crisis response change
ABV	€5.2 to €5.95 billion	€5.2 to €7.0 billion	+ €1 billion
Number of operations	310 to 355	310 to 370	+ 15 operations
Net portfolio growth	€1.2 to €2.0 billion	€1.2 to €3.0 billion	+ €1 billion
Operating assets growth	€0.9 to €1.7 billion	€0.9 to €2.3 billion	+ €600 million
Disbursements	€3.8 to 4.7 billion	€3.8 to €5.25 billion	+ € 505 million
Net debt and equity impairment	€175 to €475 million	€175 to €475 million	No change
Net income	€100 to €600 million	€100 to €600 million	No change
Headcount	1,297	1,305	+ 7
Capital utilisation headroom	92%	92%	No change
Headroom forecast	90%	94%	

Note that proposed ABV increase was projected to cause a breach of the 92 per cent capital utilisation headroom limit. Management worked carefully to ensure compliance with the 92 per cent limit.

3.2.2 The staffing constraints on the Bank's capacity to respond

The revised 2009 business plan increased the draft plan's ABV target by about 20 per cent, the number of operations by about 15, and staffing by about seven for the crisis response. The ABV increase would not be matched by a proportional rise in the number of staff or of projects. Therefore, the plan would deliver the crisis response mainly by larger projects than in the past (Table 5).

Table 5: Number of projects, average project size and ABV (€ millions)

	2006	2007	2008	2009 plan	2009 actual
ABV achieved	€5,000	€5,800	€5,300	€7,000	€8,000[10]
Projects	301	352	302	310 to 370	311
Average project	€17	€16	€18	€21	€24
Staff, from IPRs	1,184	1,232	1,269	1,297	1,337[11]

Project preparation and execution uses staff as a main resource: an operation team can handle a set number of projects at a time. If volume was to rise more than staffing, the result would be larger projects. One of the constraints the Bank faced in responding to the crisis was that its capacity was limited, in the short term, by a staffing constraint to about 300-350 projects per year, regardless of the size of the ABV target. Although the Bank had over 1,000 active clients, the constraint on the number of projects meant that only a minority of the existing clients could receive a new financing project in response to crisis needs. In the end, 115 new projects were categorised as crisis response projects (CR projects), while the Bank signed just over 300 projects in 2009. Whether more crisis response or transition impact was achieved by increasing the size of CR projects is a matter for further evaluation (Section 6.1.2).

3.2.3 The capital constraint

The business plan set out a level for capital utilisation headroom of 92 per cent. This was an upper limit, not a target. In fact, the €1 billion ABV increase caused a problem: as noted, it could result in an excess to the 92 per cent limit for capital utilisation. Table 6 shows the relevant changes in the plan documents.

Table 6: Impact on EBRD capital of the Crisis Response Business Plan

From Draft October 2009 Business Plan	From Final December 2009 Business Plan
"The adjusted portfolio with a credit conversion factor of 70% of undrawn commitments at end 2009 is projected at €22.3 billion based on the upper end of the volume envelope. This equates to a projected capital utilisation ratio of 90% of the capital resources of €24.7 billion. Based on current projections, no allocation to UGR is necessary in the context of the 2008 net income allocation process as **current capital and reserves are projected to be sufficient** to cover capital requirements for the following year while maintaining projected end-2009 capital utilisation below 92%. A final determination of allocations will be made in the context of the 2008 net income allocation process reflecting the actual financial results for 2008.	"The adjusted portfolio with a credit conversion factor of 70% of undrawn commitments at end 2009 is projected at €23.2 billion based on the upper end of the volume envelope including the Bank's crisis response. This equates to a projected capital utilisation ratio of 94% of the capital resources of €24.7 billion. Based on current projections, a transfer of an amount to UGR is necessary in the context of the 2008 net income allocation process as **current capital and reserves are projected to be insufficient** to cover capital requirements for the following year. In order to maintain a projected end-2009 capital utilisation below the 92% threshold, a transfer to UGR of around €520 million is required. This amount will depend on the actual adjusted portfolio level reached at the end of 2008.

[10] The actual result for 2009 exceeded the final business plan target by €1 billion. The excess was approved in September 2009.

[11] This actual number exceeds the budget. What is important for this part of the analysis is what the business plan called for in the way of staff increase.

Thus, the crisis response ABV target required an increase in the Bank's capital, either by a transfer of 2008 net income, or by other means.[12] The 23 December 2008 final business plan for 2009 was forecasting positive net income for 2008 (Table 4). The Board minutes that recorded the approval of the 2009 final business plan did not comment on the capital question. Not long after approving the 2009 business plan, the Board learned that net income for 2008 was negative €826 million.[13] Thus, keeping the capital utilisation below 92 per cent would require an allocation from the strategic reserve.

In March 2009, management proposed to revise the interpretation of the gearing ratio.[14] The document projected that, after allocating 100 per cent of the strategic reserve (€800 million), capital utilisation for 2009 was expected to reach 91 per cent of total capital resources, 1 per cent below the ceiling.

One year later, the 2010 business plan stated, however, that:

> "The formulation of the 2009 Business Plan had to take account, for the first time, of the Strategic Operations Framework (SOF) (BDS08-36 (Final)). Accordingly the 2009 Business Plan document included a preliminary estimate of the projected transfer to Unrestricted General Reserves <u>required to support</u>, within established SOF parameters, <u>the proposed activity level for 2009 which included additional volume for crisis response</u>.
>
> "On the basis of current operational projections, statutory capital utilisation at the end of 2009 based on the 'Review of the Gearing Ratio' (BDS08-34) is estimated at 71 per cent at the planning rate… Accordingly, no allocation of net income, or in the event of negative net income, no reallocation of previous net income is foreseen to be necessary as part of the 2009 net income allocation process."[15]

The change to the gearing ratio policy reduced forecast capital utilisation from 91 per cent to 71 per cent. The CRR-4 document noted that actual utilisation of capital in 2009 came in at 71 per cent:

> "Actual figures reflect the interpretation of statutory capital utilisation in use at the time. Accordingly the gearing ratio prior to 2008 is computed as the ratio of the portfolio divided by subscribed capital and unrestricted general reserves. The 2008 result reflects the revised interpretation to an adjusted portfolio base and the inclusion of available reserves (Prudential Ratios Policy (BDS08-234 (Final))).[16] From 2009, capital utilisation reflects an interpretation on an operating assets base."

The CRR-4 tables showed capital utilisation figures that applied a different capital rule to each year. By changing the definition of prudential ratios at the end of 2008, capital utilisation for 2008 fell to 80 per cent. By changing the gearing ratio in March 2009, capital utilisation fell from the projected 91 per cent for 2009 to an actual 71 per cent as reported in the CRR-4.

To judge how the crisis and the crisis response impacted on the Bank's capital utilisation over time, it is useful to compare like to like by applying the pre-2008 capital rule to each of the years in

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[12] "If the pre-allocation capital utilisation level is above the SOF ceiling of 92 per cent, all or part of the 2008 net income would need to be allocated to UGR. If the full allocation of 2008 net income is insufficient to meet the 92 per cent SOF ceiling requirement then a complementary allocation of strategic reserve to UGR would have to be considered." 2009 Business Plan and Budget, BDS08-196 (Final), 23 December 2008.

[13] Institutional Performance Report, year ended 31 December 2008; BDS09-008, 12 February 2009.

[14] Capital Efficiency and Interpretation of the Gearing Ratio, SGS09-058, 6 March 2009.

[15] 2010 Business Plan and Budget, 9 January 2010, BDS09-220 (Final), p. 11.

[16] Of January 2009, based on the proposal of 26 November 2008.

question. Table 7 compares estimated capital utilisation ratios, using the definition of statutory capital utilisation that guided the Bank prior to 2008 (portfolio divided by subscribed capital and unrestricted general reserves), as well as the revised ratios reported in the CRR-4 document.

Table 7: Capital utilisation ratios: pre-2008 definition and revised definitions (€ millions)

	2007	2008	2009
Portfolio	19,400	21,500	25,600
Capital utilisation ratio (pre-2008 definition)	80%	94%	113%
Revised definitions (CRR-4)	84%	80%	71%
Unrestricted general reserve	4,454	3,115	2,882

The Bank changed its capital utilisation rules at a time when the crisis was impacting on its capital (in the form of falling unrestricted general reserves) and to allow a crisis response that would lead to a large portfolio growth in 2009 (See 6.2.1).

3.2.4 Overcoming constraints to crisis response

It is clear that the Bank took steps to maximise the utilisation of its capital as called for by the G-20, mainly by changing the rules about how it calculated its statutory capital ratio. The Bank overcame the capital sufficiency matter, which was caused by increasing the AVB target for the crisis response to €7 billion, by expanding the elements that make up the definition of statutory capital in December 2008 ("Prudential Ratios Policy" (BDS08-234)) and by reinterpreting the gearing ratio for a second time (March 2009). While the draft 2009 business plan had observed that increasing the ABV target to €7 billion would exceed the capital utilisation guidelines, changing the capital utilisation rules allowed the Bank to target and deliver €7 billion, and later €8 billion in ABV in 2009 while being well within the revised capital guidelines. The Bank hired some new staff as planned and, while supportive of important work at the Bank, the staff increase did not result in more projects than in 2008.

Further analysis of the impact of the crisis, and of the Bank's crisis response, on the Bank's capital adequacy is beyond the scope of this study.[17] Suffice it to say that the Bank had to expand its definition of capital and redefine how it calculated its prudential asset and gearing ratios during the depths of the crisis in the first quarter of 2009, in order to report that it was complying with the revised capital calculations. During 2008 and 2009, the Bank suffered net income losses and losses to unrestricted reserves due to the crisis. At the same time, it relaxed the institutional restrictions on its portfolio size and increased its portfolio to deliver its crisis response in 2009, mainly in countries that were suffering more from the crisis.

3.2.5 The operational response to the Crisis Policy (ORC)

The ORC document provided a thorough assessment of the origins and probable direction of the crisis, as far as it could be assessed in November 2008. Though unable to predict the breadth and depth of the crisis as it would unfold over the next year, the qualitative economic analysis in the ORC document was excellent. It anticipated the types of problems likely to develop and outlined an EBRD response that took into account the strengths and limitations of the institution. The documents stated clearly that the EBRD was a project lender and did not have the resources to

[17] This analysis focuses on the changes to the "statutory" capital of the Bank, which is grounded in the EBRD's constitutional documents, and which was the capital rule that became subject to changes. The Bank's capital utilisation policies and frameworks underwent several changes during the CRR-3 period. While the changes took place in a series of steps, their cumulative effect was important. Management supported the proposed changes to the statutory capital rules with an economic capital analysis. A complete analysis of the changes to the capital rules, including for efficiency reasons, is beyond the scope of this report and worthy of further evaluation in future.

respond at the macro level. The support needed by sovereign states would have to be provided by others, namely the IMF, EU and to a lesser extent the World Bank. What the EBRD could do was support particular institutions.

Operationally, the ORC laid out the following elements of an approach:

- standard project-level interventions driven by client demand
- "strategic response packages" addressed to the financial and corporate sectors
- enhanced policy dialogue
- enhanced coordination with other IFIs
- fortnightly updates to the Board of Directors on crisis developments and the pipeline[18]
- clear and forceful external communication.

In summary, the ORC called for additional commitments in 2009 to cover crisis response operations. The initial focus for crisis funding would be on existing customers found to be credit worthy but in need of liquidity or capital support. In other words, crisis lending would focus, not on new investments, but on helping banks and enterprises remain in business. Crisis operations might be in any field but the Bank expected the greatest volume to be in the financial sector. The Bank's assistance could go to any of the Bank's countries regardless of their graduation status. Those planning the EBRD's response recognised that the situation was dynamic and unpredictable and the Bank would have to remain flexible, adapting to fast-changing conditions.

3.2.6 The ORC and sound banking

As noted, its mandated vocation had exposed the Bank to potential crisis impacts on its portfolio in both Banking and Treasury. Much would depend on how deep the crisis would be in the region. Protecting the Bank's portfolio was an explicit element of the ORC:

> "In short, the Bank's short term crisis response is targeted at protecting the Bank's portfolio, at generating a timely and relevant set of crisis-response projects, at supporting targeted crisis-responsive policy dialogue and implementing an organisational process that ensures a flexible response and consistency across teams."

It would not be easy to protect the portfolio while expanding it in an objectively more uncertain environment from which other lenders were withdrawing. Bankers would have to be selective and prudent in their project work. In some cases, where borrowers showed good prospects for surviving negative scenarios, the Bank might relieve liquidity pressures caused by the crisis. In many cases, this would mean providing new money to allow repayment to the EBRD and other creditors of maturing loans.[19] There was a clear risk of "throwing good money after bad", in banking parlance.

Of particular note was the EBRD's exposure to banks in the region that was over one-third of the EBRD's portfolio and in excess of guiding portfolio limits. Much of the exposure was to the subsidiaries of the largest regional network banks. The President's 19 November letter had already called on "home" authorities to consider the impacts of their decisions on daughter banks. Few of the EBRD's loans to the subsidiaries were backed by parent guarantees: if the parents were to abandon the subsidiaries, perhaps as a result of liquidity and capital shortfalls at home caused by the credit crunch, the EBRD could suffer potentially large-scale losses across the region.

[18] Management sent 22 Crisis Response Status Reports to the Board during 2009.

[19] During 2008 and 2009, the annual financial statement reported that the Bank received €6.4 billion in loan repayments from the region, and advanced €11.4 billion.

Therefore, it was in the EBRD's interest to secure support from the parent banks for their subsidiaries and to remove regulatory and other obstacles to such support; this was consistent with the ORC's purpose of protecting the Bank's portfolio. Obtaining parent and regulatory support for the EBRD's clients should also help to stabilise the banking sectors and broader economies in the region in line with the G-7 announcement. Stabilisation would in turn help to protect the EBRD's loan and equity exposure to dozens of local banks and corporations, while improving the conditions for the EBRD to provide more liquidity and capital support to them. This logic bore fruit in the form of the EBRD's strong supporting leadership role in the Vienna Initiative or European Bank Coordination Initiative. Alongside the IMF, EC, ECB, central banks and central governments, the EBRD would support selected banks and enjoy the benefits of that support for its portfolio. Thus, the core rationale of the ORC was fully consistent with both the sound banking and transition impact mandates of the Bank.

3.3 Assessing the ORC

The EBRD's primary mission was and is to finance investment projects, not to respond to crisis. Its focus, staff, funding and operations were designed to invest in private sector projects and support transition. The EBRD was not looking for a regional financial and economic crisis and did not have an off-the-shelf response to crisis when it came. Yet it quickly adjusted to the new situation. The BPCR recognised that:

> "Demand for investment finance in the corporate sector is likely to slow virtually throughout...The focus will be on defensive investments, while projects with a longer-term rationale, such as the environment or capacity expansion, may slip down the priority list...Demand from financial institutions aimed at boosting general lending capacity will doubtless decline. At the same time, demand for refinancing to address liquidity concerns, and for equity and quasi-equity to strengthen balance sheets is bound to grow. The Bank's additionality as a non-cyclical source of finance is likely to increase throughout, while the ability to syndicate transactions will be sharply curtailed."

The EBRD crisis response went well beyond the EBRD's typical practices. Instead of providing funds for new investment, it provided funding to replace money that was no longer available from other sources. In other words, the funding was not to expand assets but to prevent assets from declining by replacing other financial sources that were fast disappearing. This was quite a radical departure from the EBRD's stated mission and past practices.

3.3.1 The ORC's crisis response project classification criteria

An addendum to the ORC defined several criteria for classifying a project as a crisis response project (Box 3) for reporting purposes.[20]

Box 3. Crisis response project classification criteria

"Projects … will have to meet one of the following proposed criteria to be classified as a crisis response activity:
- new projects which address specific financial, corporate or infrastructure issues raised by the crisis (typical instruments include bank recapitalisation, working capital and debt refinancing);
- redesigned or financially restructured pipeline projects in response to crisis impact including, among other things:
  - material revision of project scope and investment plan
  - material replacement of commercial co-financing by IFIs or state owned institutions, structured by the Bank
- new investment in work-out situations."

[20] The Study Team understands that the G-20 had requested reporting of crisis response project volumes.

The first criterion allowed for refinancing of maturing debts. It was the EBRD's typical practice to limit refinancing and to tie it to investment projects in the letter and spirit of its constitutional documents. Therefore, allowing refinancing and repayment of outstanding debts to be the primary basis for a project was an exception to Bank practice and, therefore, logically subject to an exceptional criterion in an emergency situation.

The "new projects" criteria also included provision of working capital. Again, the EBRD's typical practice had been to treat working capital finance as exceptional. Finally, bank recapitalisation would border closely on the separate criterion of "new investments in work-out situations"; again, such projects have been rare at the Bank. Therefore, the criteria seemed to permit important departures from the Bank's typical practice justified by the need to respond to the crisis.

Being a late addendum to the ORC operational policy, the criteria do not seem to have been subject to thorough Board-level discussion. If they were meant to be operational criteria, with the potential to change the nature and purpose of EBRD projects, they received little scrutiny. In practice, however, they seem to have been used mainly to classify projects for reporting purposes, independent from the project design and approval process.

Bankers' awareness of the criteria was uneven. Bankers did not necessarily know that a project that they were preparing would later be designated as a crisis response project. Some bankers believe that while certain projects were clearly crisis response projects, others were less so, and some not at all. On the other hand, some 2009 projects that seemed clearly to respond to the crisis were not numbered among the CR projects.

The Study Team has reviewed the rationale of all 115 of the projects that were reported as crisis response projects ("CR projects").

- Half of the CR project documents stated that the project in question was part of the Bank's crisis response.
- Of the other half, some said nothing about the crisis, while others referred to the crisis but not to the Bank's crisis response.
- None of the projects referred to the list of CR classification criteria as such.

The final of 22 fortnightly "Crisis Response Status Reports" explained that "a clear distinction between the Bank's crisis response activity and regular operational activity" no longer remained possible, and therefore that classification and reporting of CR projects would cease at the end of 2009. It is not clear, in retrospect, that the criteria changed the way the Bank prepared its projects. The status report explained their narrower usefulness:

> "The application of the criteria has been useful to reflect the development of the crisis response operational pipeline and the build-up of commitments. It has also been useful to highlight the scale, composition and speed of the Bank's crisis response."

3.3.2 Issues regarding the crisis response project criteria

Management designated and reported certain projects as conforming to the crisis response project criteria. In parts of this study, the Study Team has taken the reported list of CR projects at face value for, among other purposes, consideration of the scale, composition and speed of the crisis response. Any such assessment will be limited in quality by the meaning of the term "crisis response project" and the accuracy of the reported classification of the projects.

As noted, none of the CR project board documents referred to the CR project criteria. One cannot confidently say, therefore, that projects were designed to satisfy or comply with the criteria. One cannot even say, in half of the cases, that the projects were approved by the Board as being "part of the crisis response" because the board document did not say so in those cases. Therefore, the classification of a project as a CR project seems to have been independent of the project's approved purpose in about half of the cases, and in no case as a result of being approved as expressly meeting the criteria. One can only say, with confidence, that the Board approved some projects that a separate administrative decision classified and reported as CR projects.

Although many of the projects were not explicitly presented to and approved by the Board as meeting the CR criteria, a review of the CR projects shows that many of them include elements that fit the criteria. Therefore, for the purposes of analysing certain aspects of the crisis response, the study takes the reported list of CR projects at face value, without relying too heavily on the results of that analysis.

3.4 CR project design, responsiveness and impact

To better understand CR project design, the Study Team reviewed a representative structured sample of 41 out of the 115 CR projects in greater depth, and 31 projects from the pre-crisis period that were not designated as CR projects. The review sought to determine if the customer was suffering from a crisis-related issue such as liquidity, solvency or other issues, and how the EBRD project would help to address the issues. In other words, it sought to determine how much the projects varied in terms of responsiveness to urgent crisis issues, and what crisis response impact seems to have been achieved by the project.[21] The main observations are as follows.

- The CR project criteria allowed a wide range of project and client types, facilitating flexible and large-scale action by the Bank to meet its announced commitments.
- The criteria set no concrete definition of the degree of crisis distress that a client should exhibit to be eligible for a CR project.
- They did not define the type of impact that the Bank sought or the cost of risk that the Bank was willing to assume to achieve it.
- If projects were to undergo restructuring, the criteria did not say whether the Bank would lead or follow others in the restructuring.
- The sampled CR projects that referred to the CR initiative scored higher in terms of crisis responsiveness than those that did not.
- Projects showing greater crisis responsiveness had greater assessed crisis response impact on relieving financial distress affecting otherwise creditworthy customers.
- Several projects that were not designated as CR projects also evidenced crisis responsiveness and impact.

The sample review led to some lessons learned and recommendations (Section 6).

4. Implementation of the ORC

4.1 Worsening crisis and the Joint IFI Action Plan

The crisis deepened in the region and may have reached its most worrisome stage in February 2009 (Box 4). That month an influential Moody's report voiced concern about the capacity of leading EU parent banks to support their CEE subsidiaries. Three months after the EBRD announced the ORC,

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[21] Evaluating the success of CR projects depends on readiness for evaluation, which few CR projects have yet achieved, and on an evaluation of the project in greater depth than could be delivered within the scope of this study. Nevertheless, it was necessary to review a sample of the CR projects to make some relevant observations about the design of the ORC.

the President signed a joint announcement with the World Bank Group and EIB that promised €25 billion of financing for the region's banking system over the next two years. The announcement of the Joint IFI Action Plan bolstered the Vienna Initiative and positioned the EBRD as a key player in providing new investment, with a targeted amount of €6 billion over two years, in banks in the COOs (Appendix 4). The EBRD met its target of €3 billion in 2009.

Box 4 Crisis response impact channels: communication and delivery of IFI support

"Communication" was an identified component of the ORC. The EBRD announced not only a general response to the crisis but also specific crisis response projects in December and the crucial early months of 2009. By all accounts, these announcements were well received and, in the case of several, mainly FI clients who signed projects by the first half of 2009, provided decisive stabilising benefits. The EBRD strengthened its general ORC announcement through visible participation in the Vienna Initiative, the February 2009 Joint IFI Action Plan commitment to specific FI volume targets, and approving projects that supported it. The EBRD's Communications Department reported strong press coverage of key FI loan packages. While it is difficult to quantitatively evaluate the impact of the announcements, it seems clear that they contributed to increasing confidence and reducing fear, alongside more important announcements by the G-7, the G-20, the IMF, EU authorities, and, with some lag, the ECB. The following note from Unicredito's 2009 annual report is one of many sources supporting this assessment:

"The tension in CEE economies increased till it peaked in March 2009: this was the most difficult period (country risk at record levels, weakness in the main currencies in the region, revisions of agency ratings), but also a significant turning point. *Starting then, it appeared clear that major international institutions would use any means to support the international economy through massive stimulus programmes, and if necessary, they would support any country in difficulty*. The financial aid of the International Monetary Fund, in some cases provided only as a precautionary measure, supported numerous CEE countries (Ukraine, Hungary, Latvia, Bosnia, Romania, Serbia and Poland) and was in many cases combined with support provided by major international banks present in these countries (through the so-called "Vienna Initiative"), and accordingly, international banks were committed to maintaining their exposure to certain countries…"

Raiffeisen International's 2009 annual report offered a similar assessment:

"*Assistance from IMF and EU stabilizes financial markets in Central and Eastern Europe*. After the outbreak of the global financial crisis, Ukraine and Hungary were the first CEE countries to receive financial assistance from the IMF in November 2008, followed by Latvia in December 2008 and other CEE countries in the first half of 2009.[22] The EU made additional funds available for the member states that required IMF money (Hungary, Latvia, and Romania). Both the rapid and pragmatic support by the IMF and the willingness of the EU to support member states in financial distress had a calming effect on the financial markets.

"At the summit meeting of the 20 most important industrialized and emerging market countries (G-20) in the beginning of April 2009, it was decided that the IMF's financial assistance would be tripled to USD 750 billion. The EU also raised the amount of funds it can make available to its member states in an emergency to €50 billion. Moreover, the World Bank, together with the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB), assembled a €24.5 billion package to strengthen the financial industry in the CEE region and lending to the private sector.

"The measures adopted at the G-20 summit strengthened the confidence of financial market participants that all CEE countries will meet their payment obligations in the foreseeable future. The meeting thus marked the turning point in the development of risk premiums and CEE currencies. The latter have stabilized since then, and some have even recovered. In the fourth quarter of 2009, risk premiums almost returned to the same levels they were at before the collapse of Lehman Brothers in September 2008."

[22] The IMF assistance programmes were unprecedented in scale, signalling unquestionable support for the region's key vulnerable countries. The EBRD and the region owe a great deal to the decisive, rapid and massive IMF interventions.

Clearly, however, it was important that the EBRD follow-through on its announcements with concrete actions and to report them far and wide. The rhythm of Board approvals of CR projects was another source of announcement effects. The approvals were both a necessary condition and a leading indicator of what would follow by way of commitments and disbursements. And they would, *ex post*, leave a legacy of the EBRD's crisis response credibility.

4.2 Speed of design and delivery of the Operational Crisis Response

The EBRD's mission was to finance projects, not respond to crisis. Hence it had not in advance conceived a crisis response plan, nor was it staffed to respond to crisis, nor did it have off-the shelf-operations that could be implemented quickly in the case of crisis. Basically it had to design its crisis response *de novo*. That said, once the President and the Board decided to respond to the crisis, the EBRD quickly put together a coherent crisis response strategy described above. By mid-November, the Bank had prepared its crisis strategy and revised its budget and work plan for 2009. The Bank even made its first "crisis" commitments before the end of 2008. Given that its mission did not include responding to crisis, the Bank deserves high marks for the speed with which it designed its strategy (Box 5).

Box 5: The time taken to conceive the crisis response

Given that the EBRD was not a crisis response institution, the time that elapsed between the President's October letter and the Board's approval of the EBRD's operational crisis response in December can be considered a short period of time. Even more so, perhaps, in light of the strong growth in the region and the positive economic forecasts; the EBRD's good performance against the 2008 business volume target that had been set a year earlier; and the apparent decoupling of Europe and the region from the year-long global financial turmoil. After Lehman Brothers collapsed and the G-7's five point plan, the President accelerated the capital resources review programme. The President's October letter set a new direction in line with the G-7 plan. But until the November G-20 declaration, the EBRD had not counted crisis response as potentially part of its mandate. Still, there was no clear crisis response plan or model for the EBRD to draw on. It took another month to outline the ORC and revise the 2009 business plan, discuss them at the mid-November Board retreat, and approve them at the Board meeting during December.

It is useful to view the situation from a more critical angle. The EBRD, due to its mandate, did not expect a major crisis or a crisis response role for itself. It had observed the deteriorating trends in the markets since August 2007. Business plans did not change although instability and risk perceptions were rising. Completion of the 2008 business plan had increased the EBRD's exposure disproportionately to the most vulnerable countries, mainly due to the EBRD's mandate. The loan portfolio originated during the period of rising instability proved vulnerable to the crisis and showed a large increase in expected loss. The Bank was capital constrained: increasing the Annual Business Volume (ABV) much above €6 billion threatened to breach the 92% capital utilisation ceiling. Responding to the crisis, and the negative impact of the crisis on the Bank's portfolio and its medium-term operational capability, led the Bank to change its capital rules and then to seek a capital increase.

When the crisis suddenly deepened in September 2008, the EBRD worked hard to quickly develop a plan. Due to the Bank's mandate, the policy impetus had to come more from outside than from within: it was shaped by the crisis and by guidance from the G-7 and the G-20. If the Bank can retain the corporate memory of these events, and keep its crisis response toolkit up-to-date, then it might be able to respond to the next crisis within days instead of months. Staying ready for a crisis could make business planning more responsive to country vulnerabilities and changing country risks, reserve capital in order to meet a call to respond to a crisis, and help to avoid unplanned capital calls (see Section 6.7).

4.3 The speed of delivery of projects

While the mere announcement of the ORC likely had confidence building benefits, management gave high priority to implementing and disbursing CR projects to meet the announced targets. By the end of 2009, the EBRD had committed €5.5 billion to fight the crisis, as shown in Table 8. But of that total, only €2.7 billion had been committed by the end of the second quarter of 2009 and only €0.9 billion had been disbursed, as shown in Table 9. The illiquidity phase of the crisis was most severe in the last quarter of 2008 and the first quarter of 2009 and it had certainly eased by end of the second quarter, by which time funds from other sources were available, particularly from the parent banks, thanks to massive EU central bank intervention. Of the crucial funding for financial institutions, only €600 million had been disbursed by the end of the second quarter of 2009. Therefore, the fact that disbursements picked up in the second half of 2009 is more relevant to the recovery than to the liquidity phase of the downturn.

Table 8: Cumulative commitments by end of each quarter (€ millions)

	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2
Financial institutions	194	347	1,285	1,943	2,420	2,549	2,843
Infrastructure	92	265	499	1,223	1,320	1,548	1,610
Enterprise	219	540	870	1,333	1,768	1,885	1,907
Total	505	1,152	2,655	4,500	5,508	5,982	6,361

Table 9: Cumulative disbursements by end of each quarter (€ millions)

	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2
Financial institutions	107	219	613	1,206	1,596	1,888	2,009
Infrastructure	0	113	173	588	641	727	1,322
Enterprise	4	68	134	450	933	1,170	1,278
Total	111	400	920	2,244	3,170	3,786	4,609

4.4 Size of crisis response programme

In the initial budget and work plan prepared in October 2008, the EBRD planned for commitments in 2009 of €6 billion, up from €5.2 billion in 2008. In the ORC this was increased to €7 billion, adding an additional €1 billion for crisis response. In late 2009, the pipeline and signings had exceeded all expectations and another €1 billion was added for crisis projects, bringing the notional commitment target to €8 billion overall. Actual commitments by year-end amounted to €7.8 billion, representing a commendable 50 per cent increase over 2008.

By the third quarter of 2009, the commitments categorised as CR projects were much larger than expected. The project pipeline existing at the end of 2008 reportedly collapsed during the crisis. The study estimates that 41 projects that became crisis response operations, totalling €1.6 billion in business volume, had been concept reviewed before the crisis response period (that is, up to 30 November 2008). The majority of the CR projects (76 operations totalling €3.9 billion) was concept reviewed during the crisis response period. The final Crisis Response Status Report provided further comment on the projects that met the "restructured pipeline" project criteria:

> "Of the approximate 390 pipeline projects that were in the pipeline at the end of November 2008, close to half are no longer active and of the remainder over two-thirds have passed final review. Accordingly the potential for redesigned or restructured pre-crisis pipeline projects is by now limited and declining."

In other words, just over 10 per cent of the 2008 pre-crisis response pipeline projects were signed and categorised as CR projects.

Overall the EBRD made 115 crisis response commitments, with a total value of over €5 billion. This total may be something of an exaggeration, as some crisis projects closely resembled the 220 or so non-crisis projects of 2009. But even allowing for the classification issue, the EBRD's crisis response was a very large part of the 2009 project signings and the dominant part of the EBRD's commitments.

The number of new commitments made in 2009 was little different than those made in 2008 (Table 11). However, the average size of the CR projects, at roughly €50 million, was three times the average size of 2008 project and the non-crisis projects in 2009. By making much larger projects, the EBRD was able to increase commitments by 50 per cent with the same number of operations and roughly the same number of staff (Box 6).

Box 6: An extraordinary performance by EBRD staff

When the crisis broke out in full in October 2008, EBRD staff were about to deliver a second straight year of record annual business volume without significant growth in staff numbers or expense budgets. The 2008 portfolio would reach a record level in both volume on the books and number of outstanding projects. The crisis would put enormous stress on the Bank's portfolio and on all the administrative processes that support it. About a thousand active commitments were available for further disbursement in 2009, even before the first new projects would be signed. But the future suddenly looked nothing like the past. Uncertainty and risk could not have been higher. The pressure to monitor existing exposures and prudently administer existing commitments was unprecedented. EBRD staff had to perform on this front, which features less visibly in the EBRD's scorecard results as reported in the Institutional Performance Reports, while delivering a 50% increase in absolute volume of new business in 2009.

4.5 Sectoral response

As can be seen from Table 10, overall every sector received additional funding but there was little percentage change in the allocations in 2009, taken as a whole, as compared with 2008. This was a combined result of business planning and pipeline management. The crisis, and the realised response to the crisis, did not shift the Bank's investment sector allocations.

Table 10: Investment by sector: 2008 and 2009[23]

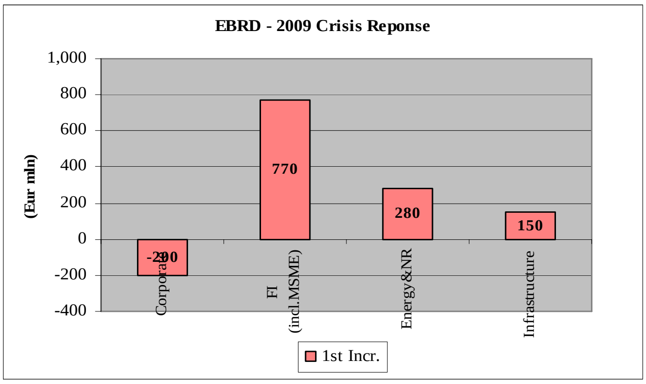
	Volume (€ million)		Share (%)	
	2009	2008	2009	2008
Financial	3,093	1,941	39%	38%
Enterprise	2,234	1,600	28%	31%
Infrastructure	2,534	1,546	32%	30%
Total	7,861	5,087	100%	100%

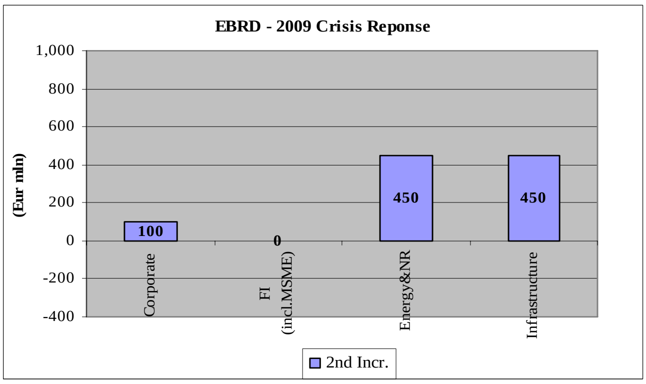
4.5.1 Financial sector

In terms of the sector composition of the strategy, the EBRD thought the financial sector would prove particularly vulnerable to the crisis and the Bank prepared to provide funding not obtainable from other sources. The 2009 Business Plan, revised for the crisis response, shows that the first €1 billion of ABV was allocated mainly to FI (Chart 3a), while the September 2009 (retroactive) revision of the plan allocated none of the next €1 billion to FI projects (Chart 3b). Thus, by the end of 2009, FI project volume provided a smaller part of total ABV than originally planned.

[23] In this table the financial sector includes MSME; enterprise consists of corporate plus natural resources; and infrastructure consists of infrastructure plus power and energy.

Charts 3a and 3b:





Hence, the financial sector's share in total EBRD lending did not increase between 2008 and 2009 (Table 10).

The Bank's initial effort was to carry out a systematic review of the existing financial sector clients' liquidity and capital adequacy and their funding needs. But the EBRD's focus was not on the banks per se. The EBRD wanted to enable the banks to be able to finance key client groups (especially SMEs and trade activity) in the context of serious funding constraints, particularly diminished access to foreign finance.

From the start, the Bank recognised the crucial role played by foreign parent banks. Initially it feared that "parent bank contagion" might be a source of vulnerability. But even if that did not happen, the EBRD worried that:

> "The few Western parent banks that own about 70-80 per cent of the banking sectors in about 17 transition countries have been affected by funding constraints and general wavering of confidence in banks. It is expected that most, if not all, parent banks would benefit from the recently announced government support packages for banks in EU countries, but it is not at all clear how the funding of these banks' subsidiaries will be affected in the region." (OFCU Update, October 2008)

The Bank put considerable effort into the Vienna Initiative with the objective of ensuring that the parent banks maintained their exposures in local markets. That successful effort transformed the relationship between the parent banks and their subsidiaries from a potential weakness into a bulwark of defense. The EBRD also worked with the other IFIs on a Joint Action Programme (JAP) to support the financial system. The EBRD did not initiate the Vienna Initiative but all the participants recognise that the Bank played a key organising and persistent leadership role in the effort. The agreements reached through the Vienna Initiative for the foreign banks to maintain their presence and exposure was a keystone to maintaining the financial systems in those countries were the foreign banks were dominant. The JAP provided a venue for IFI cooperation. Both the Vienna Initiative and JAP are discussed in more detail in Appendix 4.

Box 7: EBRD exposure to banks and EBRD support of the Vienna Initiative

As noted earlier, obtaining parent and regulatory support for the EBRD's clients should also help to stabilise the banking sectors and broader economies in the region in line with the G-7 announcement. In fact, the parent banks wished to support their subs in order to maintain and recover the value of their investments, and most were committed long term to the region for strategic reasons. But the "home" and "host" country regulators presented a different picture: they were mandated to protect banks at the national level, without regard for cross-border issues. This long-standing and well-known vulnerability of the supervisory arrangements came to the fore during the crisis; it meant that home countries might act without regard for the consequences in the region, and that host countries might expect the "foreign" banks and their home regulators to meet the funding and capital needs of the subsidiaries.[24]

The leading regional banks first met in Vienna on 6 November 2008 to try to manage these risks, and to call for coordinated support from home and host country authorities, the IFIs and the ECB. Thanks in great measure to strong support from the EBRD's President and assigned EBRD staff, the meetings quickly grew into the so-called "Vienna Initiative" (or the European Bank Coordination Initiative) starting in December 2008. The Vienna Initiative became an important crisis coordination forum throughout 2009-10.

Both the EBRD and the regional banks shared an interest that the regulators not discriminate against the local subsidiaries, or prevent the parents from supporting them. In this light, it is interesting that the parent banks made public declarations of support for their subsidiaries. In fact, adverse actions by the regulators were the main risk. It seems unlikely that the parent banks would have declared support, however, if their home regulators had opposed it. Therefore, the declarations also signalled the cooperation of the banking supervisors.

It was helpful, in several cases, that both the IMF and the EU requested the declarations of parent support and the promise to maintain parent funding to the subs. Like the EBRD, the two suppliers of balance of payments funding were concerned to stabilise the banking systems, to keep the new external funding from exiting the countries to repay the foreign banks, and thereby also to reduce the amount needed for balance of payments financing.

With regard to its own commitments to the financial sector, the EBRD divided its funding about 60–40 between the international banks' subsidiaries and the large local banks. About two-thirds of the project volume to the international banks consisted of lines of credit. The other one-third was for capital support in the form of subordinated debt, almost all of which went to institutions in two countries – Hungary and Ukraine. On the other hand, the 40 per cent of funding to local banks was almost all in the form of capital support.

In the ORC, the EBRD placed particular emphasis on helping existing clients. In assisting local banks, however, the EBRD went beyond its existing customer base. What the EBRD came to realise in its crisis response was that the most exposed banks were those without foreign parents. Through providing liquidity and capital assistance to these banks, the EBRD took on some elements of the role played by the foreign parent. By supporting the big local banks lacking a foreign parent, the EBRD complemented the work of the Vienna Initiative with the international banking groups to stabilise financial systems.

[24] "The Basel Committee's focus on consolidated international supervision dates from as early as 1979. The collapse of BCCI in 1991 revealed shortcomings in global capacity to supervise international banks on a consolidated basis. In response, the Basel Committee published minimum standards for the supervision of international banking groups in 1992 and published the Core Principles in 1997. Lessons learned from the cross border contagion it provoked, fortified the commitment to furthering consolidated supervision on a global basis." EvD Mid-Term Review, June 2004. Supervision includes the critical issues of intervention and resolution**.**

Direct liquidity support to the banks was provided in the form of innovative foreign exchange swap lines in a couple of cases in advanced countries. Indirect liquidity was provided in the form of lines of credit. Through its lines of credit the EBRD worked to maintain the liquidity of the real sector, particularly SMEs. While the lines were directed to and signed with specific subsidiaries, they were for the most part negotiated as a package with parent banks. The group approach was efficient, as it meant that many operations could be done with a maximum of speed and a minimum of manpower. The parent banks could provide support for the individual loans. However, where the EBRD lacked up-to-date information on the subsidiary, it had to undertake due diligence, which slowed the process considerably.

4.5.2 Ensuring that banks could finance SMEs

The programme of providing lines of credit for on-lending to SMEs must be judged as delivering less than expected. The lines were not available during the months of the most severe liquidity squeeze, with little disbursement of funds during the first nine months of the crisis. Second, the pricing of the loans was controversial. Many of the borrowers considered them to be expensive, both because they believe that prices exaggerated country risk and because the loans required a parent guarantee or similar support. [25]

When markets are closed and there are few if any alternative suppliers, it is difficult to say that a price-taker is being offered a "fair" price even if he agrees to pay it. He may feel that he has no choice. On the other hand, liquidity returned quickly for the strongest borrowers that were soon able to avoid the EBRD's more expensive funding. Furthermore, some observers have argued that the EBRD should have obtained even higher pricing given the risks, and obtained equity kickers and other incentives that it rarely sought. In conclusion, the crisis response pricing issue is one that is not easily assessed ex post.

Some of the credit lines did not disburse; by the time the lines were available, banks had access to other, cheaper funding sources thanks mainly to massive intervention by EU central banks, and by the run-down of the banks' portfolios because banks slowed new lending. Although figures are not available separately for small business, Appendix 5 shows what happened to private credit during the crisis. In most of the countries of the region, credit to the private sector either contracted or expanded minimally during the period. The Study Team field visits confirmed that banks had slowed down lending, especially to SMEs. Therefore, the EBRD SME credit lines did not prevent the credit crunch, particularly for small businesses. However, there is the possibility that conditions would have been worse without the EBRD's lines of credit.

4.5.3 Expansion of the Trade Facilitation Programme

The ORC highlighted the Trade Facilitation Programme (TFP) as part of the Financial Institutions Response Package. It noted that the TFP "is a product that is in high demand, can be delivered quickly and has a strong positive effect on the real economy. The Bank has increased its TFP activity and will be seeking approval for an expanded programme in 2009". The document also expressed the intention to "increase TFP exposure in all countries" (Table 1 of the ORC).

The TFP had been expanded a number of times since its inception in 1999. In February 2009, its total limit was almost doubled from €800 million to €1.5 billion "to allow the EBRD to respond to

[25] Parent banks argue that if they provide a guarantee, the risk premium charged should be based on the market's assessment of their, not the subsidiary's, risk. But even for the subsidiaries, the market risk premium fell between the time the loans were negotiated and the funds disbursed, leading in their view to excessive charges.

the current severe lack of liquidity and risk taking capacity in the private trade finance market" (BDS98-157 (Add 14)).

In 2007, the EBRD had financed 1,056 trade transactions totalling €777 million under the TFP. This rose to 1,115 transactions totalling €890 million in 2008. As reported in the Bank's Annual Report 2009, "during the first part of 2009 trade volumes fell dramatically as the EBRD's client banks showed reluctance to take risk and provide financing to their own clients. However, as the appetite for trade finance improved towards the fourth quarter of 2009, business increased significantly and one-third of the year's [TFP] business was handled during that period. In total the EBRD financed 886 trade transactions worth €573 million in 2009. Most transactions in 2009 originated from five countries: FYR Macedonia, Georgia, Kazakhstan, Russia and Ukraine." So in 2009 both the number and volume of transactions financed under the programme fell, particularly during the most acute period of the crisis.

This report does not go into further detail on the contribution of the TFP to the Bank's crisis response. The TFP has recently been evaluated in depth through an evaluation special study (SGS10-257).

4.5.4 Commitments by country and region

New commitments in 2009 were larger than in 2008 in all regions, but the increase was not equal. The Bank had over 1,000 existing clients and produced just over 100 CR projects, and not all for existing clients and not for all of the EBRD's countries. A few countries garnered the majority of the CR projects and project volume. Ukraine, already well in excess of its country risk trigger, was the second largest recipient of crisis response projects both by number and volume (Chart 4).

The following observations are relevant.

- Crisis response projects were signed in 19 of the EBRD's 29 COOs. In many countries, only one or two CR projects were signed.

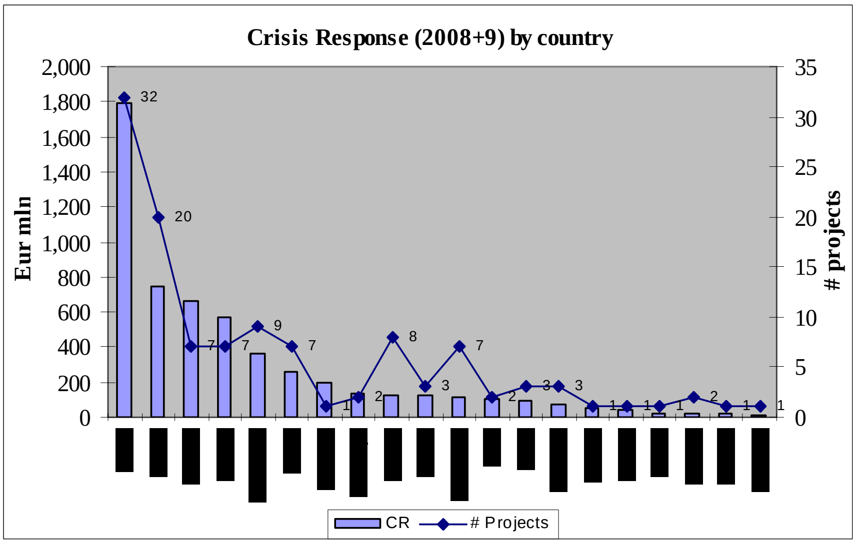
- Russia accumulated the largest number with a total of 32 projects, followed by Ukraine with 20.

- By regions, approximately one-third of all crisis response projects was directed to the EU countries, one-third to Russia and one-third to other countries (including regional projects), mainly Ukraine.

- In the EU countries, CR projects were signed in seven of the nine EU COOs, namely Bulgaria, Hungary, Latvia, Lithuania, Poland, Romania and Slovak Republic.

- Romania (with 7 projects for a total of €660 million) and Hungary (with seven projects totalling €567 million) were the largest EU beneficiaries, accumulating together two-thirds of the total volume of CR projects invested in the EU countries.

Chart 4:



The EBRD recognised that some countries were likely to be harder hit by crisis than others, namely those with large current account deficits and high levels of external debt. Those that had funded booms with short-term debt from abroad were particularly vulnerable. Some of these countries were well advanced in the transition process, had relatively high incomes and had not received much funding from the EBRD in recent years due to a deliberate graduation policy enshrined in the 2005 CRR-3 policy document.

However, the EBRD recognised that some of the CE countries were among those most affected by the crisis and was prepared to provide support regardless of their graduation status. In fact of the initial €1 billion earmarked for crisis response, half was initially allocated to the countries of central Europe and the Baltic states. Eventually €1.6 billion or 21 per cent of the 2009 commitments went to this region, up from €330 million or 6 per cent of the total in 2008, as shown in Table 11. In keeping with the plans laid out in the Final 2009 Business Plan, the EBRD did in absolute terms allocate more funds in 2009 to the Early Transition Countries and Western Balkans. But in terms of percentage growth of volume versus 2008, it was central Europe and the Baltic states that benefited most (Box 8).

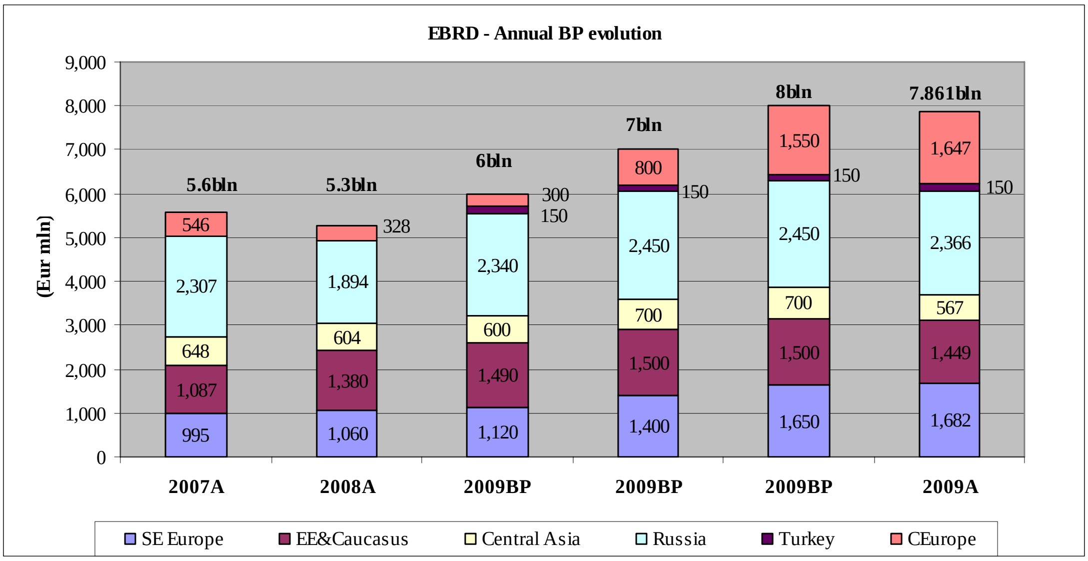
Table 11: Lending by region

	Volume (€ million)		Share (%)	
	2009	2008	2009	2008
South-eastern Europe	1,682	1,059	21%	21%
Eastern Europe and Caucasus	1,449	1,310	18%	26%
Central Asia	567	574	7%	11%
Russia	2,366	1,816	30%	36%
Turkey	150	-	2%	-
Central Europe and the Baltic states	1,647	328	21%	6%
Total	7,861	5,087	100%	100%
	Number of operations*		**Share (%)**	
	2009	2008	2009	2008
South-eastern Europe	83	76	25%	24%
Eastern Europe and Caucasus	92	104	27%	32%
Central Asia	56	53	17%	16%
Russia	56	69	17%	21%
Turkey	5	-	1%	-
Central Europe and the Baltic states	46	21	14%	7%
Total	311 (338*)	302 (323*)	100%	100%

- For central Europe, the total 2009 ABV represented an increase of 373 per cent of previous year 2008 actual portfolio of €328 million. For south-eastern Europe, it represented an increase of 56 per cent and for Russia 29 per cent.

- As a result, the total 2009 budget split by regions presented a shift compared with previous years: Russia decreased its weight from 35 per cent to 31 per cent, and central Europe presented a substantial shift in its weight in the ABV, which had been decreasing over the last few years to 6 per cent in 2008, to represent a 19 per cent of the total ABV in 2009 (Chart 5).

Chart 5: Annual business plan figures



Box 8: A strategic consequence of the crisis response: a change to graduation

The Bank planned an increase for crisis response volume for central Europe (CE), first as €500 million of the €1 billion increase in the 2009 business plan/budget, then €750 million of the second €1 billion increase in September 2009, for a total €1,250 million. The Capital Resources Review #4 (the 2010-15 strategic and capital plan) observed that the crisis response had made an important impact on the advanced (that is, CE) country realised ABV, noting that it had moved from the 8% target of the CRR-3 (2005-10 plan) for 2009 to 20 per cent for 2009 because of the crisis response: "...cumulative business volume in the advanced transition countries more than double the CRR3 projection reflecting the impact of the Bank's crisis response in the latter part of the CRR3 period" (CRR-4, page 14-15 with its Table 2.4). So, it is clear that an important part of the Bank's crisis response plan was to support the CE/advanced countries through the crisis response. The Bank delivered on that volume plan, mainly with CR projects.

CRR-3 had said that the EU-8 countries would all graduate by 2010 and stated that there would be no new EBRD business in those countries after 2010. To comply with that plan, the Bank closed four offices (Prague, Tallinn, Riga and Ljubljana) and cut back business, achieving only 8% of volume in CE/advanced countries in 2008. In 2007, the Czech Republic graduated and graduation of the remaining EU-8 countries looked to be on track. The October 2008 draft 2009 business plan proposed closing two more offices in the EU-8.

The December ORC had promised that the higher volume allocation to CE would not call graduation into question as set out in CRR-3 ("addressing crisis needs across the region, including in central Europe and the Baltic states, without questioning graduation"). Four months later, the March CRR-4 would change the formulation on graduation from what shareholders had agreed in 2005. In contrast to CRR-3, CRR-4 said that the EU-7 countries (EU-8 minus the Czech Republic) will graduate during 2010-15, and that management would propose a post-graduation policy for them (that is. that new business may continue in them after graduation focusing in principle on cross-border trade and investment, knowledge transfer, and consideration of possible further needs after graduation). Therefore, one consequence of the crisis and the crisis response was to delay graduation by five years, and propose continued engagement post-graduation. Therefore, the allocation of CR project volume towards CE countries had effects that went beyond responding to the crisis: it laid the foundation of a strategic shift at the EBRD, delaying graduation and in principle changing the terms of graduation from what was agreed in CRR-3.

The degree to which the CR project volume may have matched the country-level needs caused by the crisis is discussed in Appendices 6a and 6b.

4.6 Form of financing: equity, quasi equity and debt

Overall the distribution of senior debt at 69 per cent of the total of new commitments changed little between 2008 and 2009. However, in 2009 the EBRD made greater use of subordinated debt, 18 per cent of crisis operations against 5 per cent of non-crisis operations in 2008, with a corresponding decline in equity investments. With regard to financial operations, the change was more marked. Senior debt constituted 75 per cent of new signings in the financial sector in 2008, but only 50 per cent of crisis signings in 2009. Subordinated debt rose from 6 per cent of non-crisis operations in 2008 to one-third of FI CR projects in 2009. In other words, in the financial area the Bank responded to crisis with different forms of financing, taking on more risk overall but limiting that risk somewhat by taking on subordinated debt rather than equity.

Table 12: Total signed business volume by instrument (€ millions)

Product	2008			2009			Grand total
	Non-crisis	Crisis	Total	Non-crisis	Crisis	Total	
Guarantee and off-balance sheet	4%	0%	4%	9%	1%	4%	4%
Equity	25%	0%	22%	21%	12%	16%	18%
Senior debt	67%	88%	69%	69%	69%	69%	69%
Subordinated debt	4%	12%	5%	0%	18%	11%	9%
Total € millions	4,585	502	5,087	2,852	5,009	7,861	12,948

Table 13: Financial institutions: annual signed business volume by instrument (€ millions)

Product	2008			2009			Grand total
	Non-crisis	Crisis	Total	Non-crisis	Crisis	Total	
Guarantee and off-balance sheet	192		192	261	44	305	497
Ordinary shares	257		257	147	272	419	676
Other participating interest	78		78	21	75	96	174
Preference shares	2		2		48	48	50
Senior debt	1,112	136	1,247	342	1,122	1,464	2,711
Subordinated debt	106	58	164		762	762	926
Total	1,747	194	1,941	770	2,323	3,093	5,035

4.7 Technical cooperation for crisis response

The ORC referred to a need for technical cooperation in support of the Bank's crisis response. These projects would fall under two umbrellas depending on the source of funding: the Shareholder Special Fund[26] and other donors. In March 2009, the EBRD Shareholder Special Fund[27] was replenished by €30 million, out of which €4 million were allocated to confront the crisis. Crisis-related TCs were defined as measures to support partner financial institutions aimed at strengthening risk management, which might extend to the medium-sized corporate sector, hardest hit after the banking sector. In addition, an allocation to the new EU member states was introduced as a new regional category for the SSF activities, taking into account the severe repercussions of the crisis in these countries (BDS09-047 (Rev1)).

Later in the year (October 2009), management proposed to broaden the use of the SSF resources that had been allocated for crisis response in the EU-9 countries. As the impact of the crisis across sectors became clearer, it was argued that the crisis response should now also encompass closing the commercial and financial gaps for critical energy efficiency, transport and municipal infrastructure projects. More specifically, six projects in the areas of MEI- and "Energy Efficiency"-activities was presented for the total amount of €1 million (BDS09-212).

[26] Reference is made to the Special Study: Shareholder Special Fund – Initial Review (PE10-482S).
[27] The SSF was established in May 2008 with an initial allocation of €115 million out of the net income the Bank had achieved in the previous business year.

As of June 2010, the actual project commitments made under the "financial crisis response" scheme account for some €2.9 million (which equals 4 per cent of all SSF commitments since 2008). Individual projects include "institution building measures for Banks" (amounting to €1 million). One of the more substantial projects committed for this purpose is the "UMLP Crisis Response and Development of Lending Capacity in Ukrainian Banks".[28] In addition, a number of commitments to the TAM/BAS programme have been dedicated to "crisis response measures" as well as the above-mentioned project in the Infrastructure and Energy sectors (PE10-482S).

Overall TC projects for crisis response

The EBRD's records show that there are two categories of TCs for the crisis response:

- TCs committed after the start of the crisis response period and that are linked to crisis response investment operations
- TCs with "crisis" in the title, whether linked to investment operations or not, which were mainly supported by the Shareholder Special Fund.

In total, there were 26 commitments or call-offs totalling €5.4 million, of which 13 commitments had actually made disbursements totalling €1 million. Many of these were standard TCs related to projects that were subsequently classified as crisis response. TCs that were clearly relevant to crisis response include those for TFP, Parex Bank, TBC, Kreditprom and TTK banks, which total €1.5 million in commitments and €0.3 million in disbursements to date. The TC delivered for crisis response was lighter in amount, if not in importance, than expected.

4.8 Closing observations on the design and reported implementation of the ORC

The crisis of 2008-10 had two phases, a sharp downturn that lasted from six to nine months, followed by a slow recovery. The first phase was marked by a severe reduction in trade and a liquidity shock in which financial markets froze. With its tools, the EBRD could do little about the trade shock; even the TFP is a tool for financing trade, not creating it. Within two months of the 2008 collapse of Lehman Brothers, EBRD management had defined and the Board had approved a strategic response to the crisis as laid out in the ORC and made operational in the 2009 business plan. As originally conceived, the crisis funding was to cover only €1 billion of the €7 billion in planned new commitments for 2009. But the ORC and business plan noted that the crisis was only then unfolding and the business plan needed to be adaptable. By year end, the EBRD had added another €1 billion to fund its crisis response, with total new commitments up 50 per cent compared with 2008. By year end, all regions received more funding, but the largest beneficiaries were Russia and Ukraine, followed by the countries of central Europe and the Baltic states. Many of these countries had been near to graduation, but the EBRD showed flexibility in responding to their crisis needs. The EBRD showed flexibility not only in country allocations but also in project selection.

As the recession deepened over the year, crisis-related projects replaced the existing project pipeline. Normal EBRD funding financed new investments; in the crisis period much of the designated crisis response projects went for balance sheet support, namely liquidity and capital infusions, replacing funding lost from other sources. At the financial institution and enterprise level, the initial strategy was to focus on existing clients. Because the need for assistance extended beyond the existing client base, the Bank expanded its funding to new clients. But the need to review conditions with existing clients and undertake due diligence with new clients increased response time. By the end of the second quarter of 2009, the Bank had only disbursed €1 billion of crisis commitments. By that date, for the financial institutions the liquidity crisis was over with funds available from other sources, including parent banks. EBRD funding was still important, but less to relieve the liquidity crisis and more to mitigate its consequences and to help with the recovery.

[28] Please compare with Board document BDS10-113 dd, 30 April 2010.

To what degree did the EBRD's intervention reduce country vulnerability? In the EBRD region, a key vulnerability was excessive levels of foreign borrowing. Replacing one loan with another did nothing to reduce overall debt levels and replacing one foreign exchange loan with another did not reduce foreign exchange exposure. On the other hand the EBRD's loans did lengthen maturities and, through equity investments and subordinated debt, the EBRD worked to shore up enterprise capital. Overall the EBRD's crisis response had elements that helped to balance the short-term liquidity issues with the longer term solvency issues

5. Crisis impact on the risk of the EBRD's loan portfolio

Earlier sections have referred to the EBRD's exposure to the region, especially to more vulnerable countries, and to management's focus on the Bank's capital adequacy at the start of the crisis response period. This section looks more closely at how the Bank's loan portfolio evolved and was impacted by the crisis through June 2010. The crisis impacted on the assessed risk of the EBRD's loan portfolio in three main ways:

- the Bank changed the risk ratings on many loans in response to the worsening outlook
- the Bank changed its provisioning policy to increase the loss given default[29]
- the Bank allocated CR projects in 2009 to higher risk countries.

These changes led to higher expected loan losses and to higher loan loss provisions in 2008-10, with direct relevance to the Bank's capital adequacy and its ability to respond to the crisis.

When Lehman Brothers collapsed, the EBRD was about to complete a second consecutive of year of producing annual business volume of over €5 billion. As described earlier (Section 2.2), during the CRR-3 years, the Bank's portfolio had grown more rapidly in vulnerable countries. This was particularly true during the period of rising instability (Table 14).

Table 14: Loans to key countries[30]

Key countries loans	2007	2008	Change	Per cent
Russia	2,733	3,466	733	27%
Ukraine	771	1,198	427	55%
Romania	770	1,013	243	32%
Hungary	286	253	-33	-12%
Serbia	406	547	141	35%
Kazakhstan	581	718	137	24%
Bosnia and Herzegovina	185	270	85	46%

The Study Team (see Appendix 3) has identified and analysed the expected loss of three portfolio vintages of the EBRD loans:

A- the portfolio signed in 2006 up to August 2007
B- the portfolio signed after August 2007 to November 2008
C- the crisis response projects.

[29] 2009 Provisioning, Impairment and Loan Loss Reserve Policy (BDS09-143), effective as of 30 June 2009. Rating agencies and the EBRD considered that the severity of the crisis would increase the loss given default.
[30] The analysis excludes equity investments for several reasons. First, customers do not have to service the EBRD's equity investments with cash flows that could be reduced by the crisis. Second, the EBRD does not provision equity investments, which instead are changed in size on a mark-to-market basis.

In this section, we focus on the amount "expected loss" that is embedded in the loan portfolios according to the risk ratings assigned by the Bank to each loan exposure. This approach permits closer observation of risk concentrations in the portfolios and vintages. Vintage B, which was signed during the period of rising instability, had the highest rate of expected loss at June 2010. Importantly, its rate of expected loss at approval was about the same as that for Vintage A, both at about 8 per cent (Table 15). But by June 2010, its expected loss rate had nearly doubled to 15.4 per cent, while Vintage A's loss rate increased by only 40 per cent to 13.6 per cent.

Table 15: Total expected loss on the June 2010 loan portfolio (€ millions)

Vintage	Loan portfolio	% of total	Loan commitments outstanding*	% of total	Total expected loss	% of total	Total expected loss rate
Vintage A	3,398	16%	2,862	19%	310	19%	10.83%
Vintage B	3,616	17%	2,585	17%	399	24%	15.42%
Vintage C	4,582	21%	3,267	22%	443	27%	13.55%
Other	10,031	46%	6,067	41%	504	30%	8.30%
Total	21,627	100%	14,781	100%	1,655	100%	11.20%

Table 16: Total expected loss: change between vintage end-date and June 2010 (€ millions)

Vintage	Total expected loss at vintage cut-off date	As % of loans outstanding	Total expected loss at June 2010	As % of loans outstanding	Nominal change in expected loss
Vintage A	291	7.95%	310	10.83%	19
Vintage B	193	8.18%	399	15.42%	206
Vintage C	414	14.52%	443	13.55%	28

Vintage B projects deteriorated more than Vintage A, according to these measures. In fact, much more, because much faster: Vintage B's exposures had about two years to age until June 2010, while Vintage A's had about four years. Also, Vintage B contributed most of the deterioration, as its expected loss more than doubled to €399 million.[31]

As noted in Section 2.3, the Quarterly Risk Reviews reported rising loan spreads for a given risk rating. It could be that the higher spreads meant that the risk ratings at inception of Vintage B were incorrect, that the projects in Vintage B were riskier than they were rated to be. In other words, that the risk of these projects was underestimated. This is possible, given that the crisis was building to a head during the Vintage B period of rising instability.

Table 17 shows the regional distribution of Vintage A and B projects did not differ much; therefore, Vintage B's worse performance may not have its roots in the regional distribution used in the annual business plans.

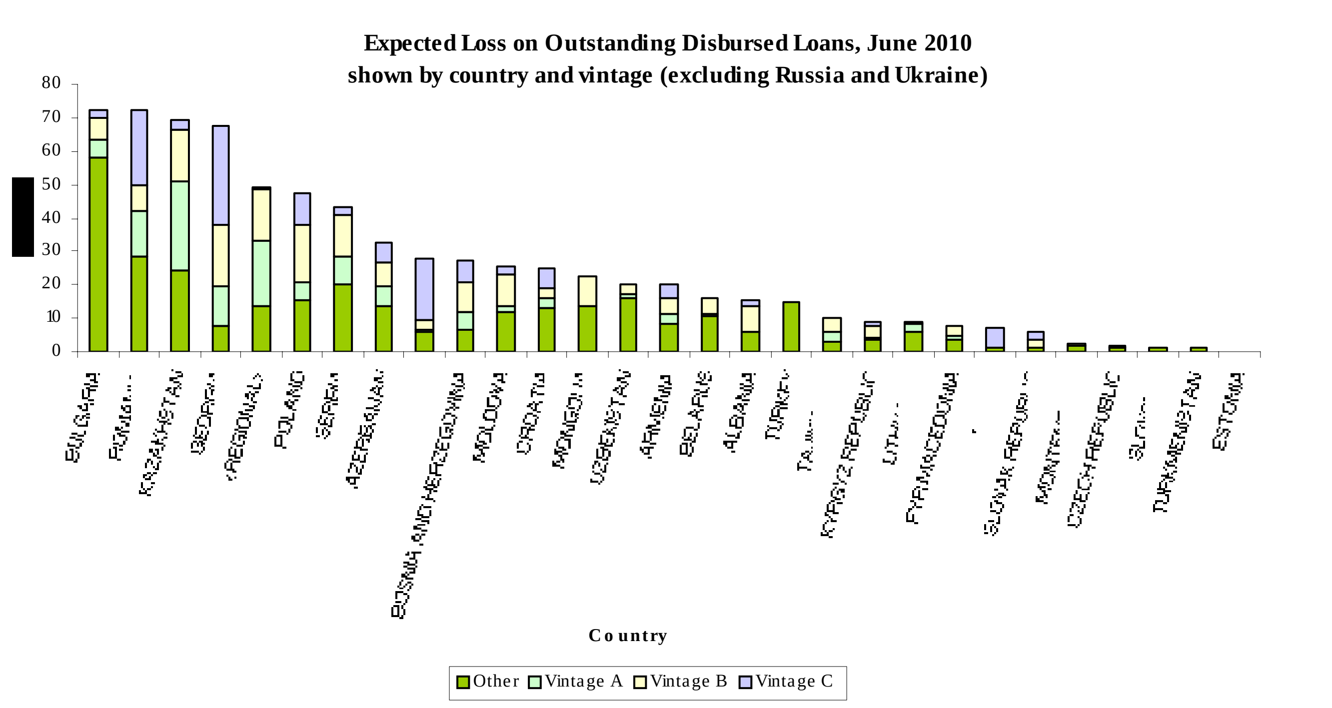
[31] The vintage analysis cannot stabilise all of the variables. For example, the absolute level of expected loss rose less in Vintage A than in B because Vintage A was older and its underlying portfolio had partially amortised. That is why the rate of expected loss as a percent of loans outstanding is also an important comparator.

Table 17: Regional distribution of Vintage A and B at 30 June 2010 (€ millions)

Country group	A		B	
	Outstanding portfolio	% distribution	Outstanding portfolio	% distribution
Central Asia	466	9%	437	9%
Central Europe and Baltic states	607	12%	590	12%
Eastern Europe & Caucasus	1,254	24%	982	20%
Russia	1,668	32%	1,866	38%
South-eastern Europe	1,190	23%	1,066	22%
Total	5,185	100%	4,941	100%

Chart 6 shows the EBRD position as of June 2010 with regard to the concentration of credit risk in the EBRD's loan book by country (excluding Russia and Ukraine) and vintage. The "Other" vintage is all outstanding loans other than vintages A, B, and C. The Bank's operations had spread risk across countries, with some concentration levels in riskier countries.

Chart 6:



The more important story, however, is Russia and Ukraine, which concentrate most of the Bank's loan portfolio when measured in terms of risk (expected loss):

Vintage A

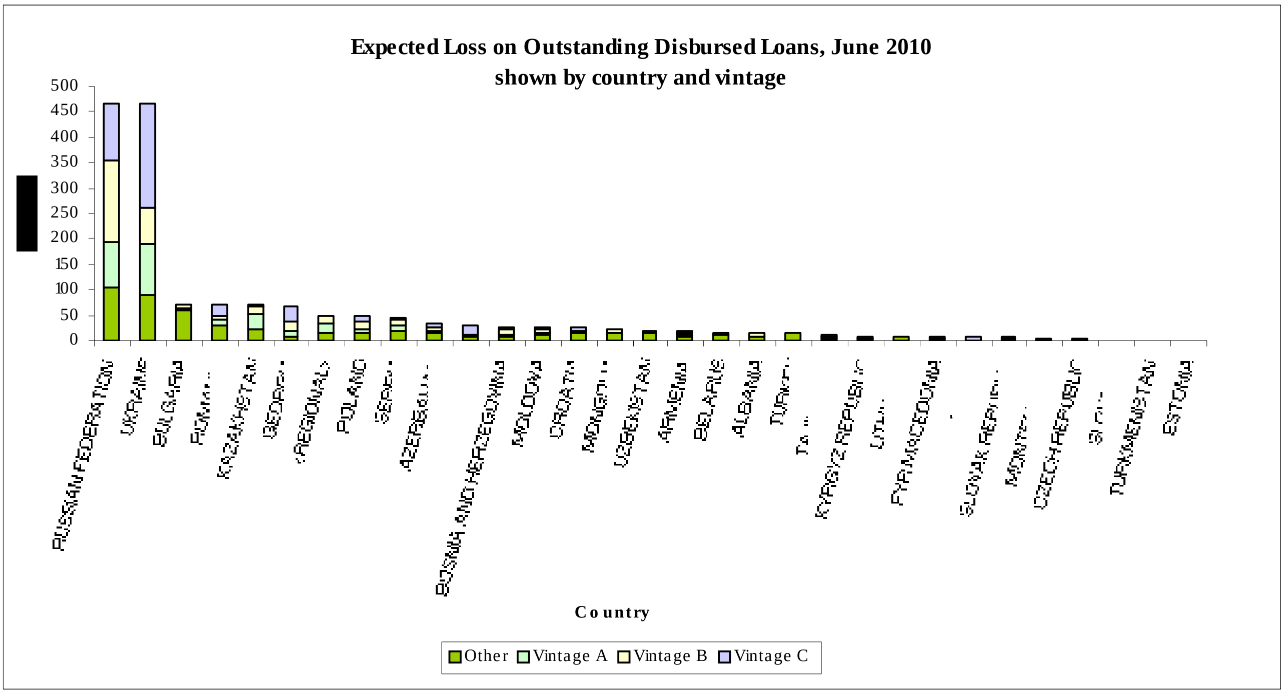
- At inception, Russia accounted for 32 per cent of the signed volume of Vintage A, but 50 per cent of its expected loss.
- Although the total expected loss in Vintage A rose by €19 million to an expected loss rate of 10.8 per cent by June 2010, concentration in Ukraine increased the expected loss in Vintage A by €62 million.

Vintage B

- At inception, Russia accounted for 38 per cent of the expected loss of Vintage B.
- Concentration in Russia accounted for 42 per cent and Ukraine 23 per cent of the increase of the expected loss in Vintage B by €206 million to a total of €399 million.
- Exposure to enterprises made up €234 million (65 per cent) and to FI €57 million (28 per cent) of the change in Vintage B's expected loss.

Chart 7 includes Russia and Ukraine, showing the predominate concentration of risk in the two countries.

Chart 7:



Thus, at the beginning of the crisis response period, the Bank had large concentrations in exposures in Russia and Ukraine in both Vintage A and B. These country exposures would contribute the bulk of increased risk faced by the Bank during the crisis response period, even if the Bank had not launched a crisis response programme. The CR period offered an opportunity to reduce these country concentrations by allocating CR projects with regard to existing country risk concentration and the expected country vulnerabilities. The question can be asked why this was not done.

The ORC gave rise to Vintage C, made up of the signed CR Projects. At inception, the CR Projects added €414 million of expected loss at a loss rate of about 14 per cent, almost double the inception loss rates on Vintage A and B.

- Ukraine accounted for 42 per cent and Russia 34 per cent of Vintage C's expected loss amount.
- CR projects in FI made up 65 per cent of the total amount, and 91 per cent of the amount in Ukraine.
- CR projects in Ukraine made up 62 per cent of the expected loss in FI's CR portfolio.

By June 2010, total expected loss on the still very young Vintage C had risen by €28 million, contributed mainly by FI projects in Ukraine. At that date, Ukraine represented 46 per cent of the expected loss of Vintage C. As Ukraine remains deeply affected by the ongoing crisis, the country concentration in Ukraine poses a challenge to the Bank. Other vulnerable countries, such as Georgia, Romania and Bosnia and Herzegovina, also made contributions to increased expected loss, but in much smaller amounts than Russia and Ukraine.

The pre-crisis and crisis response periods have built a loan portfolio that spreads risk across the region except for dominating concentrations in two countries. In this sense, the portfolio developed in an *unbalanced* way as to country risk, querying the effect of risk management processes on the diversification of realised country exposures.[32] The unfolding crisis, which persists in the industrialised countries and has since taken deeper root in Europe during 2010, keeps the vulnerability of countries to event risk at the forefront of developments.

The Study Team reviewed some aspects of country vulnerability analysis, which resulted in, among other things, a set of country vulnerability indicators using a colour-coded ranking system whose results are illustrated in Table 3 in section 4.0 of Appendix 2. Green means relatively low vulnerability, yellow means rising instability, orange means unstable, and red means crisis. This comparatively simple system of management indicators, and the rationale behind it, has been shared with management. As there is no one "best" way of assessing country vulnerability, it is useful for learning purposes to contrast alternative approaches.

Latvia, among the vulnerable countries in the QVA, moved from orange to red in 2007 in Table 3. Table 3 and the QVA's agreed that Ukraine exhibited vulnerabilities. Ukraine was in the orange or unstable zone during the period of rising instability. Russia, on the other hand, appeared to be more stable. The main challenge that Russia and Ukraine pose are their absolute concentration size in the EBRD's portfolio.

[32] The question about country risk concentrations is also relevant to compliance with Article 13 (iv) of the Agreement Founding the Bank: "the Bank shall not allow a disproportionate amount of its resources to be used for the benefit of any member".

6. Key issues, lessons learned, and recommendations

6.1 High level observations on the crisis response

6.1.1 Structural constraints on the EBRD’s crisis response

As an investment project lender and private equity investor focused on transition impact, the Bank lacked experience in crisis response. Its greatest achievement in the crisis response was to keep on doing project work within its mandate, at even higher volume levels, when other investors had heavily retrenched. Many of the CR projects were timely and of decisive importance to clients.

Unlike the IMF, however, the EBRD had no vocation and few skills, practices or instruments that could be counted on as tested and proven effective for crisis response. The Bank had to improvise and rely on instruments that were designed to finance growth and transition, not crisis response. If it seemed likely that banks would need liquidity, SME and TFP credit lines might help. If firms and banks would suffer from capital shortfalls, they might need equity investment. In the event, demand for these instruments was mixed, while subordinated loans for banks enjoyed better acceptance. On the other hand, if lenders backed off from infrastructure projects, the Bank could step in, playing its accustomed project lending role with confidence.

Likewise, the Bank had to use existing practices and procedures, which had evolved over two decades to meet its ordinary operating needs. For example, it focused its resources in the 2009 business plan on the same broad sectors and country groupings used in the ordinary operating plans. With some exceptions, it did not focus on country level assessment and intervention, the preferred intervention level of the IMF. The Bank could not do more in a short span of time than to provisionally and imperfectly adapt its established ways to an emergency situation. This evaluation comes too early to comprehensively judge which instruments and approaches were the most effective responses to the crisis. Future project evaluation work, and a study focusing on the matured project level outcomes, could shed more light on which generic approaches might be counted on to perform well in a future crisis.

Where the Bank *could* respond was on a case-by-case basis to the specific needs of clients and to try to tailor solutions. That work would necessarily be slow and painstaking, given the constraints of sound banking. It might not feature in newspaper headlines. In many cases, the need might not be for new money that could count toward an annual business volume target. Instead, clients might need rescheduling and restructuring of existing obligations, such as in the FX swap line projects. It was not clear, *a priori*, that promising greater volume (which exceeded the then-binding capital constraints on the Bank) in the form of larger projects would result in greater effectiveness. Nor is it clear now.

Lesson learned:
The instruments, skills and staffing constraints on crisis response. While the EBRD can increase the average size of projects to show commitment to crisis response, more project evaluation data is needed to tell if project size was a decisive source of crisis impact. Programme size can help communication of commitment to and confidence in the region, as project size can show the same for a customer. But they also brought more risk. The EBRD may not be able to do more because it cannot expand, in the short run, its instruments, skills and staffing to design and implement more new projects that are more expertly responsive to crisis needs. Nor can it be confident that using ordinary instruments in extraordinary situations will produce hoped for results. Only a prolonged commitment to crisis response work could make progress in that direction. That would seem to be outside of the EBRD’s mandate and vocation.

Recommendation: The Bank should carefully review and consider the impacts of the crisis response on the Bank's portfolio, capital structure and operations. It could consider to what degree responding to a future call for crisis response should again be met with an increase in volume targets, average project size, and a flow of nominated crisis response projects. It could consider anchoring the Bank's response even more deeply and conservatively in the Bank's mandate and proven capacities. Future evaluations of the projects affected by the crisis, as well as the crisis response projects themselves, could provide input to the review.

6.1.2 Crisis response: How much does volume matter?

The Bank increased its volume target in 2009 and delivered 50 per cent more volume but not more projects than in 2008. Raising the volume target seems have been important, both *ex ante* and *ex post*, as a signal of responding to the G-20 declaration and of support to the region. This evaluation study assigns an important *communication* value to the increased ABV target. The larger projects that resulted made the EBRD's response more relevant to larger clients, especially in the FI sector and among some larger infrastructure clients.

But increased volume brought some increased costs in terms of the need to raise more capital and by raising the EBRD's exposure to certain vulnerable countries where the crisis is still unfolding. The EBRD beat its €7 billion volume target by the middle of 2009. Had it not received Board approval in late 2009 to sign more projects for another €1 billion above plan, the EBRD would have finished 2009 with greater volume but fewer projects than in 2008, perhaps 50 fewer projects.

The EBRD and other IFIs urged banks in the region to maintain their exposure to the region. The EBRD increased its exposure to the region in 2009. Many banks had to show forbearance to borrowers through "restructuring". During 2009, the Bank received net repayments (about €3.6 billion) from over a thousand borrowers, only some of which received new loans from the Bank during 2009. The CR projects reached a subset of the EBRD's existing customers.

Recommendation: **Alternatives to increased volume in crisis response: the role of restructuring**. Rescheduling and restructuring is a valuable form of crisis response and one that falls squarely within the experience of banking professionals. In lieu of providing new money to repay old, which carries a number of risks, the bank can renegotiate the terms of the old money. When the Bank soundly renegotiates the terms of a loan in response to the urgent crisis issues, that action can be equally responsive to the crisis. Future crisis response plans could consider the role of forbearance and restructuring, which could benefit many more of the EBRD's customers than new projects can reach. The Bank could report such restructurings as part of its crisis response.

6.1.3 Crisis response preparedness

In 2008, the EBRD did not have in place a crisis strategy; the Bank had to prepare a strategy simultaneously with the economic deterioration. Having a strategy in advance of future crises would enable the Bank to respond more quickly. Can the EBRD draw lessons from the crisis of 2008-09 that may help it formulate a strategy for future crises?

Each crisis seems to have unique features but also shares some features with prior crises. In developing a strategy for dealing with future crises, it is useful to think in probabilistic terms; nothing is certain, but some things are more probable than others. For example, while crises of the breadth and depth of 2008-09 are unlikely events, smaller crises involving fewer countries are considerably more common. That eastern Europe could remain decoupled from events in western Europe was possible, but unlikely given the region's strong trade ties, financial involvement and remittance patterns. It may be possible to see trade shocks coming, but financial markets tend to freeze suddenly and with little warning. As a result, the timing and the depth of crises are difficult to predict in advance, as proved true in 2008-09. But given a crisis, IFIs are likely to be better at forecasting which countries will be most impacted, namely those countries that have already been identified as having serious vulnerabilities. There also seems to be a common sectoral pattern; namely, financial institutions and SMEs are most likely to be hard hit by crisis.

Experiences in 2009 suggest the EBRD can develop some strategic principles for dealing with crisis, such as the usefulness of maintaining contacts with other IFIs in order to act jointly and the need to strengthen and generalise the commitments of parent banks (and their supervisors) to maintain commitments to daughter banks in host countries. The EBRD can build on its 2008-09 crisis strategy of support for regional banks lacking a parent bank.

But the EBRD operates at a project level and given the many uncertainties surrounding a crisis cannot really develop projects *ex ante* but must respond to specific conditions *ex post*. Because the timing of a liquidity crisis is difficult to predict, a fast response requires some form of standby arrangement. Such arrangements can be considered but, given that crises are relatively rare events, having standby projects ready to implement may prove to be neither practical nor cost-effective. Very possibly the EBRD's response to future crises, as in 2008-09, will be primarily to mitigate adverse consequences brought on by the liquidity and trade shocks and to support recovery.

Lesson learned: **The need for the Bank to be ready to respond to a crisis**. While it is true that crisis response was not part of the EBRD's mandate, the Bank decided nevertheless to increase output and incur large risks to respond to the crisis. Therefore, the Bank should retain this lesson and maintain an updated strategy and capability to respond to future crisis.

Recommendation: **Maintaining crisis response readiness.** Staying ready to respond to a crisis could reduce the scope for debate about the role of the Bank in a crisis, and could allow for even quicker and more effective response in future than was achieved in 2008-09. A management committee, comprising staff from Banking, Finance and Risk Management, could lead periodic exercises in reviewing crisis scenarios and updating the Board on the Bank's capacities (capital, human resources, and so on) to respond to a financial or other crisis impacting on the Bank's countries and portfolio. Annual business planning could identify and reserve capital and liquidity for an increase in risk and volume in response to crisis, if they are again to be parts of the crisis response.

6.2 The Bank's response to capital strength and country-level issues pre- and post-crisis

6.2.1 Maintaining capital strength before and during the crisis

When the crisis deepened in late 2008, the EBRD's capital was buffeted by sharp adjustments to the expected value of the banking and treasury portfolios. The Bank looked unable to comply with its established capital rules and increase its ABV target for a crisis response at the same time. It had to change the rules during the stress of the crisis period, and then had to request a capital increase. One of the sources of negative capital impact was a lack of country risk diversification due to large portfolio concentrations in two countries.

Lesson earned: Clarity about the capital impacts of events. Changes to planned and actual business performance have impact on the Bank's capital utilisation. Measuring the capital impact requires a constant capital rule. It is important to present the changing performance, whether planned or actual, against the background of a constant capital rule. When proposing to change the capital rule, it is important to show the effect of the change by illustrating the application of the new and old rules side by side, both for planning purposes, and to measure actual compliance with both the prevailing and proposed capital rule. This is to reduce the risk of losing direction for lack of a stable capital benchmark. It is understood that MDBs must not shy away from risk; however, it is essential that the risks be laid out consistently for decision-makers for the sake of the EBRD's sound banking mandate.

6.2.2 The crisis revealed unexpected differences among COOs

It is worth noting that the crisis threw the strengths and weaknesses of countries into vivid relief. Among other things, it showed that actual GDP performance varied more among countries than forecast. The EBRD's standard November 2008 forecasts for 2009 GDP differed greatly from the realised regional average and even more from the actual results by country (Table 18). The deviation from forecast was greater than five percentage points in 22 cases, and greater than 10 percentage points in 10 cases.

Table 18:

	2009 Forecast	2009 Actual
Regional average	4.6%	-4.1%
Standard deviation	3.4%	7.0%
Maximum growth	15%	9%
Minimum growth	-1%	-18%
Range max to min	16%	27%

The comparison reveals how widely results can vary from forecast, not only on average but for each country, and how differently the countries actually performed compared among themselves.

Lessons earned:

Transition differentiated the vulnerabilities of countries. The EBRD's COOs have diverged greatly in their capacity and performance during the pre-crisis transition years. The 2008-09 crisis tested these capacities, made differences more visible among the COOs, and showed which ones could weather the crisis better than others. It also showed that room existed to more fully appreciate and respond to the differing vulnerabilities to event risk at the country level.

Forecasting is more art than science. It is an art that failed to provide much useful information about future developments. Indeed, forecasts mainly predicted that the future would continue much like the past. Scenario analysis can provide more value, especially through stress testing of country capacity to weather shocks. Even then, what is most plain from the crisis is how utterly unexpected the outcomes can be. The crisis confirmed an age-old lesson: expect the unexpected. This is why it is important to assess country resilience and vulnerability to unlikely events that cannot be forecast, and to give due weight to unexpected downside scenarios. It is difficult for one department to supply both vulnerability analyses and point forecasts of equal quality and effectiveness. Vulnerability analysis is a matter for risk management, which should not be affected in its managerial effectiveness by the constraints placed on economic forecasting.

Recommendation: **Strengthening country resilience to event risk.** It is important for the Bank to study what caused some countries to perform better than others, to adjust its country vulnerability assessments to take those factors into account, and to explore how country strategies, business plans, and projects could become more consistent with reducing the vulnerability of COOs to event risk.

6.2.3 The crisis revealed difficulties in early detection of country-level vulnerabilities

During the pre-crisis periods, some large investors in the region seem to have assumed that the region might be "decoupled" and effectively immune to contagion, that the region was more robust than other regions, and that it might weather contagion relatively well. These incorrect assumptions detracted from taking a more balanced view, earlier on, of vulnerabilities to unexpected events and to integrating them into economic forecasts, country risk limits, business plans, and realised country exposure levels. One consequence was that during the CRR-3 period some large investors, including the Bank due to its mandate, built up large concentrations of risk exposure in some countries, and to an over-extended banking sector across the region, and kept building the concentrations during the period of rising instability.

As part of the fieldwork for this study, the Study Team informed itself in detail about the Bank's approach to assessing country risk and managing the build-up of country risk concentrations. The Study Team has shared with management the analysis and conclusions that point to opportunities to improve the effectiveness of the EBRD's country vulnerability assessments and exposure management, giving it more detectable impact on business planning decisions and realised portfolio exposure.

Lesson learned:

Country-level developments in the crisis. The crisis brought country-level vulnerabilities to event risk into the limelight and the EBRD's vulnerability to them. The fact that the unprecedented international action mitigated the crisis impact on the EBRD does not mean that the EBRD was well positioned for the crisis. The crisis tested the adequacy and responsiveness of the EBRD's approaches to country risk assessment, business planning, and management of country risk concentrations. It also revealed room to improve country-level strategic, project and risk management work by the EBRD.

Recommendation: **Focusing on vulnerability to event risk and actively limiting exposure to country and sector concentrations.** The EBRD could improve its assessment of country risk and consider approaches to help to focus decisions more proactively on country vulnerabilities, by classifying countries into event risk vulnerability categories, and to actively manage business planning and country risk exposure concentrations accordingly. For business planning purposes, countries could be ranked into different classes of vulnerability irrespective of their country credit risk ratings. The Study Team recommends that the Bank review the effectiveness of its country risk management processes as tools not only for formal reporting purposes, but for alerting decision-makers to key country-level vulnerabilities leading to detectable impact on business plans and volume targets.

6.2.4 Business cycle and credit risk

The study chose to look at the vintages to test a hypothesis: that the projects originated during the period of rising instability would show a worse credit performance, or be more vulnerable to deterioration. Reason being that, as the objective risks increased but were not perceived during the origination process, the risks of the projects could be underestimated. This resembles the problem of investing equity at the peak of the market. Timing in the cycle is important. Projects signed towards the end of the credit cycle often suffer greater projected credit deterioration.

Lesson learned:

The importance of reacting to rising credit risk during the business cycle. When the credit cycle matures, as signalled by rising risks in the market (rising pricing, real estate bubbles, years of buoyant credit expansion), it is prudent to tighten credit underwriting standards as a matter of sound banking. For sound banking, it can be important to slow growth overall, and especially in more vulnerable countries and sectors, to reduce risk of loss, and to preserve capital and operational capacity, in order to avoid unplanned capital calls. Management and the Board can review alternative business plan scenarios and the trade-offs between degrees of sound banking and country-level volume targets for transition impact and other strategic purposes.

6.3 Targeted observations on the Bank's crisis response

6.3.1 Bailout versus work-out

There is a fundamental concern in designing a crisis strategy, namely the trade-off between the bailout on the one hand and the work-out on the other. Because of the dynamic nature of crisis, if intervention does not come quickly, initial problems can spread and deepen both at the micro/enterprise and the macro/national level, and both domestically and internationally. Hence governments and international financial institutions have in recent crises opted for a policy of quick and widespread intervention.

But this approach has its costs. In the early stages of crisis it is difficult and perhaps impossible to distinguish between enterprises and financial institutions that are insolvent from those that are merely illiquid. At the enterprise level quick and widespread interventions brings support both to illiquid firms that should survive and insolvent firms that should not. And when the support comes from the IFIs at the national level, it enables governments to continue policies and practices that should indeed be changed. Bailouts come with some strings attached but usually not enough to lead to serious change in policies and practices. Hence there is a trade-off between the harsh dynamics of crises and the stultifying affects of bailouts. Not only do the two have different dynamics, they distribute the costs of crisis quite differently.

Lesson learned:

Bailout versus work-out in crisis response. During 2009, the policy preference seemed to lie in favour of quick and widespread intervention both at the national and international level. Fear of contagion and deepening crisis led policy-makers post-Lehman to seek to stabilise the financial system with minimal cost to creditors, in order to avoid worst-case scenarios. Future strategy could aim to balance the two approaches of bailout versus work-out.

6.3.2 Issue: Mitigating crisis impacts on banks and SMEs

The two sectors most likely to need support are financial institutions and SMEs. In the aftermath of crisis, banks tend to be risk averse and lending to SMEs considered too risky even when banks no longer have liquidity problems. This has proved true in the present crisis: in the region, lending to SMEs remains depressed two years after the crisis.

Lessons learned:

Supporting SMEs through risk sharing. For the EBRD to simply extend lines of credit to financial intermediaries for SME financing may not induce sufficient bank lending. Banks need to be both able and willing to lend, and they proved unwilling to lend to SMEs due to the higher perceived risk. The EBRD should consider developing instruments that share repayment risk with institutional lenders, perhaps in teamwork with the EIF, the EIB's risk sharing institution. That would increase the EBRD's own risk, but the EBRD may be in a better position to bear the risk than either the SMEs or the local financial institutions.

Capital support for banks. Financial institutions frequently emerge from crisis with impaired capital. The EBRD's ability and willingness in 2009 to provide capital, both equity and subordinated debt to banks without parents, was useful. Even the offer of capital support without any disbursement can be reassuring to markets. Some element of capital support should certainly be included in the EBRD's crisis response toolkit. Subordinated debt with equity kickers would balance risk better than straight equity in many cases.

6.3.3 The speed of delivery of CR projects. The slower than expected delivery of CR projects, noted in various 2009 management reports to the Board, is understandable. Initially the EBRD expected that most of the CR projects would go to existing customers. In principle, such operations could be done more quickly due to familiarity. As it turned out, many of the loans also went to customers new to the EBRD.[33] In all cases, whether new or existing customer, the crisis deepened the required due diligence process, delaying both commitments and disbursements. In some countries, Hungary for example, by the time that the lines of credit operations became available, they were no longer attractive to the banks and, at mid-2010, had not been disbursed. The same is true for other sectors in Hungary. During the months of sharp economic decline, namely between the fourth quarter of 2008 and the end of the second quarter of 2009, less than €1 billion of the EBRD's crisis-related funds were disbursed. Hence most of the EBRD funds were available for the recovery process but little funding from the EBRD was available to relieve the credit crunch.

Lesson learned:

Recovery versus liquidity projects. In a liquidity crisis, speed of financing is of utmost importance; if you are slow to deliver promised funding, effectiveness for liquidity purposes goes down. If the EBRD is to do liquidity crisis financing (as distinct from "recovery" financing) in the future, it will need to consider how to speed up the delivery of funds, possibly through the development of new products. The experience of the 2009 crisis suggests that the EBRD's mandate and structure are better adapted to meeting recovery needs than immediate liquidity needs.

6.3.4 Crisis response project eligibility criteria

The study found that the ORC's CR project criteria better served the need to report crisis response activities than to guide staff in the preparation of projects that could meet urgent crisis needs. Indeed, it would be unreasonable to think that the Bank could quickly codify and institute procedures for designing and screening projects to meet crisis response needs. By comparison, it has taken the Bank years to define its transition impact objectives, monitoring, and evaluation systems. It could hardly hope to create a robust approach to designing and screening crisis response projects in a matter of weeks. That being said, there are some lessons learned and recommendations that are relevant.

[33] The Study Team could not ascertain with greater precision how many projects were for new or existing clients.

Lesson learned:

Crisis response projects and transparency of objectives. Criteria that label projects as responding to crisis conditions could define responsiveness to a shortfall in liquidity, capital, or cash flow caused by the crisis. The approval documents for such projects could cite the eligibility criteria and show how the project will address the urgent symptoms of the crisis.

6.3.5 Issue: Pricing of crisis response interventions

In 2009 some borrowers considered the rates charged by the EBRD to be too high. Not only was the initial rate high, but the rates failed to decline as the market's perception of an appropriate risk premium declined, even before the loans could be disbursed. The Bank needs to consider how to set an appropriate risk premium in a very dynamic situation. For example, is the credit default swap rate the appropriate benchmark for risk pricing of loan's with longer maturities? Second, how can the EBRD incorporate into its pricing mechanism the rapidly changing perception of risk in order for its pricing to remain in sync with the market?

On the other hand, perceived risk was high. If clients signed loans and did not draw them down later due to pricing, either they did not need the funding or found other sources on more attractive terms. Still, a more flexible approach to pricing, both up and downwards, might be appropriate in a crisis situation.

Lesson learned:

Pricing of crisis response interventions. The Bank could consider ways to make loan pricing both higher when granted, in light of high risks, and lower once risks recede. One element of a crisis response strategy could be a more flexible interest margin rate regime that would adapt rapidly to changing market conditions. This could help to increase disbursements and reduce prepayments, without damaging the EBRD's additionality. This is not easily done, but worth further consideration.

6.3.6 Deepening the supply of local currency financing

Regional differences in interest rates had led to foreign exchange denominated borrowing by unhedged borrowers. This is an entrenched problem in emerging markets. Various suggestions have been made to reduce this risk, but careful comparisons of the cost of loans in domestic and foreign currencies have not been made. Currency devaluations in Hungary, Poland, Kazakhstan, Ukraine and Russia did negatively impact many unhedged borrowers.

Countries within the region need to rebalance their growth and funding models to reduce excessive reliance on foreign savings and funding. It will be important to address this issue in tandem with the development of long-term local currency funding and capital markets. This in turn will depend on more stable macroeconomic conditions, low inflation and stronger regulatory and legal frameworks. The Czech Republic stands out for its deeper local currency market and lower exposure during the crisis to FX risk on unhedged borrowers. Without better macro policies and structural reforms to encourage domestic savings, this vulnerability will remain.

Lesson learned:

The role of the EBRD in developing local currency markets. The institutions with macro responsibilities (the IMF, EC, and the ECB) are better placed to encourage reform than the multi-national development banks that cannot address the structural and policy-induced incentives for foreign exchange borrowing. The EBRD can help, as it tries to do, by offering loans denominated in local currency and support to develop local capital markets. In particular, the EBRD's FI sector investments could focus on developing the capacity of banks to gather local deposits and manage liquidity risks as the main source of local currency loans.

Appendix 1:

Increasing margins on EBRD loans

In response to worsening risk situations, the Bank was able to raise the interest margins applied to its operations. Between the second quarter of 2008 and the fourth quarter of 2009, the weighted average interest margin applied increased from 273 bps to 522 bps. The increase was due not so much to higher risk ratings of individual projects (and subsequently higher weighted risk of the new portfolio), but to a general perception of increased market risk.

As can be seen in Chart 1 below, the trend of increase in the risk rating of new projects was pretty moderate. Between the second quarter of 2008 and the fourth quarter of 2009, the average weighted risk increased by only one-fifth of a notch, from 5.71 to 5.91, while the interest margin was increased by 249 bps. Also, different increases in margins between regions despite insignificant differences in increases of risk ratings (for example, in Russia, margins increased by 243 bps in the period considered, despite a decrease in the weighted portfolio risk), seems to support this view.

Margins started to increase from the third quarter of 2007 but the most significant increase took place in the fourth quarter of 2008, when weighted margins applied increased by 102 bps with respect to the previous quarter. Overall, average weighted margins went from 171 bps in the second quarter of 2007 to a peak at 522 bps in the fourth quarter of 2009.

Chart 1: Pricing of new signing – quarterly evolution

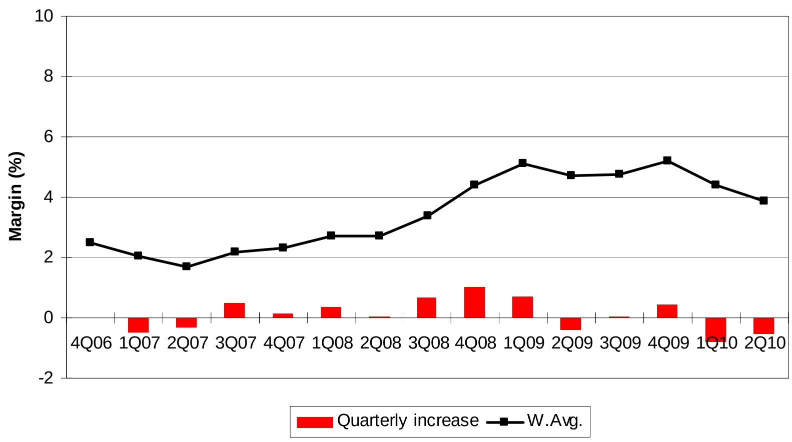
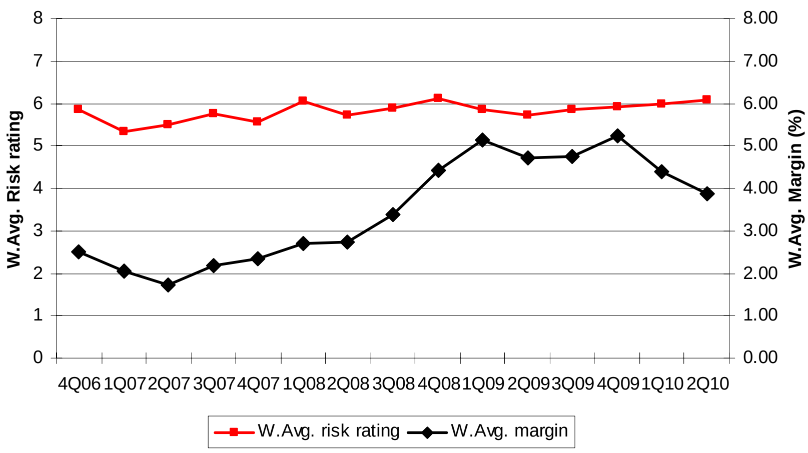
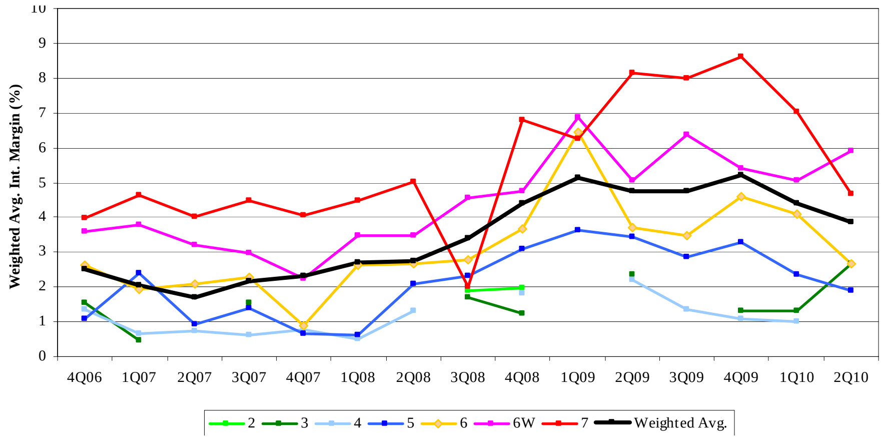


Chart 2: Pricing of new signings vs increase in risk rating



The increase in margins took place in all risk rating brackets, but more significantly in the higher risk (6, 6W, 7) projects (see Chart 3 below).

Chart 3: Pricing of new signings – by risk level

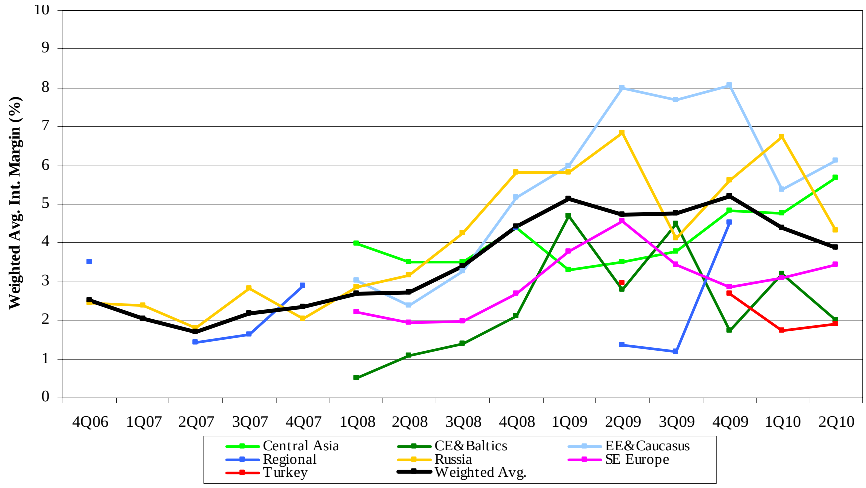


There were some significant differences between regions. Considering the period of the second quarter of 2008 to fourth quarter of 2009, the increase in margins in the eastern Europe and Caucasus region was of 570 bps and in Russia the increase was of 243 bps.

In the case of eastern Europe and Caucasus, the increase seems to keep some correlation with the higher risk of the new projects, as the increase in risk rating in the same period was of more than one notch (1.19), the largest among the regions, compared with overall average increase in risk rating of 0.20. In the case of Russia, however, the increase seems to be less correlated with the increase in the risk of new projects, as over the same period the weighted average risk rating in Russia actually decreased by -0.22. This seems to indicate that the higher pricing of projects in Russia was not a result of higher risk rating of the individual projects but of higher perceived market risk.

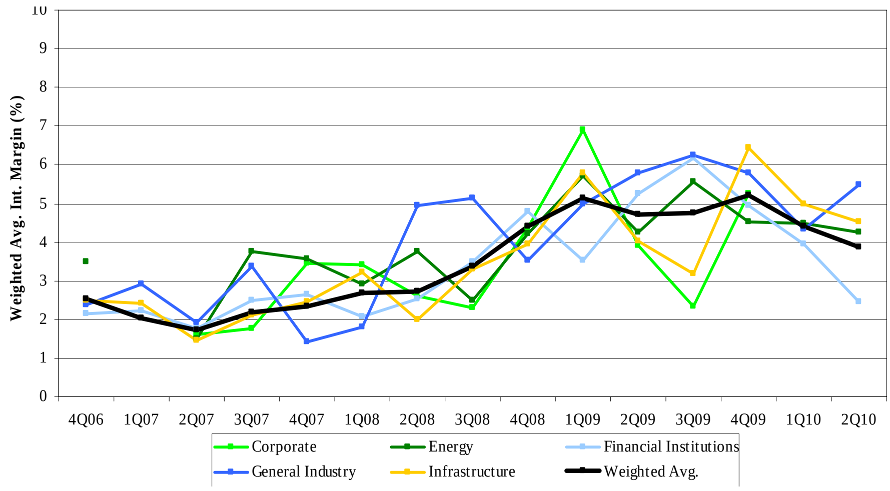
In south-eastern Europe, margins increased by 99 bps while increase in risk rating was actually negative (-0.82). This seems to support the idea that the increase in margins was not only related to increase in projects risk ratings but to general perceived market risk.

Chart 4: Pricing of new signings – by region



There were also some differences in the evolution of margins between sectors but the differences seem less significant and the general trend (if quarterly variations are eliminated) seems less erratic. This is consistent with the view that higher margins were associated to higher markets risk, as projects of different sectors are spread over all regions (although with some higher concentrations of certain sectors in specific regions), thus different risk ratings for different regions should not have an impact on risk ratings of different sectors.

Chart 5: Price of new signings – by sector



Appendix 2

Further analysis of initial conditions during the three periods

1. Initial conditions and vulnerabilities in the pre-crisis period (2006 to August 2007)

1.1. Description at region level

Both the 2006 Transition Report published in November 2006 and the October 2006 Quarterly Vulnerability Assessment of EBRD countries of operations (written by OCE economists and political counsellors and referred hereafter as QVA) indicated an essentially benign scenario in the world economy, with international growth in 2007 moderating from 2006 levels but remaining above potential. The slowing was due to inflationary pressures intensifying and monetary conditions being gradually tightened. Risks to this benign scenario were identified as: an abrupt tightening in key policy interest rates in G-3 countries; supply disruptions in oil markets; and a hard landing in China that would negatively impact commodity markets.

Transition countries were showing robust growth in 2006, with the Bank forecasting weighted average growth for the region of 6.2 per cent for the year (the weights used are EBRD estimates of nominal dollar-GDP lagged by one year). The Report noted that this growth was driven by strong domestic demand spurred on by growth in real terms of credit and wages. Inflation was under upward pressure throughout the region. Countries were incurring large current account deficits, requiring substantial capital inflows to finance.

For comparison purposes with other forecasts, the Bank's forecast unweighted average growth in the region for 2006 in the Transition Report of 2006 was 7.0 per cent. This compared with 7.1 per cent growth forecast by the IMF, 5.4 per cent by the OECD and 5.8 per cent by the European Union. The average of all included forecasts (official and private) was 7.2 per cent. The OECD's forecast was the lowest of all included in the survey, with the Bank just below the average.

For 2007, the Transition Report of 2006 forecast weighted average growth in the region of 5.8 per cent, a reduction in growth from the forecast for 2006 of 0.4 per cent. On an unweighted basis, the Bank's forecast was 6.5 per cent, a reduction of 0.5 per cent from the 2006 forecast. All other forecasts surveyed also forecast weaker growth in the region in 2007 from the previous year. The IMF forecast 6.4 per cent for 2007, the OECD 5.1 per cent and the European Union 5.6 per cent. The average of all included forecasts (official and private) was 6.5 per cent. Again, the OECD's forecast was the lowest of all included in the survey, with the Bank right on the average.

	2006		**2007**	
EBRD	**Forecast (1)**	**Actual (2)**	**Forecast (1)**	**Actual (2)**
Weighted average growth in region	6.2%	7.2%	5.8%	7.0%

1. Transition Report 2006
2. Transition Report 2009

In the event, as shown in the table above, actual economic conditions in the region turned out to be more robust in 2006 and, especially, in 2007 than forecast in the Transition Report of 2006.

Policy-wise, central banks were coping with problems related to the rapid development of their financial sectors and rising inflation. Fiscal policy was described as generally too loose in most countries to stem domestic demand growth effectively.

1.2. EBRD strategies and risk assessments

Notwithstanding this benign economic environment, the October 2006 QVA identified various countries considered to be particularly exposed to external shocks, with some vulnerabilities and, more significantly, some serious vulnerabilities.

# of vulnerabilities	Serious	Some
Kyrgyz	5	3
Moldova	5	3
Georgia	4	4
Tajikistan	4	4
Hungary	4	3
Ukraine	4	3
Uzbekistan	4	1
Mongolia	4	1
Armenia	3	5
Albania	3	4
Belarus	3	4
Bosnia/Herz.	3	3
Serbia	3	3
Latvia	1	6
Lithuania	1	6
Croatia	1	6

Even with considerable attention being devoted to noting vulnerabilities in a not insignificant number of countries, particularly those deemed to have serious vulnerabilities, Hungary was the only country to have its risk rating downgraded by the Bank in the pre-crisis period up to August 2007 (Hungary's country risk rating was downgraded in January 2007).

From March 2006 to September 2007, Portfolio Operations exposure rose from €4,687 million to €5,526 million in the countries with vulnerabilities noted above, a rise of 17.9 per cent. Portfolio Operations exposure in countries of operations other than the vulnerable countries rose during the same period from €11,715 million to €12,547 million, a rise of 7.1 per cent.

The Bank operates a system of Country Credit Review Triggers that are a function of the country risk rating, the size of the country's economy (GDP) and the Bank's paid-in capital and reserves. The stated purpose of the triggers is "to ensure appropriate risk diversification within the Bank's portfolio and by doing so, (to) reduce the likelihood that adverse economic and political developments in a single country of operations would negatively affect the Bank's profitability or shareholders' equity".

These triggers rise from 3 per cent of the Bank's paid-in capital and reserves for a 'small' country risk rated 7- to the full 90 per cent for a 'very large' country risk rated 3+. The Bank states that its Country Credit Review Triggers are a risk management tool and not investment limits or targets.

In the first quarter of 2006, the Bank's total Portfolio Operations amounted to €16,402 million or 24.5 per cent of the total of all countries' triggers of €66,822 million. By the third quarter of 2007, the Bank's total portfolio grew by 10.2 per cent to €18,073, the triggers total grew by 36.9 per cent to €91,512 million and, thus, the share of total Portfolio Operations of the triggers total fell to 17.9 per cent.

The triggers total changed significantly during this period as did the individual country trigger levels, which, in the third quarter of 2007, ranged from a low of €700 million to a high of €6,642 million. At the same time, Portfolio Operations in a country as a share of individual country triggers ranged from a low of 0.3 per cent to a high of 80.7 per cent. These are large changes whose effects on risk management decisions are unclear.

2 Vulnerabilities in the period of increasing instability (August 2007 to third quarter 2008)

2.l. Description at region level

The Transition Report of 2007 (published in November 2009 estimated that the region's weighted average real GDP would rise by 7.0 per cent in 2007. But, increasingly through this period, the OCE was describing economic conditions more negatively during this period. The November 2007 QVA was titled "Growing Financing Needs in Unsettled Capital Markets" while the May 2008 QVA was even more pessimistic, titled "Implications of the Slowdown in International Growth and Credit Squeeze".

The region continued to grow strongly through the first half of 2008 but signs of a slow-down became clear in the third quarter of the year. The annual weighted average 2008 growth forecast for the region in the 2007 Transition Report of 6.1 per cent was thus lower than for its 2007 growth forecast. Growth was expected to slow but still to remain respectable. This forecast could not have been called a forecast of increasing instability.

For comparison purposes with other forecasts, the forecast unweighted average growth in the transition economies in 2007 in the Transition Report for 2007 was 7.8 per cent. This compares to 8.0 per cent by the IMF, 6.0 per cent by the OECD and 6.2 per cent by the European Union. The average of all included forecasts (official and private) was 7.9 per cent. The OECD and European Union were much more bearish about 2007, while the Bank was about on the average.

The Bank's unweighted average forecast for the region for 2008 was 7.1 per cent. All other forecasts surveyed also forecast weaker growth in the region in 2008 from the previous year. The IMF forecast 7.0 per cent for 2008, the OECD 5.4 per cent and the European Union 5.7 per cent. The average of all included forecasts (official and private) was 6.9 per cent. The OECD and the European Union continued to be more pessimistic than other forecasters, with the Bank's forecast just above the average.

As seen in the table below, as it turned out even the OECD and European Union were not pessimistic enough in their forecasts for 2008. All other forecasters, including the Bank, were very badly off the mark.

For informational purposes:

	2007		**2008**	
EBRD	**Forecast (1)**	**Actual (2)**	**Forecast (1)**	**Estimate (2)**
Weighted average growth in region	7.0%	7.0%	6.1%	4.2%

1. Transition Report 2007
2. Transition Report 2009

The 2007 Transition Report noted that pressures on economies in the region were becoming apparent in wage and price inflation and rising external imbalances. The competitiveness of the Baltic states and several countries in south-eastern Europe was at risk. Monetary policy was being gradually tightened but remained loose in some countries. Fiscal policy was, in many countries, fuelling already-heated economies. The Report noted that problems in the US sub-prime mortgage market from August 2007 were expected to increase the cost of external finance and/or decrease its availability. Thus, the Bank correctly noted that some countries with high external funding needs could experience stronger economic downturns than forecast.

2.2 EBRD strategies and risk assessments

Countries highlighted for concern during this period in the Bank's QVAs were those countries with regular exposure to international capital markets or where important developments in country risk were observed. The list of vulnerable countries was pared down from 16 countries to 13 countries, with five new countries added (Bulgaria, Estonia, Kazakhstan, Romania and Russia) and eight countries removed from the list (Albania, Armenia, Bosnia and Herzegovina, Georgia, Kyrgyz Republic, Moldova, Mongolia and Uzbekistan).

The countries that were removed had not reduced their underlying vulnerabilities so much as they were thought to be less vulnerable because of their relative lack of financial integration with international capital markets. Notwithstanding this perception of reduced vulnerability, Georgia was downgraded in August 2008. Tajikistan, which remained on the list, had its country risk rating downgraded during this period.

The countries that were added to the list were correctly thought to be more vulnerable because of their high degree of financial integration with international capital markets. Of the countries added to the list, only Kazakhstan's country risk rating was downgraded.

Vulnerable countries	Vulnerabilities
Hungary	Fiscal deficit and debt, external financing, high inflation
Latvia	External financing, credit growth, high inflation, retail FX loans
Lithuania	External financing, credit growth, high inflation, retail FX loans
Estonia	External financing, credit growth, high inflation, retail FX loans
Bulgaria	External financing, credit growth, high inflation
Croatia	Extremely high external debt, euro substitution
Romania	Credit growth, external financing, high inflation
Serbia	External financing, high inflation, political uncertainty
Belarus	External financing, rising inflation
Kazakhstan	Locked out of international capital markets, bank credit quality
Russia	High inflation, political uncertainty, commodity prices, capital flows
Tajikistan	External financing, high inflation, IMF programme problems
Ukraine	Demand pressures, hyrvnia peg, high inflation, external liquidity

From September 2007 to September 2008, Portfolio Operations exposure rose from €11,160 million to €12,936 million in the countries with vulnerabilities noted above, a rise of 15.9 per cent. Portfolio Operations exposure in countries of operations other than the vulnerable countries rose during the same period from €6,913 million to €7,857 million, a rise of 13.7 per cent. Bank exposure in vulnerable countries in this increasing instability period, as in the pre-crisis period, rose more rapidly than in the Bank’s other countries of operations.

2.3. Findings and conclusions

The Bank's growth forecasts for the region are typically the same as the consensus forecasts year-after-year. Thus, the Bank and most other forecasters missed the period of increasing instability in their economic forecasts during this period. Thus, the forecasts gave little to no forewarning to Bank management, shareholders or customers of the possibility of anything like the extreme events that were about to unfold in late 2008, despite the large vulnerabilities identified in the QVAs during this period.

Indeed, as late as the Transition Report of 2008 (distributed in November 2008), the Bank was forecasting only a slow-down in the weighted average growth rate for the region to a still positive 3.5 per cent in 2009. For information, in the Transition Report of 2009, as noted below, the Bank revised that projection down by an incredible 9.7 percentage points to a decline in output of 6.2 per cent.

3 The crisis response period

3.1 Description at region level

The Transition Report of 2008 (published in November 2008) noted that as the global financial system experienced an unprecedented period of turbulence, output in the advanced countries was expected to remain flat or fall during the rest of 2008 and 2009. In turn, after years of buoyant growth and progress in reform, the Report indicated that the region had not faced a more uncertain future since the Russian crisis of 1998. The Report also noted that the risk of a more severe slow-down than projected for the region was much higher than a year ago. Nevertheless, the Report then went on to state that there were several factors that mitigated both the risks that this more negative scenario would occur and its consequences if it did occur.

Thus, going into the crisis response period, the Bank was forecasting an important slow-down in the region's economic activity, but noted that it did not think a more negative scenario would ensue and, even if it did, it would not be that painful for the region.

As noted above, however, the Transition Report of 2009 indicated this was not at all the case as a much more negative scenario occurred in the region, with significant consequences for all countries. By the time of the publication of the Transition Report of 2009 in October of that year, the Bank and all other forecasters, both official and private, had revised downwards their 2009 output forecasts for the region into deep negative territory.

For informational purposes:

	2008		**2009**	
EBRD	**Forecast (1)**	**Estimate (2)**	**Forecast (1)**	**Project (2)**
Weighted average growth in region	6.3%	4.2%	3.5%	-6.2%

1. Transition Report 2008
2. Transition Report 2009

3.2 EBRD strategies and risk assessments

Starting in November 2008 and through 2009, many country risk ratings were changed at the Bank, mainly downgrades. Until late in 2009, these rating changes were derived from the then-existing system of country risk rating. Fifteen downgrades occurred during this period prior to a change in the country risk rating system.

Risk rating changes

Ukraine	4 downgrades = 5 risk classes
Latvia	2 downgrades = 6 risk classes
Russia	2 downgrades = 2 risk classes
Estonia	1 downgrade = 3 risk classes
Hungary	1 downgrade = 2 risk classes
Kazakhstan	1 downgrade = 2 risk classes
Romania	1 downgrade = 1 risk class
Lithuania	1 downgrade = 1 risk class
Poland	1 downgrade = 1 risk class
Bulgaria	1 downgrade = 1 risk class

It is noteworthy that Ukraine was upgraded on 11 December 2009, 14 days after its previous downgrading, both occurring under the previous country risk rating system.

Portfolio Operations*

	3Q2008	4Q2009	% change
Ukraine	2,092	2,841	+35.8
Latvia	40	121	+202.5
Russia	6,013	6,824	+13.5
Estonia	57	28	-50.9
Hungary	402	902	+124.4
Kazakhstan	1,174	1,264	+7.7
Romania	1,548	2,078	+34.2
Lithuania	120	123	+2.5
Poland	1,047	1,172	+11.9
Bulgaria	621	818	+31.7
Total	13,114	16,171	+23.3

*Millions of euros

The above countries, downgraded between 3Q2008 and the end of 2009, were responsible for €3,057 million of the increase in Portfolio Operations of the Bank during this same period or almost two-thirds (63.0 per cent) of the increase for all countries of operations.

Perhaps more significantly, in the Bank’s Operational Response to the Crisis, these same countries represented 75.1 per cent of the Bank’s total signed and pipeline financing of the response programme. Ukraine, Russia and Latvia registered 13 downgrades among them in their Bank's country risk ratings in 2009 before the new country risk rating system came into effect. In the event, these three countries alone received 47.4 per cent of the signed and pipeline financing of the programme.

In December 2009, management made improvements to the country risk rating that led to changes in some country risk ratings. The new country risk rating system first calculates for each country separate ratings of macro-financial risks, business environmental risks and political risks. The Bank explained the purpose behind the three new ratings "is to provide guidance to Risk Management and Banking when assessing projects and improve internal understanding of the environment in which EBRD transactions are conducted". These three ratings are then aggregated into one country risk rating.

Seven country risk ratings were changed in December (four upgrades and three downgrades) to bring differences between ratings derived under the previous system into line with ratings derived under the new system.

Belarus	Upgraded
Georgia	Upgraded
FYR Macedonia	Upgraded
Poland	Upgraded
Lithuania	Downgraded
Montenegro	Downgraded
Slovenia	Downgraded

3.3 Conclusions

During the crisis response period, as noted above, the Bank downgraded countries' risk ratings 18 times. It also upgraded countries' risk ratings six times.

- Almost 50 per cent of the Crisis Response went to the three countries of operations with the most country credit risk downgrades: Ukraine, with four downgrades by the Bank from late 2008 to the end of 2009; Latvia, with two downgrades; and Russia, with two downgrades.
- Within all the countries that were downgraded in this period, the disparity in the growth of Portfolio Operations among countries is very wide, from growth of over 200 per cent in Latvia to only 2.5 per cent in Lithuania during the same period. Both countries had been downgraded by the Bank.

In summary, changes in the Bank's country risk ratings during the crisis response period (under both the former country credit risk rating system and the improved country risk rating system introduced at the end of 2009) appear mainly to have been backward-looking, to catch up with events, rather than forward-looking to anticipate events. As noted earlier, the country risk triggers ranged widely as time moved forward. They proved to be an unstable compass to steer by. It is not surprising that their effects on risk management decisions are hard to detect. The triggers seem to be more a reporting instrument of risk incurred than an active risk management tool that would have detectable effects on realised portfolio exposures.

4.0 An early warning approach to country vulnerability to event risk

The Study Team reviewed some aspects of country vulnerability analysis, which resulted in, among other things, a set of country vulnerability indicators using a colour-coded ranking system whose results are illustrated in Table 1. Green means relatively low vulnerability, yellow means rising instability, orange means unstable, and red means crisis.

Table 1. Vulnerability to event risk

	2004	2005	2006	2007	2008	2009
D / F / G						
Country						
Albania	2 / 2 / 6	2 / 2 / 6	3 / 2 / 6	3 / 2 / 6	3 / 2 / 5	2 / 2 / NA
Armenia	0 / 2 / 4	0 / 2 / 4	0 / 2 / 5	0 / 3 / 5	1 / 3 / 4	2 / 3 / NA
Azerbaijan	1 / 2 / 6	1 / 2 / 6	1 / 1 / 6	1 / 2 / 6	1 / 2 / 6	NA
Belarus	2 / 3 / 6	2 / 2 / 5	1 / 3 / 5	0 / 3 / 5	2 / 3 / 5	2 / 3 / NA
Bosnia-Herzegovina	1 / 2 / 0	1 / 1 / 0	1 / 1 / 0	1 / 1 / 0	1 / 1 / 0	4 / 1 / NA
Bulgaria	1 / 3 / 1	1 / 4 / 1	1 / 5 / 0	1 / 5 / 0	1 / 5 / 0	2 / 4 / NA
Croatia	2 / 3 / 0	2 / 4 / 0	2 / 4 / 0	2 / 4 / 0	1 / 5 / 0	2 / 4 / NA
Czech Republic	0 / 1 / 0	1 / 1 / 0	1 / 2 / 0	1 / 2 / 0	0 / 2 / 0	2 / 2 / NA
Estonia	1 / 4 / 0	1 / 5 / 0	1 / 5 / 0	1 / 5 / 0	3 / 5 / 0	2 / 4 / NA
Georgia	0 / 2 / 6	1 / 2 / 6	2 / 2 / 6	3 / 3 / 4	3 / 3 / 3	2 / 3 / NA
Hungary	2 / 4 / 0	3 / 3 / 0	3 / 4 / 0	3 / 4 / 0	4 / 3 / 0	3 / 3 / NA
Kazakhstan	1 / 2 / 6	1 / 3 / 6	1 / 4 / 5	2 / 4 / 5	1 / 3 / 5	0 / 4 / NA
Kyrgyz Republic	2 / 2 / 6	4 / 2 / 6	2 / 3 / 6	3 / 2 / 6	2 / 3 / 6	2 / 1 / NA
Latvia	1 / 6 / 0	1 / 6 / 0	1 / 5 / 0	2 / 6 / 0	4 / 6 / 0	2 / 4 / NA
Lithuania	1 / 2 / 0	1 / 2 / 0	1 / 3 / 0	1 / 4 / 0	2 / 4 / 0	2 / 3 / NA
FYR Macedonia	1 / 3 / 4	0 / 3 / 6	1 / 2 / 4	1 / 3 / 3	1 / 2 / 2	1 / 3 / NA
Moldova	2 / 5 / 6	1 / 5 / 6	2 / 5 / 6	2 / 4 / 6	2 / 4 / 6	2 / 4 / NA
Mongolia	1 / 3 / 3	3 / 3 / 4	0 / 1 / 5	1 / 2 / 5	3 / 3 / 4	2 / 1 / NA
Montenegro	1 / 3 / NA	1 / 3 / NA	1 / 2 / 6	1 / 2 / 5	1 / 4 / 1	1 / 4 / NA
Poland	1 / 1 / 0	2 / 1 / 0	2 / 2 / 0	1 / 3 / 0	2 / 2 / 0	2 / 1 / NA
Romania	2 / 2 / 2	2 / 3 / 1	1 / 4 / 1	0 / 4 / 0	2 / 4 / 0	2 / 4 / NA
Russia	1 / 1 / 6	1 / 2 / 6	1 / 2 / 6	1 / 2 / 6	2 / 2 / 6	4 / 2 / NA
Serbia	2 / 4 / 6	2 / 5 / 6	2 / 5 / 5	1 / 4 / 5	2 / 4 / 4	3 / 4 / NA
Slovak Republic	0 / 1 / 0	1 / 2 / 0	2 / 2 / 0	1 / 2 / 0	1 / 3 / 0	2 / 5 / NA
Slovenia	1 / 1 / 0	1 / 1 / 0	1 / 2 / 0	1 / 3 / 0	1 / 3 / 0	2 / 3 / NA
Tajikistan	1 / 4 / 6	1 / 4 / 6	2 / 4 / 6	3 / 3 / 6	3 / 4 / 6	1 / 5 / NA
Turkey	2 / 2 / 2	1 / 2 / 2	0 / 2 / 2	1 / 2 / 2	2 / 2 / 2	3 / 2 / NA
Turkmenistan	0 / 1 / 6	1 / 1 / 6	1 / 1 / 6	2 / 1 / 6	2 / 0 / 5	1 / 0 / NA
Ukraine	2 / 1 / 6	2 / 2 / 6	2 / 3 / 6	2 / 4 / 6	3 / 2 / 6	3 / 1 / NA
Uzbekistan	0 / 0 / 6	1 / 0 / 6	2 / 0 / 6	2 / 0 / 6	2 / 0 / 6	1 / 0 / NA

D: Domestic Economic and Financial Tripwires
F: Foreign Economic and Financial Tripwires
G: World Bank Governance Indicators

This comparatively simple system of early warning management indicators, and the rationale behind it, has been shared with management. As there is no one “best” way of assessing country vulnerability, it is useful for learning purposes to contrast alternative approaches.

Latvia, among the vulnerable countries in the QVA, moves from orange to red in 2007 in Table 1.[1] Table 1 and the QVA’s agree that Ukraine exhibited vulnerabilities. Ukraine was in the orange or unstable zone during the period of rising instability. Russia, on the other hand, appeared to be more stable. The main challenge that Russia and Ukraine pose are their absolute concentration size in the EBRD’s portfolio.

A stronger commitment to portfolio diversification, at the country level, and to proactive country risk management could make more evident the concentrations and their potential impacts on the EBRD’s medium-term operational capacity and degrees of freedom.

[1] The EBRD’s Office of the Chief Economist comments: “The reason why some countries with big output collapses in the crisis, like Latvia, were rated comparatively favourably before the crisis is not because macrofinancial vulnerabilities were not recognised (they were, as can be seen from the country risk papers) but because the country risk ratings are quite heavily weighted towards business environment risk. The justification for this is that our country risk is supposed to measure risks to a representative EBRD portfolio, not the risk of a financial crisis or a sovereign default. The latter matters of course, but it is not the only or even main thing that matters for country risk from the perspective of EBRD investments.”

Appendix 3:

Analysis of EBRD loan portfolio vintages in the three periods

This appendix considers the impact of the crisis on three sub-portfolios, or vintages, and combinations thereof.

Vintages: loans signed in different periods

a. The CRR-3 Pre-Crisis Vintage (Vintage A): facilities signed from 1 January 2006 to 31 August 2007.
b. The Rising Instability Vintage (Vintage B): facilities signed from 1 September 2007 to 30 November 2008.
c. The Crisis Response Vintage (Vintage C): crisis response facilities signed from 1 December 2008 to 31 December 2009.
d. Made up of D-1, operations signed before 2006, and D-2, 2009 Non-Crisis Response Operations.

Vintage A

At **31 August 2007**, Vintage A consisted of 457 operations totalling €7.5 billion in cumulative volume, giving an average operation size of €16.4 million. €5.5 billion (73 per cent) was debt and €2.0 billion equity. The weighted average risk rating of the outstanding portfolio on 31 August 2007 was 5.7.

At **30 June 2010**, the outstanding portfolio for Vintage A comprised 349 operations totalling €5.2 billion, giving an average outstanding size of €14.9 million. €3.5 billion (67 per cent) was debt. The equity was carried at book value and totalled €1.7 billion. Ninety operations had been fully repaid and closed, totalling €1.1 billion. Repayments on active operations totalled €1.0 billion. Sixteen operations totalling €244 million had been cancelled with no disbursements, and there had been a further €442 million of partial cancellations. Other discrepancies between the figures result from operations restructured or rebooked and from exchange rate differences. The weighted average risk rating of the outstanding portfolio on 30 June 2010 was 6.3.

Tables and Charts A1-A3 below show the regional, sectoral and facility risk distributions of Vintage A at 31 August 2007 and 30 June 2010.

Table A1: Regional distribution of Vintage A operations at 31 August 2007 and 30 June 2010

Country group	August-07		June-10	
	Business volume	% distribution	Outstanding portfolio	% distribution
Central Asia	577,946,301	8%	466,209,284	9%
Central Europe and Baltic states	912,064,934	12%	606,768,636	12%
Eastern Europe and Caucasus	1,586,818,981	21%	1,254,125,845	24%
Russia	2,820,748,217	38%	1,667,951,112	32%
South-eastern Europe	1,592,644,753	21%	1,190,087,088	23%
Total	**7,490,223,186**	**100%**	**5,185,141,966**	**100%**

Chart A1.1: Regional distribution of Vintage A operations at 31 August 2007 and 30 June 2010 (absolute figures in € million)

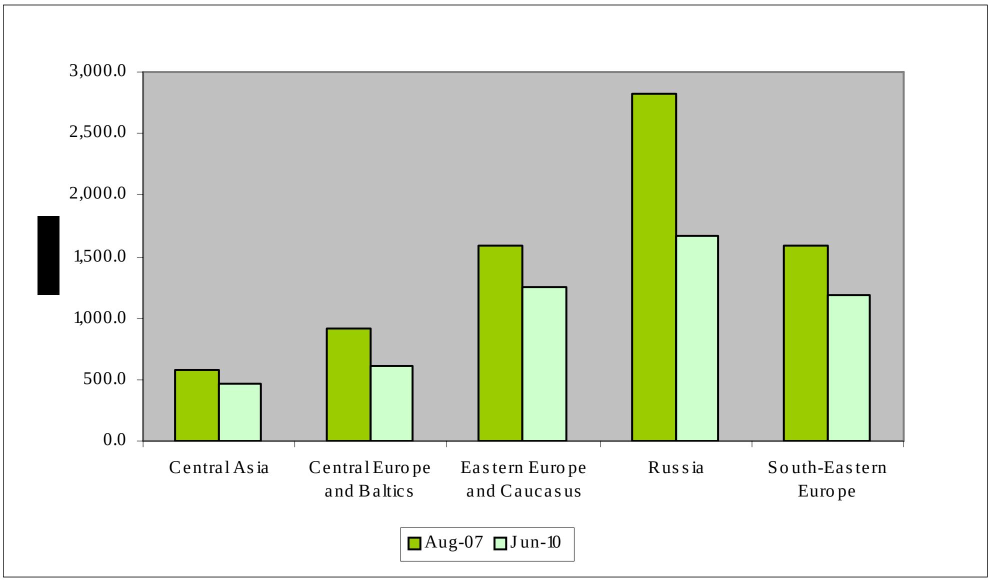


Chart A1.2: Regional distribution of Vintage A operations at 31 August 2007 and 30 June 2010 (as % of portfolio)

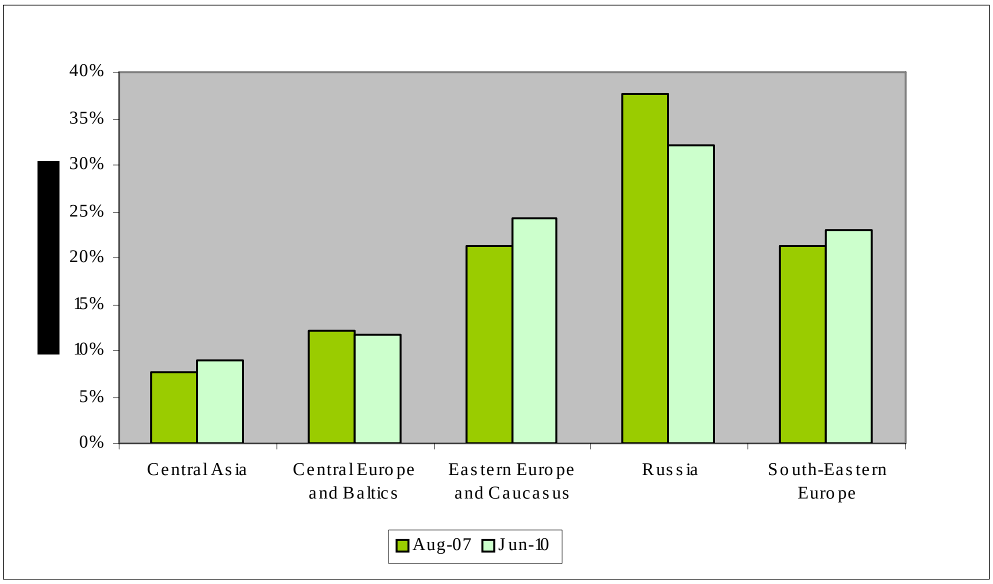


Table A1 and Charts A1.1 and A1.2 above show the regional distribution of Vintage A at the two dates. The largest part of the vintage was in Russia (38 per cent of the original business volume), followed by South-eastern Europe and eastern Europe and Caucasus (21 per cent each). Over the period, the portfolio share of the projects in Russia (in particular) and in central Europe and Baltic states fell. This was balanced by an increase in portfolio share of the other regions, particularly eastern Europe and Caucasus.

Table A2: Sectoral distribution of Vintage A operations at 31 August 2007 and 30 June 2010

Banking sector group	Banking sector team	August-07		June-10	
		Business volume	% distribution	Outstanding portfolio	% distribution
Enterprise	Agribusiness	871,258,314	12%	556,739,439	11%
	Manufacturing and Services	1,191,729,333	16%	825,983,719	16%
	Natural Resources	171,505,014	2%	136,701,609	3%
	Property and Tourism	517,125,703	7%	408,104,040	8%
	Telecoms Informatics and Media	248,165,421	3%	101,020,488	2%
Enterprise total		*2,999,783,785*	*40%*	*2,028,549,295*	*39%*
Financial	Bank Equity	493,145,340	7%	385,436,076	7%
	Bank Lending	1,003,504,694	13%	570,771,442	11%
	Equity Funds	464,134,401	6%	456,807,498	9%
	Non-Bank Financial Institutions	515,137,767	7%	214,940,892	4%
	Small Business Finance	295,719,045	4%	182,109,889	4%
Financial total		*2,771,641,248*	*37%*	*1,810,065,798*	*35%*
Infrastructure	Municipal and Env Inf	452,300,233	6%	426,318,797	8%
	Power and Energy	465,924,819	6%	357,115,092	7%
	Transport	800,573,101	11%	563,092,984	11%
Infrastructure total		*1,718,798,153*	*23%*	*1,346,526,873*	*26%*
Total		**7,490,223,186**	**100%**	**5,185,141,966**	**100%**

Chart A2.1: Sectoral distribution of Vintage A operations at 31 August 2007 and 30 June 2010 (absolute figures in € million)

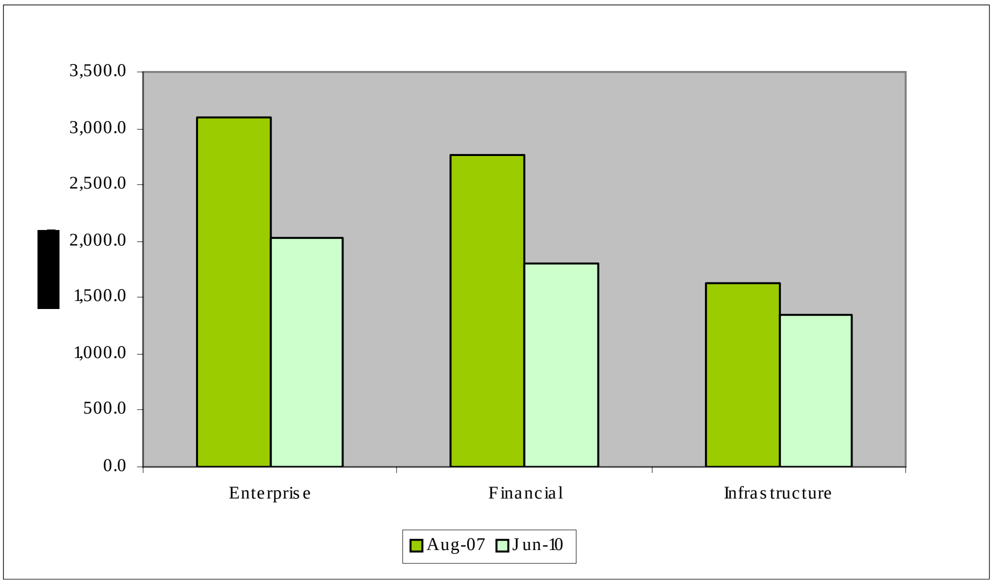


Chart A2.2: Sectoral distribution of Vintage A operations at 31 August 2007 and 30 June 2010 (as % of portfolio)

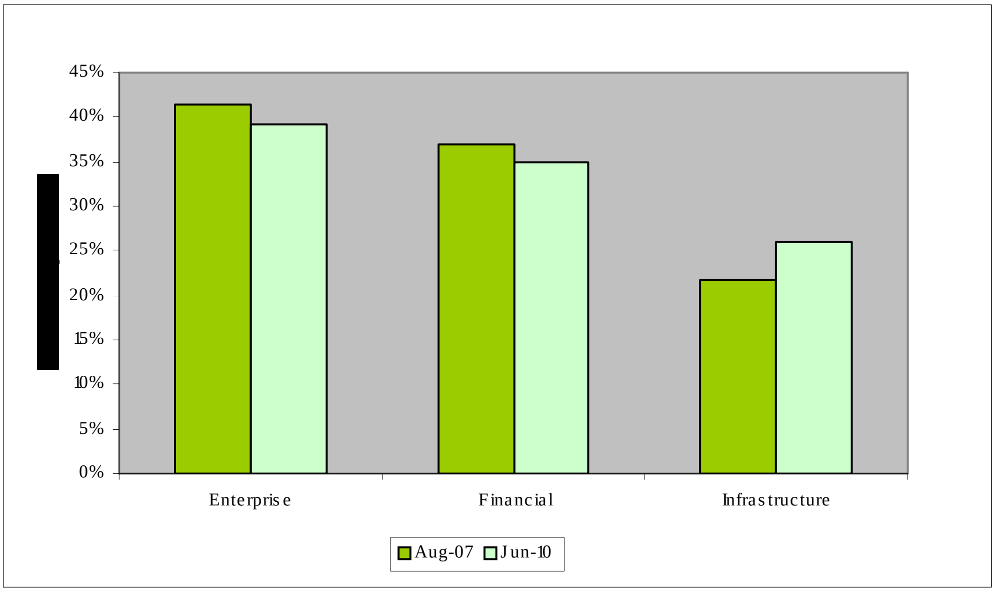


Table A2 and Charts A2.1 and A2.2 above show the sectoral distribution of Vintage A projects at the two dates. The Enterprise sector accounted for 40 per cent of the original business volume, the Financial sector 37 per cent and Infrastructure 23 per cent. These proportions changed only slightly over the period, with Infrastructure increasing its portfolio share to 26 per cent by the end of June 2010 at the expense of the other two sectors.

Table A3: Facility risk distribution of Vintage A operations at signing, at 31 August 2007 and 30 June 2010

Facility risk	At signing date		August-07		June-10	
	Business volume	% distribution	Business volume	% distribution	Outstanding portfolio	% distribution
1	0	0%	0	0%	0	0%
2	55,929,378	1%	51,864,925	1%	33,833,368	1%
3	185,582,229	2%	267,171,760	4%	90,891,414	2%
4	620,093,698	8%	569,961,342	8%	183,879,278	4%
5	1,789,489,983	24%	1,608,965,949	22%	1,174,877,702	23%
6	2,537,402,182	34%	2,627,985,089	36%	871,658,597	17%
6.5	1,817,205,134	24%	1,727,782,146	24%	631,009,443	12%
7	450,307,437	6%	432,247,561	6%	1,298,851,545	25%
8	1,693,696	0%	3,281,368	0%	837,319,349	16%
9	0	0%	0	0%	25,903,761	0%
10	0	0%	0	0%	36,917,508	1%
Total	**7,457,703,736**	**100%**	**7,289,260,140**	**100%**	**5,185,141,966**	**100%**

Chart A3.1: Facility risk distribution of Vintage A operations at signing, at 31 August 2007 and at 30 June 2010 (absolute figures in € million)

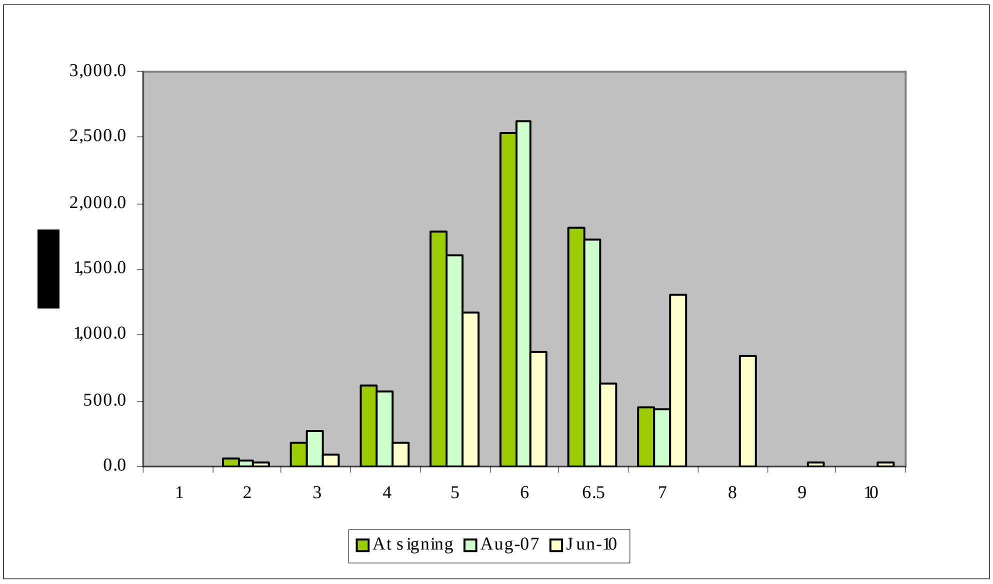
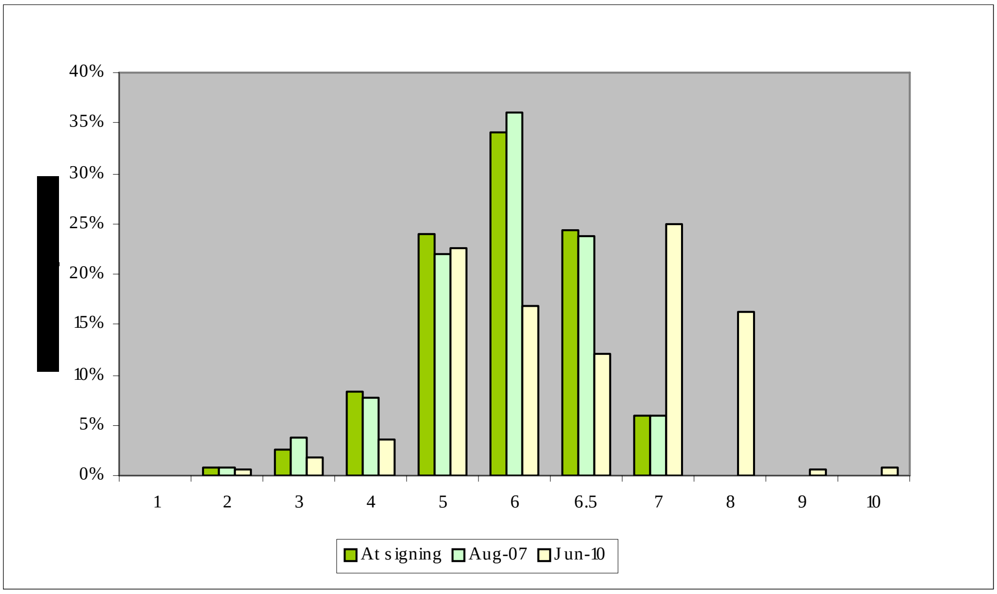


Chart A3.2: Facility risk distribution of Vintage A operations at signing, at 31 August 2007 and at 30 June 2010 (as % of portfolio)



Facility risk ratings show the most striking changes over the period. These are presented in Table A3 and illustrated in Charts A3.1 and A3.2 above, as at date of signing,[1] 31 August 2007 and 30 June 2010. At signing, only 6 per cent of Vintage A had risk ratings of 7 or higher, and less than 1 per cent was impaired (rated 8, 9 or 10).[2] There was little change between that time and the end of August 2007, the end of the pre-crisis period. By the end of June 2010, 42 per cent of the outstanding portfolio was rated 7 or higher and 17 per cent of Vintage A was impaired.

Vintage B

At **30 November 2008**, Vintage B consisted of 399 operations totalling €6.0 billion in cumulative volume, giving an average operation size of €15.3 million. €4.4 billion (73 per cent) was debt and

[1] More exactly, risk rating as at the end of the month in which the facility was signed. Owing to the structure of the database, this is the most precise information that can easily be obtained.
[2] The business which was already impaired (rated 8) at signing arose from the recovery efforts on an existing operation.

€1.6 billion equity. The weighted average risk rating of the outstanding portfolio on 30 November 2008 was 5.96.

At **30 June 2010**, the outstanding portfolio for Vintage B comprised 356 operations totalling €4.9 billion, giving an average outstanding size of €13.9 million. €3.6 billion (73 per cent) was debt. The equity carried at book value totalled €1.3 billion. Twenty-eight operations had been fully repaid and closed, totalling €406 million. Net repayments on active operations totalled €239 million. Ten operations totalling €200 million had been cancelled with no disbursements, and there had been a further €287 million of partial cancellations. Other discrepancies between the figures result from operations restructured or rebooked and from exchange rate differences. The weighted average risk rating of the outstanding portfolio on 30 June 2010 was 6.4.

Tables and Charts B1-B3 below show the regional, sectoral and facility risk distributions of Vintage B at 30 November 2008 and 30 June 2010.

Table B1: Regional distribution of Vintage B operations at 30 November 2008 and 30 June 2010

Country group (RA)	**November-08**		**June-10**	
	Business volume	% distribution	Outstanding portfolio	% distribution
Central Asia	575,202,500	10%	436,550,673	9%
Central Europe and Baltic states	698,001,515	12%	590,497,685	12%
Eastern Europe and Caucasus	1,287,332,283	22%	982,311,024	20%
Russia	2,284,091,347	38%	1,865,560,350	38%
South-eastern Europe	1,137,451,222	19%	1,066,324,511	22%
Total	**5,982,078,866**	**100%**	**4,941,244,242**	**100%**

Chart B1.1: Regional distribution of Vintage B operations at 30 November 2008 and 30 June 2010 (absolute figures in € million)

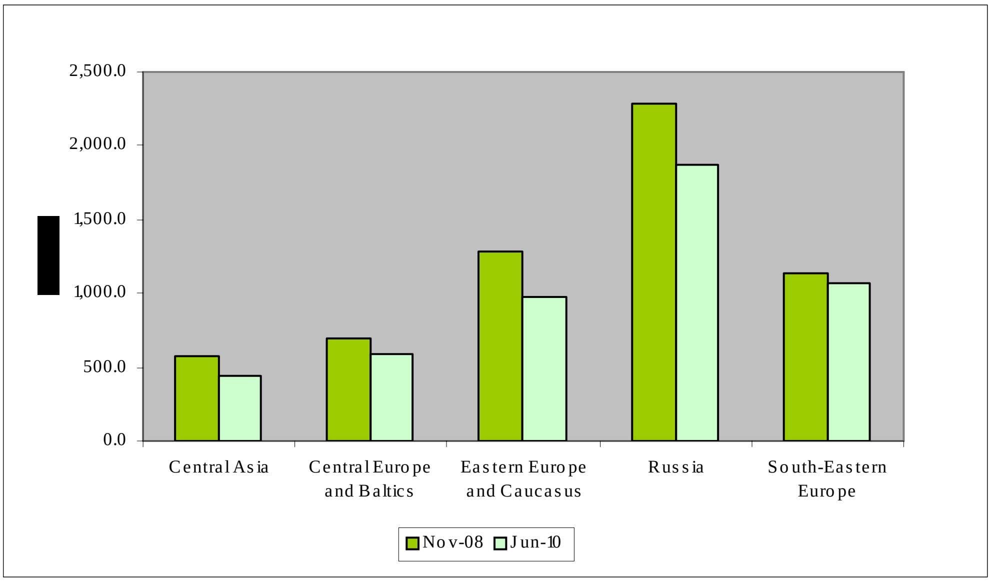


Chart B1.2: Regional distribution of Vintage B operations at 30 November 2008 and 30 June 2010 (as % of portfolio)

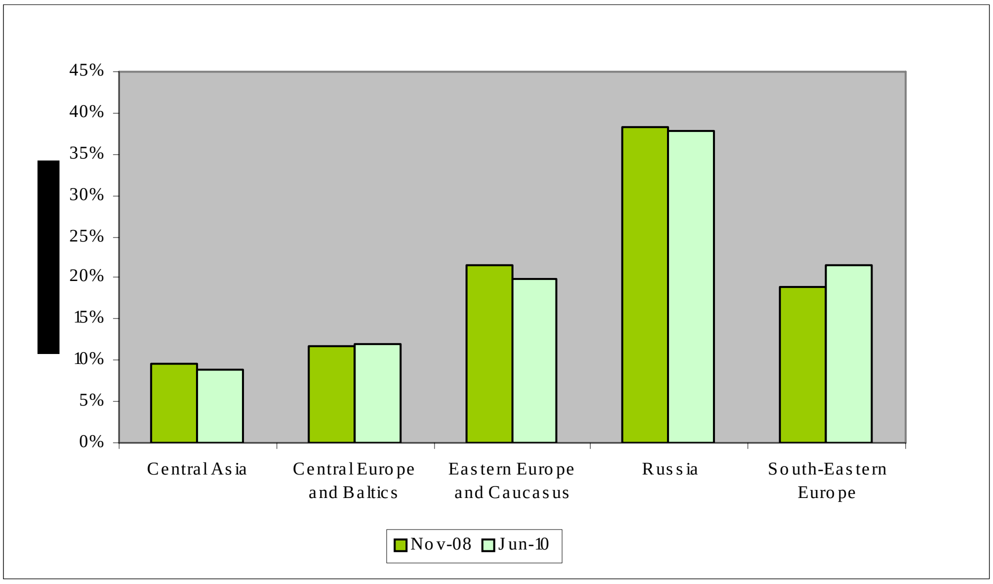


Table B1 and Charts B1.1 and B1.2 above show the regional distribution of Vintage B operations on the eve of the crisis response period, November 2008, and at the end of June 2010. Although overall the Vintage B portfolio had shrunk by the end of June 2010, as might be expected, there are only very minor changes to the proportion of the portfolio in each region.

Table B2: Sectoral distribution of Vintage B operations at 30 November 2008 and 30 June 2010

Banking sector group	**Banking sector team**	**November-08**		**June-10**	
		Business volume	% distribution	Outstanding portfolio	% distribution
Enterprise	Agribusiness	647,356,157	11%	559,139,662	11%
	Manufacturing and Services	688,919,660	12%	675,167,629	14%
	Natural Resources	267,872,458	4%	231,614,186	5%
	Property and Tourism	281,140,266	5%	181,585,826	4%
	Telecoms Informatics & Media	39,841,880	1%	39,337,163	1%
Enterprise total		*1,925,130,421*	*32%*	*1,686,844,466*	*34%*
Financial	Bank Equity	181,433,171	3%	81,510,232	2%
	Bank Lending	947,177,047	16%	727,034,547	15%
	Equity Funds	296,654,024	5%	208,134,390	4%
	Insurance & Financial Services	253,884,352	4%	112,497,816	2%
	Small Business Finance	348,826,284	6%	237,999,781	5%
Financial total		*2,027,974,878*	*34%*	*1,367,176,766*	*28%*
Infrastructure	Municipal and Env Inf	419,259,422	7%	292,331,043	6%
	Power and Energy	776,578,708	13%	783,339,049	16%
	Transport	833,135,438	14%	811,552,918	16%
Infrastructure total		*2,028,973,568*	*34%*	*1,887,223,010*	*38%*
Total		**5,982,078,866**	**100%**	**4,941,244,242**	**100%**

Chart B2.1: Sectoral distribution of Vintage B operations at 30 November 2008 and 30 June 2010 (absolute figures in € million)

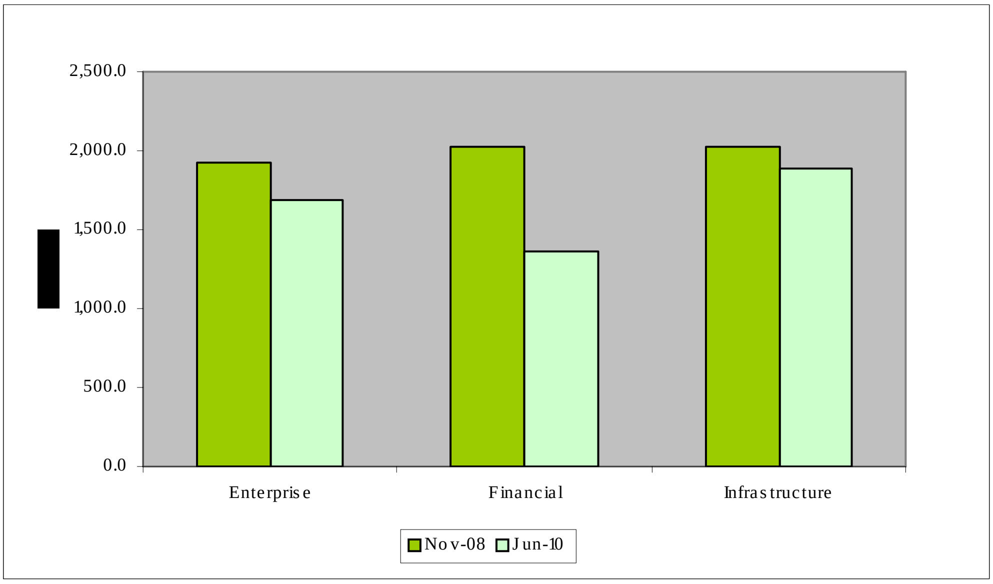


Chart B2.2: Sectoral distribution of Vintage B operations at 30 November 2008 and 30 June 2010 (as % of portfolio)

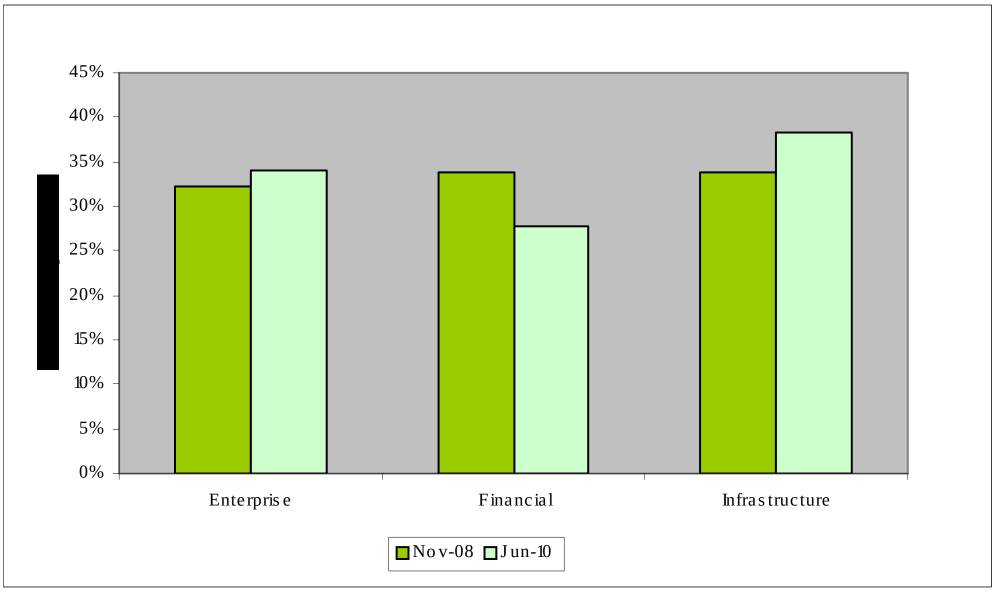


Table B2 and Charts B2.1 and B2.2 above show the sectoral distribution of Vintage B projects at the two dates. The distribution was much more even than in Vintage A, with 32 per cent of the business volume in the Enterprise sector and 34 per cent each in the Financial and Infrastructure sectors. By the end of June 2010, the proportion of the outstanding portfolio in the Financial sector had fallen to 28 per cent, while the other two sectors maintained a higher proportion of their original business volume in the active portfolio.

Table B3: Facility risk distribution of Vintage B operations at signing and 30 June 2010

Facility risk	At signing		June-10	
	Business volume	% distribution	Outstanding portfolio	% distribution
1	0	0%	0	0%
2	10,266,457	0%	21,198,532	0%
3	283,138,540	5%	138,574,408	3%
4	164,763,161	3%	97,654,694	2%
5	855,556,840	15%	457,021,398	9%
6	2,013,151,303	36%	1,450,759,456	29%
6.5	1,776,396,738	31%	919,923,853	19%
7	560,044,594	10%	1,011,753,950	20%
8	2,350,056	0%	743,753,091	15%
9	84,037	0%	50,244,714	1%
10	0	0%	50,360,147	1%
	5,665,751,726	100%	4,941,244,242	100%

Chart B3.1: Facility risk distribution of Vintage B operations at signing and at 30 June 2010 (absolute figures in € million)

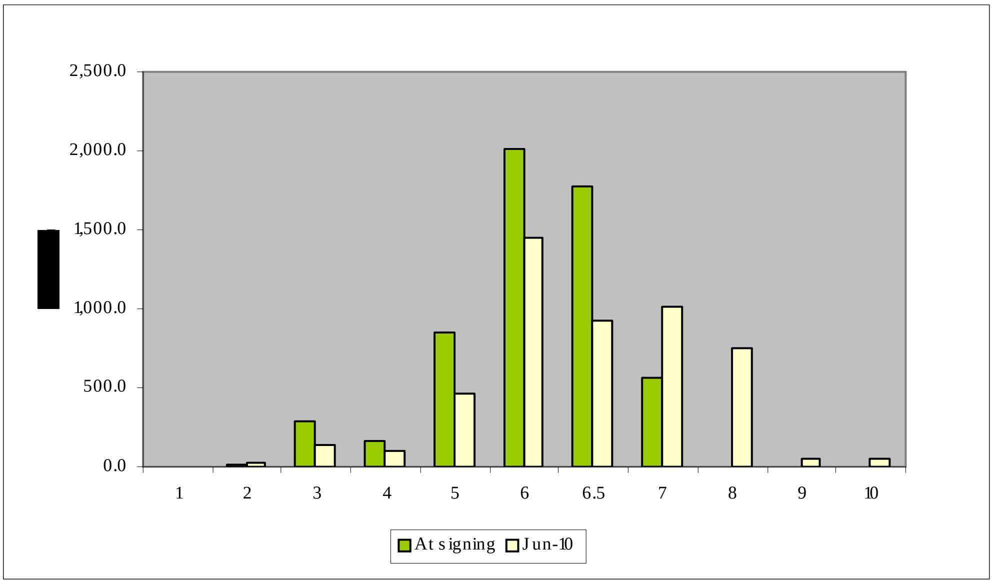


Chart B3.2: Facility risk distribution of Vintage B operations at signing and at 30 June 2010 (as % of portfolio)

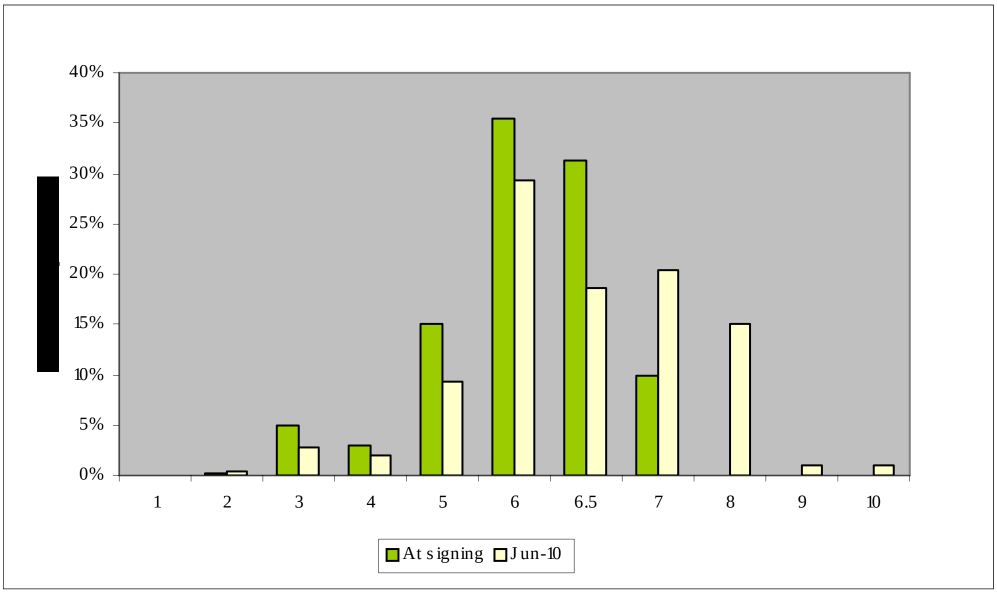


Table B3 and Charts B3.1 and B3.2 above show the changes in facility risk ratings between signing and the end of June 2010. A similar pattern is seen as in Vintage A, although the proportion of projects rated 7 or above is somewhat lower in Vintage B. At signing, 10 per cent of operations by volume were rated 7 and none impaired. By 30 June 2010, 37 per cent of the portfolio was rated 7 or higher, with 17 per cent impaired.

Vintage C

At **31 December 2009**, Vintage C consisted of 115 operations totalling €5.5 billion in cumulative volume, giving an average operation size of €47.5 million. €4.9 billion (89 per cent) was debt and €0.6 billion equity. The weighted average risk rating of the outstanding portfolio on 30 December 2009 was 5.98.

At **30 June 2010**, the outstanding portfolio for Vintage C comprised 107 operations totalling €5.2 billion, giving an average outstanding size of €49.0 million. €4.6 billion (88 per cent) was debt. The equity carried at book value totalled €0.6 billion. Six operations had been fully repaid and closed, totalling €251 million. There had been a partial cancellation of €102 million on one operation. Other discrepancies between the figures result from operations restructured or rebooked and from exchange rate differences. The weighted average risk rating of the outstanding portfolio on 30 June 2010 was 5.89.

Tables and Charts C1-C3 below show the regional, sectoral and facility risk distributions of Vintage B at 30 December 2009 and 30 June 2010.

Table C1: Regional distribution of Vintage C operations at 31 December 2009 and 30 June 2010

Country group	December-09		June-10	
	Business volume	% distribution	Outstanding portfolio	% distribution
Central Asia	145,073,002	3%	112,855,209	2%
Central Europe and Baltic states	1,378,466,246	25%	1,372,640,304	26%
Eastern Europe and Caucasus	1,057,284,101	19%	1,138,875,826	22%
Russia	1,926,161,219	35%	1,705,418,022	33%
South-eastern Europe	960,871,659	18%	911,042,366	17%
Total	**5,467,856,227**	**100%**	**5,240,831,727**	**100%**

Chart C1.1: Regional distribution of Vintage C operations at 31 December 2009 and 30 June 2010 (absolute figures in € million)

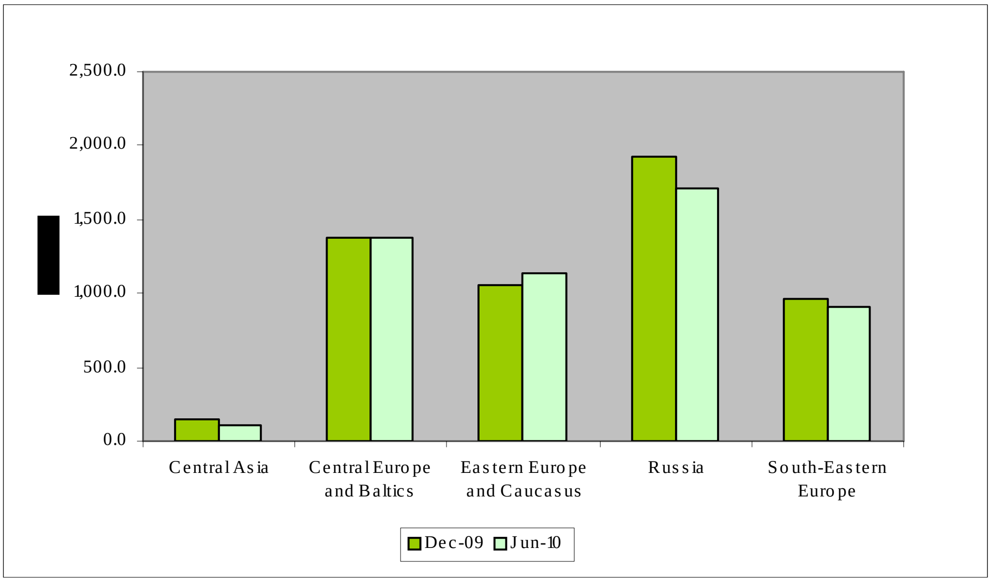


Chart C1.2: Regional distribution of Vintage C operations at 31 December 2009 and 30 June 2010 (as % of portfolio)

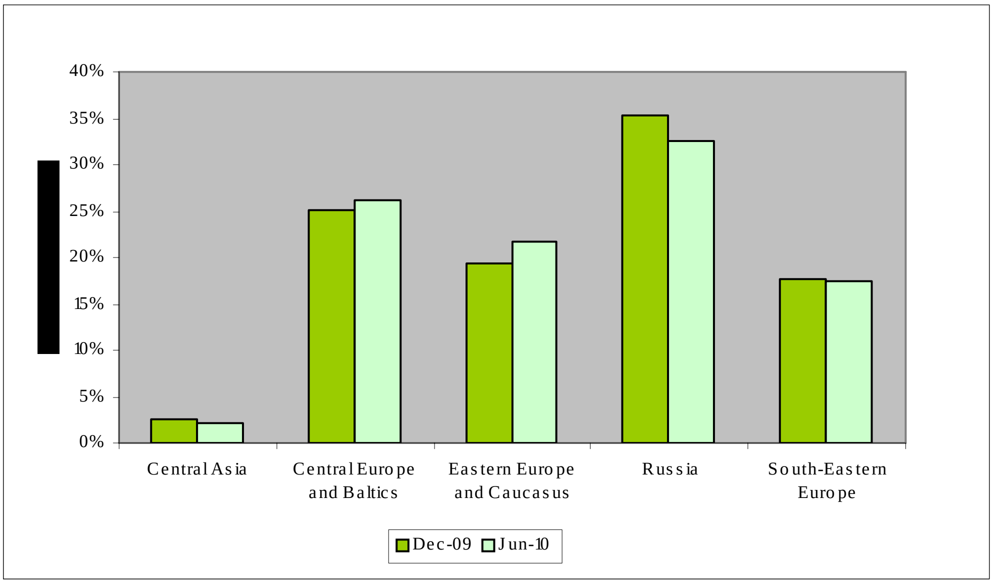


Table C1 and Charts C1.1 and C1.2 above show the regional distribution of the Vintage C portfolio. Given that this vintage represents only part of the Bank's business (crisis response projects only) over a shorter period than the other two vintages (13 months, compared with 20 months for Vintage A and 15 months for Vintage B), the relative increase in volume is clear. Including non-crisis projects, the total volume in the Vintage C period was €8.7 billion. This vintage also shows a much lower proportion of business volume in Central Asia and a much higher proportion in Central Europe and the Baltic states, compared with the other vintages.

Table C2: Sectoral distribution of Vintage C operations at 31 December 2009 and 30 June 2010

Banking sector group	**Banking sector team**	**December-09**		**June-10**	
		Business volume	% distribution	Outstanding portfolio	% distribution
Enterprise	Agribusiness	273,525,296	5%	264,158,174	5%
	Manufacturing and Services	526,902,722	10%	493,348,449	9%
	Natural Resources	499,366,114	9%	458,328,577	9%
	Property and Tourism	223,077,939	4%	206,859,797	4%
	Telecoms Informatics and Media	149,953,722	3%	36,780,704	1%
Enterprise total		1,672,825,793	31%	1,459,475,701	28%
Financial	Bank Equity	322,043,276	6%	324,659,099	6%
	Bank Lending	1,684,494,833	31%	1,802,071,301	34%
	Equity Funds	95,000,000	2%	94,996,010	2%
	Insurance and Financial Services	298,614,309	5%	194,264,050	4%
	Small Business Finance	114,588,690	2%	134,534,063	3%
Financial total		2,514,741,107	46%	2,550,524,523	49%
Infrastructure	Municipal and Env Inf	38,000,000	1%	38,000,000	1%
	Power and Energy	482,402,941	9%	483,858,086	9%
	Transport	759,825,942	14%	708,973,417	14%
Infrastructure total		1,280,228,883	23%	1,230,831,503	23%
Total		**5,467,795,782**	**100%**	**5,240,831,727**	**100%**

Chart C2.1: Sectoral distribution of Vintage C operations at 31 December 2009 and 30 June 2010 (absolute figures in € million)

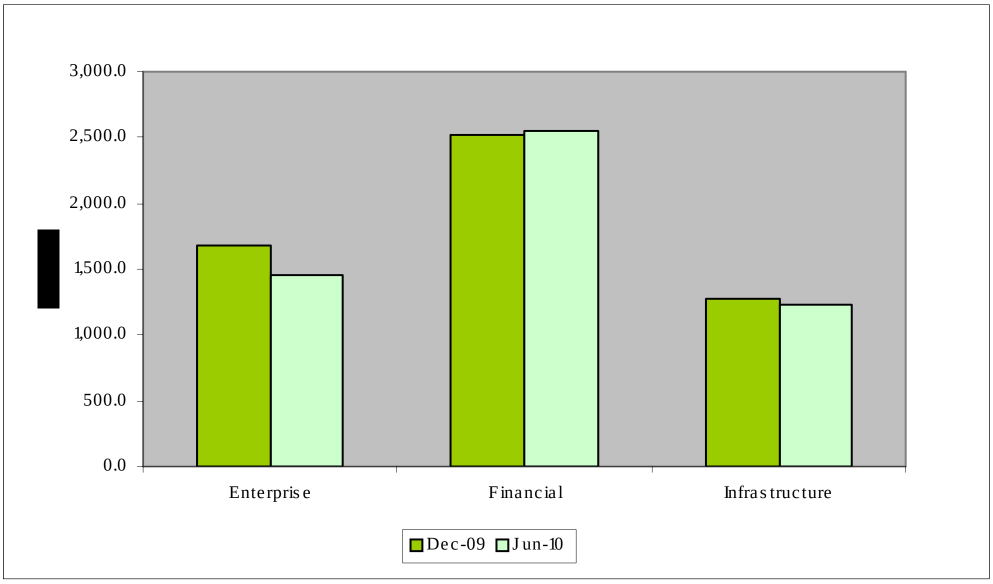


Chart C2.2: Sectoral distribution of Vintage C operations at 31 December 2009 and 30 June 2010 (as % of portfolio)

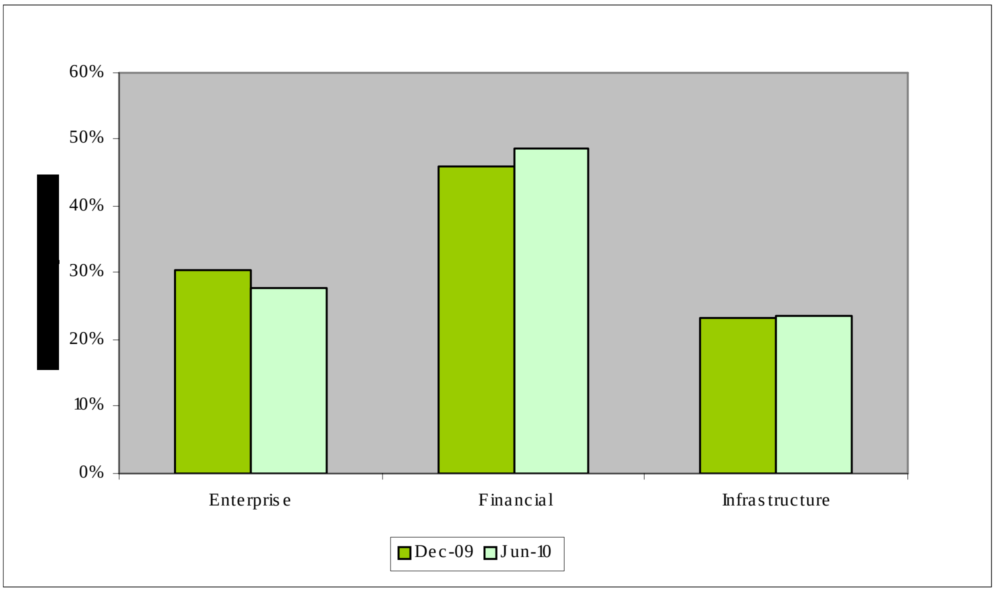


Table C2 and Charts C2.1 and C2.2 show the sectoral distribution of the crisis response projects signed 1 December 2008 to 31 December 2009. Financial sector projects predominated in this Vintage, in contrast to Vintage A (Enterprise sector predominant) and Vintage B (sectors equal in volume). The proportions did not change significantly between 31 December 2009 and 30 June 2010, which is not surprising given the short time period.

Table C3: Facility risk distribution of Vintage C operations at signing and 30 June 2010

Facility risk	At signing		June-10	
	Portfolio	% distribution	Outstanding portfolio	% distribution
1	0	0%	0	0%
2	0	0%	0	0%
3	100,711,356	2%	111,532,817	2%
4	6,000,000	0%	317,601,188	6%
5	1,755,264,061	32%	1,476,319,116	28%
6	956,929,110	18%	1,065,238,682	20%
6.5	1,161,642,054	21%	1,016,514,535	19%
7	1,458,087,117	27%	1,158,655,176	22%
8	0	0%	84,970,248	2%
9	0	0%	9,999,966	0%
10	0	0%	0	0%
Total	**5,438,633,698**	**100%**	**5,240,831,727**	**100%**

Chart C3.1: Facility risk distribution of Vintage C operations at signing and at 30 June 2010 (absolute figures in € million)

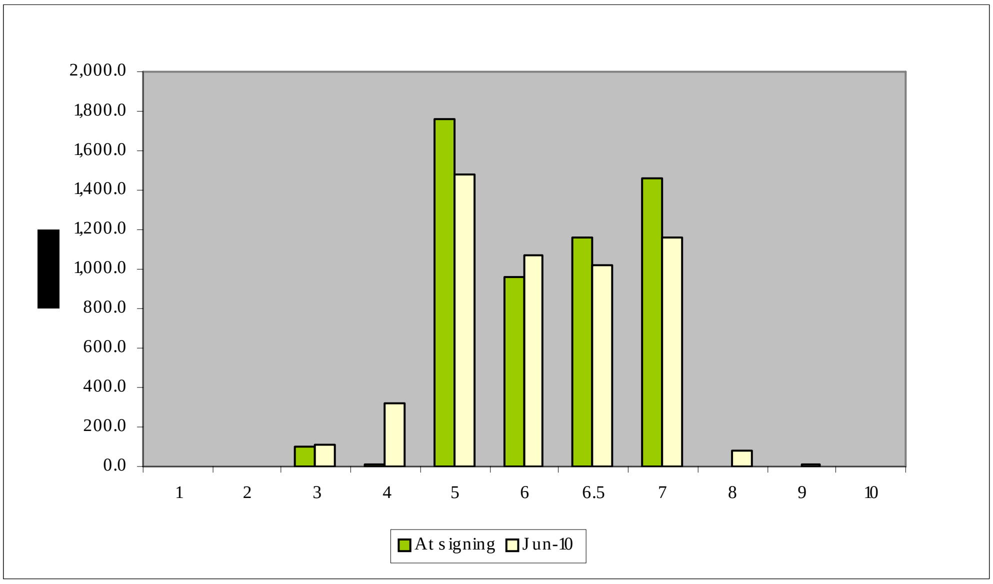
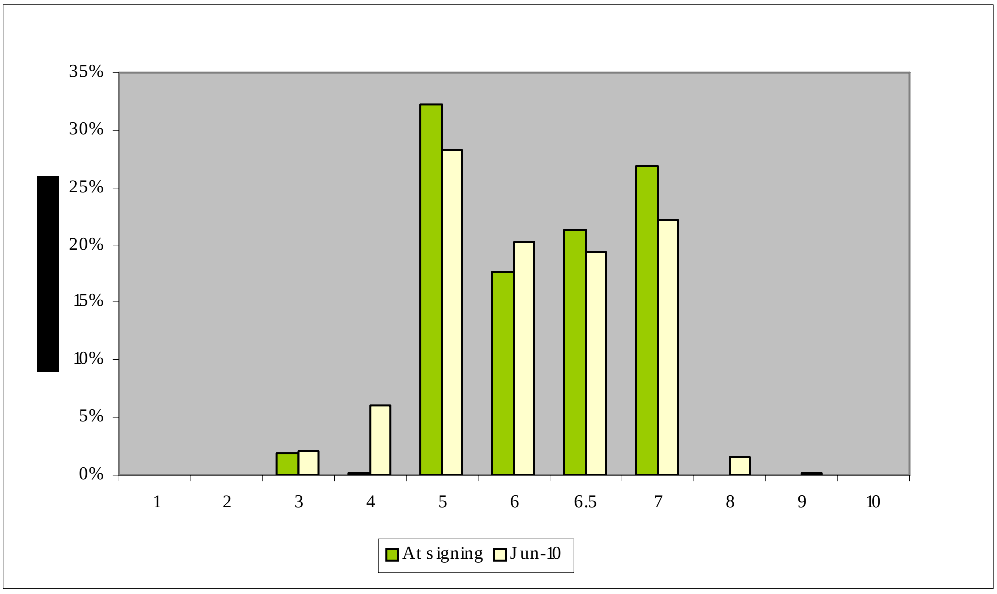


Chart C3.2: Facility risk distribution of Vintage C operations at signing and at 30 June 2010 (as % of portfolio)



The risk distribution of Vintage C projects, shown in Table C3 and Charts C3.1 and C3.2 above, is very different from the distribution seen in the projects of Vintages A and B. At signing, there were very few projects with a risk rating lower than 5. Since projects are generally not approved with a risk rating higher than 7, this produces a rather square distribution among the ratings 5-7. The proportion of projects rated 7 at signing was 27 per cent, several times higher than in the other two vintages. In the period up to 30 June 2010, there have been some changes to the risk ratings, with a few projects showing up rated 4 or 8. However, the proportion of the portfolio that was impaired at 30 June 2010 was much lower in Vintage C (only 2 per cent) than in Vintages A and B (17 per cent in each case). This could be a result of more careful structuring and monitoring of projects signed in the context of the financial crisis, or it could simply be because less time has elapsed.

Expected loss

The EBRD's Provisioning, Impairment and Loan Loss Reserve Policy, updated annually, presents the expected loss on unimpaired loan operations. The most recent update of the policy was in July

2009 (BDS09-143). For facilities with risk ratings 1-7, standard percentages for the expected loss are calculated based on the facility risk rating, industry sector, sovereign guarantee status, country risk rate and product type (senior or subordinated debt). The percentages are applied to the debt outstanding, which is the amount disbursed but not yet repaid. For facilities rated 8 or higher, specific provisions of up to 100 per cent are applied on a case-by-case basis. Equity operations are assumed to take expected loss into consideration in their fair value figures.

Table 4 below considers the debt portfolio at 30 June 2010. For each vintage, it shows the total debt portfolio, the debt outstanding, and the total expected loss including specific provisions on impaired loans. The last column shows an "expected loss rate" for each vintage, calculated as a ratio of the total expected loss over the debt outstanding.

Table 4: Total expected loss on the June 2010 debt portfolio

Vintage	Debt portfolio	% of total	Debt commitments outstanding*	% of total	Total expected Loss	% of total	Total expected loss rate
Vintage A	3,397,648,779	16%	2,861,991,019	19%	309,862,302	19%	10.83%
Vintage B	3,616,373,856	17%	2,584,517,327	17%	398,596,234	24%	15.42%
Vintage C	4,581,959,818	21%	3,266,738,148	22%	442,533,259	27%	13.55%
Other	10,031,498,767	46%	6,067,424,602	41%	503,855,655	30%	8.30%
Total	**21,627,481,219**	**100%**	**14,780,671,096**	**100%**	**1,654,847,450**	**100%**	**11.20%**

Table 5 makes a comparison between the total expected loss at the end of June 2010 and the corresponding figure for the cut-off date of each vintage. So for Vintage A, the reference date is 31 August 2007, for Vintage B it is 30 November 2008 and for Vintage C it is 31 December 2009. The table shows the total expected loss at that date, and expresses it also as a percentage of the total debt outstanding for that vintage, and as a percentage of the total expected loss on the entire portfolio, all as at the same date. The corresponding figures are then shown at June 2010.

Table 5: Total expected loss: change between vintage end-date and June 2010

Vintage	Total expected loss at vintage cut-off date	As % of debt outstand ing	As % of total expected loss	Total expected loss at June 2010	As % of debt outstand ing	As % of total expected loss	Nominal change in expected loss
Vintage A	290,672,504	7.95%	40.95%	309,862,302	10.83%	18.72%	19,189,798
Vintage B	192,742,747	8.18%	31.30%	398,596,234	15.42%	24.09%	205,853,487
Vintage C	414,273,512	14.52%	27.69%	442,533,259	13.55%	26.74%	28,259,747

It is to be expected that the total expected loss on Vintage C should not have changed much between December 2009 and June 2010. However, the striking result in Table 5 is the difference between Vintages A and B. The total expected loss on the Vintage B portfolio has increased hugely between November 2008 and June 2010, both in nominal terms and as a percentage of the debt outstanding on the Vintage B portfolio at those two dates. The same outcome is not seen for Vintage A.

Annexes to vintages analysis: expected losses by country

Vintages A, B and C

Key countries summary

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand otal	Enterprise	Financial	Infrastructure	Grand total
RUSSIAN FEDERATION A/07	33,429,042	90,007,765	22,204,604	145,641,412	13%	13%	12%	13%	37%	54%	69%	50%
RUSSIAN FEDERATION A/10	40,209,577	42,917,602	7,126,391	90,253,570	8%	15%	5%	10%	27%	34%	20%	29%
RUSSIAN FEDERATION B/08	36,594,234	21,847,383	14,725,328	73,166,944	7%	8%	10%	7%	46%	24%	71%	38%
RUSSIAN FEDERATION B/10	102,248,392	39,593,417	18,617,135	160,458,944	15%	16%	21%	16%	48%	27%	54%	40%
RUSSIAN FEDERATION C/09	67,564,735	39,076,766	35,180,271	141,821,771	18%	16%	7%	12%	67%	14%	84%	34%
RUSSIAN FEDERATION C/10	49,862,379	39,027,926	24,816,458	113,706,764	11%	15%	5%	9%	52%	13%	63%	26%
UKRAINE A/07	19,011,257	16,963,416	1,208,823	37,183,496	6%	20%	28%	10%	21%	10%	4%	13%
UKRAINE A/10	48,439,194	47,258,608	3,553,656	99,251,458	16%	56%	3%	20%	32%	38%	10%	32%
UKRAINE B/08	6,426,952	17,827,493	0	24,254,445	7%	9%	NA	8%	8%	19%	0%	13%
UKRAINE B/10	26,305,500	45,533,069	77,650	71,916,220	25%	24%	4%	24%	12%	31%	0%	18%
UKRAINE C/09	13,779,270	161,943,984	0	175,723,254	19%	32%	NA	30%	14%	60%	0%	42%
UKRAINE C/10	13,137,274	190,497,762	0	203,635,037	20%	32%	NA	30%	14%	62%	0%	46%
Total A/07	91,342,097	167,342,015	31,988,391	290,672,504	9%	13%	9%	11%	100%	100%	100%	100%
Total A/10	149,504,994	124,426,854	35,930,454	309,862,302	12%	17%	4%	11%	100%	100%	100%	100%
Total B/08	80,336,719	91,557,389	20,848,640	192,742,747	7%	9%	8%	8%	100%	100%	100%	100%
Total B/10	214,882,863	149,091,030	34,622,341	398,596,234	17%	16%	10%	15%	100%	100%	100%	100%
Total C/09	101,336,332	270,935,493	42,001,687	414,273,512	13%	19%	7%	15%	100%	100%	100%	100%
Total C/10	95,425,658	307,912,761	39,194,840	442,533,259	11%	19%	5%	14%	100%	100%	100%	100%

Vintage A – Total expected loss at August 2007

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	8,057,096	19,727	0	8,076,823	9%	0%	NA	9%	9%	0%	0%	3%
ALBANIA	1,109,300	0	31,460	1,140,760	28%	NA	1%	16%	1%	0%	0%	0%
ARMENIA	412,061	3,313,036	2,390,673	6,115,771	28%	22%	16%	20%	0%	2%	7%	2%
AZERBAIJAN	414,355	3,511,683	8,432	3,934,469	23%	16%	1%	16%	0%	2%	0%	1%
BELARUS	0	1,045,435	0	1,045,435	NA	36%	NA	36%	0%	1%	0%	0%
BOSNIA AND HERZEGOVINA	1,488,834	6,641,746	42,664	8,173,244	6%	21%	1%	14%	2%	4%	0%	3%
BULGARIA	2,538,814	2,076,824	0	4,615,637	14%	5%	NA	8%	3%	1%	0%	2%
CROATIA	3,574,925	190,136	1,399,419	5,164,480	12%	2%	4%	7%	4%	0%	4%	2%
CZECH REPUBLIC	0	377,187	0	377,187	NA	4%	NA	4%	0%	0%	0%	0%
ESTONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
FYR MACEDONIA	1,157,205	3,331,587	0	4,488,792	5%	17%	NA	11%	1%	2%	0%	2%
GEORGIA	3,502,896	7,540,776	15,025	11,058,697	28%	23%	1%	24%	4%	5%	0%	4%
HUNGARY	0	84,642	45,962	130,604	NA	2%	0%	0%	0%	0%	0%	0%
KAZAKHSTAN	3,070,137	15,712,537	0	18,782,674	7%	14%	NA	12%	3%	9%	0%	6%
KYRGYZ REPUBLIC	1,643,439	1,889,636	0	3,533,074	34%	35%	NA	35%	2%	1%	0%	1%
LATVIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
LITHUANIA	0	33,857	459,265	493,122	NA	2%	5%	4%	0%	0%	1%	0%
MOLDOVA	1,856,106	2,358,509	0	4,214,615	33%	36%	NA	35%	2%	1%	0%	1%
MONGOLIA	0	529,717	0	529,717	NA	29%	NA	29%	0%	0%	0%	0%
MONTENEGRO	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
POLAND	832,692	371,947	2,377,863	3,582,502	5%	1%	8%	5%	1%	0%	7%	1%
ROMANIA	2,208,418	5,063,363	1,673,430	8,945,211	2%	8%	12%	5%	2%	3%	5%	3%
RUSSIA	33,429,042	90,007,765	22,204,604	145,641,412	13%	13%	12%	13%	37%	54%	69%	50%
SERBIA	4,138,468	3,050,321	130,770	7,319,559	13%	9%	16%	11%	5%	2%	0%	3%
SLOVAK REPUBLIC	0	37,481	0	37,481	NA	0%	NA	0%	0%	0%	0%	0%
SLOVENIA	0	215,131	0	215,131	NA	0%	NA	0%	0%	0%	0%	0%
TAJIKISTAN	588,399	2,163,663	0	2,752,062	34%	36%	NA	36%	1%	1%	0%	1%
TURKEY	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKMENISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
UKRAINE	19,011,257	16,963,416	1,208,823	37,183,496	6%	20%	28%	10%	21%	10%	4%	13%
UZBEKISTAN	2,308,655	811,895	0	3,120,550	41%	18%	NA	31%	3%	0%	0%	1%
Total	91,342,097	167,342,015	31,988,391	290,672,504	9%	13%	9%	11%	100%	100%	100%	100%

Vintage A – Total expected loss at June 2010

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	19,387,641	14,775	0	19,402,415	23%	0%	NA	21%	13%	0%	0%	6%
ALBANIA	0	0	311,302	311,302	NA	NA	2%	2%	0%	0%	1%	0%
ARMENIA	208,239	1,451,514	1,385,121	3,044,873	18%	13%	12%	12%	0%	1%	4%	1%
AZERBAIJAN	746,838	2,736,100	2,617,739	6,100,678	20%	16%	2%	4%	0%	2%	7%	2%
BELARUS	0	516,126	0	516,126	NA	28%	NA	28%	0%	0%	0%	0%
BOSNIA AND HERZEGOVINA	2,164,214	1,326,060	1,813,671	5,303,945	12%	12%	2%	4%	1%	1%	5%	2%
BULGARIA	1,694,299	2,287,262	1,650,720	5,632,281	13%	5%	11%	8%	1%	2%	5%	2%
CROATIA	0	635,790	2,080,554	2,716,344	0%	3%	2%	3%	0%	1%	6%	1%
CZECH REPUBLIC	0	255,273	0	255,273	NA	2%	NA	2%	0%	0%	0%	0%
ESTONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
FYR MACEDONIA	831,300	312,500	0	1,143,800	6%	32%	NA	8%	1%	0%	0%	0%
GEORGIA	2,884,183	4,660,317	4,457,031	12,001,530	27%	24%	17%	21%	2%	4%	12%	4%
HUNGARY	0	131,517	42,048	173,565	NA	3%	0%	1%	0%	0%	0%	0%
KAZAKHSTAN	18,181,968	8,447,186	0	26,629,155	11%	11%	NA	11%	12%	7%	0%	9%
KYRGYZ REPUBLIC	462,613	494,621	0	957,234	25%	28%	NA	26%	0%	0%	0%	0%
LATVIA	0	0	27,918	27,918	NA	NA	9%	9%	0%	0%	0%	0%
LITHUANIA	0	463,811	1,682,159	2,145,970	NA	14%	21%	19%	0%	0%	5%	1%
MOLDOVA	645,749	885,267	0	1,531,015	17%	16%	NA	16%	0%	1%	0%	0%
MONGOLIA	0	119,299	0	119,299	NA	15%	NA	15%	0%	0%	0%	0%
MONTENEGRO	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
POLAND	4,367,923	369,166	824,947	5,562,037	21%	4%	4%	11%	3%	0%	2%	2%
ROMANIA	2,744,088	7,068,988	4,112,727	13,925,803	2%	8%	8%	5%	2%	6%	11%	4%
RUSSIA	40,209,577	42,917,602	7,126,391	90,253,570	8%	15%	5%	10%	27%	34%	20%	29%
SERBIA	3,254,955	944,482	4,244,471	8,443,908	11%	4%	5%	6%	2%	1%	12%	3%
SLOVAK REPUBLIC	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
SLOVENIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TAJIKISTAN	1,844,865	861,481	0	2,706,347	100%	28%	NA	55%	1%	1%	0%	1%
TURKEY	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKMENISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
UKRAINE	48,439,194	47,258,608	3,553,656	99,251,458	16%	56%	3%	20%	32%	38%	10%	32%
UZBEKISTAN	1,437,348	269,108	0	1,706,455	49%	7%	NA	25%	1%	0%	0%	1%
Total	149,504,994	124,426,854	35,930,454	309,862,302	12%	17%	4%	11%	100%	100%	100%	100%

Vintage A

Total write-offs at June 2010

	Absolute figure			
	Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	0	0	0	0
ALBANIA	0	0	0	0
ARMENIA	0	0	0	0
AZERBAIJAN	0	0	0	0
BELARUS	0	0	0	0
BOSNIA AND HERZEGOVINA	0	0	0	0
BULGARIA	0	0	0	0
CROATIA	0	0	0	0
CZECH REPUBLIC	0	0	0	0
ESTONIA	0	0	0	0
FYR MACEDONIA	0	0	0	0
GEORGIA	0	0	0	0
HUNGARY	0	0	0	0
KAZAKHSTAN	0	0	5,286,396	5,286,396
KYRGYZ REPUBLIC	0	0	0	0
LATVIA	0	0	0	0
LITHUANIA	0	0	0	0
MOLDOVA	0	0	0	0
MONGOLIA	0	0	0	0
MONTENEGRO	0	0	0	0
POLAND	0	0	0	0
ROMANIA	0	0	0	0
RUSSIA	7,853,927	118,389	0	7,972,316
SERBIA	0	0	0	0
SLOVAK REPUBLIC	0	0	0	0
SLOVENIA	0	0	0	0
TAJIKISTAN	0	0	0	0
TURKEY	0	0	0	0
TURKMENISTAN	0	0	0	0
UKRAINE	0	0	0	0
UZBEKISTAN	0	3,489,605	0	3,489,605
Total	7,853,927	3,607,993	5,286,396	16,748,317

Vintage B – Total expected loss at November 2008

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	2,246,916	1,196,217	947,422	4,390,554	8%	6%	13%	8%	3%	1%	5%	2%
ALBANIA	2,720,952	0	50,292	2,771,244	9%	NA	1%	8%	3%	0%	0%	1%
ARMENIA	521,698	2,078,904	63,119	2,663,721	13%	10%	13%	11%	1%	2%	0%	1%
AZERBAIJAN	206,799	3,060,371	258,545	3,525,715	10%	11%	13%	11%	0%	3%	1%	2%
BELARUS	0	4,466,966	0	4,466,966	NA	19%	NA	19%	0%	5%	0%	2%
BOSNIA AND HERZEGOVINA	780,396	4,679,942	0	5,460,338	12%	7%	NA	8%	1%	5%	0%	3%
BULGARIA	592,360	889,806	892,082	2,374,248	3%	2%	9%	3%	1%	1%	4%	1%
CROATIA	1,301,606	56,601	1,536	1,359,743	7%	1%	1%	5%	2%	0%	0%	1%
CZECH REPUBLIC	295,301	0	0	295,301	3%	NA	NA	3%	0%	0%	0%	0%
ESTONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
FYR MACEDONIA	0	0	2,174,822	2,174,822	NA	NA	7%	7%	0%	0%	10%	1%
GEORGIA	6,746,991	14,132,852	0	20,879,843	22%	18%	NA	20%	8%	15%	0%	11%
HUNGARY	0	0	969,877	969,877	NA	NA	3%	3%	0%	0%	5%	1%
KAZAKHSTAN	2,657,908	9,133,639	689,128	12,480,675	5%	9%	9%	8%	3%	10%	3%	6%
KYRGYZ REPUBLIC	150,693	2,016,474	0	2,167,167	24%	18%	NA	19%	0%	2%	0%	1%
LATVIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
LITHUANIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
MOLDOVA	2,636,142	3,189,462	0	5,825,604	14%	14%	NA	14%	3%	3%	0%	3%
MONGOLIA	2,101,344	779,132	0	2,880,476	9%	8%	NA	9%	3%	1%	0%	1%
MONTENEGRO	0	150,898	76,488	227,386	NA	8%	1%	2%	0%	0%	0%	0%
POLAND	6,582,434	0	0	6,582,434	8%	NA	NA	8%	8%	0%	0%	3%
ROMANIA	675,337	1,588,530	0	2,263,867	3%	4%	NA	4%	1%	2%	0%	1%
RUSSIA	36,594,234	21,847,383	14,725,328	73,166,944	7%	8%	10%	7%	46%	24%	71%	38%
SERBIA	5,862,720	1,777,171	0	7,639,891	7%	6%	NA	7%	7%	2%	0%	4%
SLOVAK REPUBLIC	0	396,708	0	396,708	NA	2%	NA	2%	0%	0%	0%	0%
SLOVENIA	0	30,044	0	30,044	NA	1%	NA	1%	0%	0%	0%	0%
TAJIKISTAN	786,280	1,842,891	0	2,629,171	22%	15%	NA	17%	1%	2%	0%	1%
TURKEY	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKMENISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
UKRAINE	6,426,952	17,827,493	0	24,254,445	7%	9%	NA	8%	8%	19%	0%	13%
UZBEKISTAN	449,656	415,907	0	865,564	24%	18%	NA	21%	1%	0%	0%	0%
Total	80,336,719	91,557,389	20,848,640	192,742,747	7%	9%	8%	8%	100%	100%	100%	100%

Vintage B – Total expected loss at June 2010

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	13,819,237	0	1,595,395	15,414,632	55%	NA	21%	47%	6%	0%	5%	4%
ALBANIA	6,945,718	0	564,505	7,510,224	14%	NA	3%	11%	3%	0%	2%	2%
ARMENIA	1,091,531	3,434,480	56,993	4,583,004	21%	14%	21%	15%	1%	2%	0%	1%
AZERBAIJAN	384,763	6,652,242	110,396	7,147,401	15%	19%	21%	18%	0%	4%	0%	2%
BELARUS	0	4,989,777	0	4,989,777	NA	21%	NA	21%	0%	3%	0%	1%
BOSNIA AND HERZEGOVINA	2,097,459	6,775,541	298,029	9,171,029	30%	12%	2%	12%	1%	5%	1%	2%
BULGARIA	2,381,208	2,546,775	1,194,889	6,122,872	8%	5%	6%	6%	1%	2%	3%	2%
CROATIA	2,477,602	35,453	238,399	2,751,455	13%	1%	4%	10%	1%	0%	1%	1%
CZECH REPUBLIC	357,550	0	0	357,550	4%	NA	NA	4%	0%	0%	0%	0%
ESTONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
FYR MACEDONIA	0	0	2,946,456	2,946,456	NA	NA	9%	9%	0%	0%	9%	1%
GEORGIA	8,420,919	9,429,017	44,771	17,894,707	24%	18%	2%	20%	4%	6%	0%	4%
HUNGARY	0	0	3,153,038	3,153,038	NA	NA	4%	4%	0%	0%	9%	1%
KAZAKHSTAN	7,418,171	3,177,524	4,917,603	15,513,298	11%	15%	12%	12%	3%	2%	14%	4%
KYRGYZ REPUBLIC	789,333	2,378,214	0	3,167,547	25%	28%	NA	27%	0%	2%	0%	1%
LATVIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
LITHUANIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
MOLDOVA	5,859,406	3,756,259	0	9,615,665	18%	16%	NA	17%	3%	3%	0%	2%
MONGOLIA	4,700,418	3,949,764	0	8,650,182	13%	41%	NA	19%	2%	3%	0%	2%
MONTENEGRO	0	92,959	520,000	612,959	NA	9%	2%	2%	0%	0%	2%	0%
POLAND	16,359,066	537,701	0	16,896,767	22%	13%	NA	22%	8%	0%	0%	4%
ROMANIA	1,074,553	6,490,827	0	7,565,380	5%	7%	NA	7%	1%	4%	0%	2%
RUSSIA	102,248,392	39,593,417	18,617,135	160,458,944	15%	16%	21%	16%	48%	27%	54%	40%
SERBIA	8,773,130	3,267,242	222,042	12,262,413	11%	12%	3%	11%	4%	2%	1%	3%
SLOVAK REPUBLIC	0	2,365,736	0	2,365,736	NA	4%	NA	4%	0%	2%	0%	1%
SLOVENIA	0	214,308	0	214,308	NA	4%	NA	4%	0%	0%	0%	0%
TAJIKISTAN	1,347,339	3,213,980	65,039	4,626,358	36%	26%	2%	24%	1%	2%	0%	1%
TURKEY	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKMENISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
UKRAINE	26,305,500	45,533,069	77,650	71,916,220	25%	24%	4%	24%	12%	31%	0%	18%
UZBEKISTAN	2,031,565	656,748	0	2,688,313	47%	17%	NA	33%	1%	0%	0%	1%
Total	214,882,863	149,091,030	34,622,341	398,596,234	17%	16%	10%	15%	100%	100%	100%	100%

Vintage B – Total write-offs at June 2010

	Absolute figure			
	Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	0	469,086	0	469,086
ALBANIA	0	0	0	0
ARMENIA	0	0	0	0
AZERBAIJAN	0	0	0	0
BELARUS	0	0	0	0
BOSNIA AND HERZEGOVINA	0	0	0	0
BULGARIA	0	0	0	0
CROATIA	0	0	0	0
CZECH REPUBLIC	0	0	0	0
ESTONIA	0	0	0	0
FYR MACEDONIA	0	0	0	0
GEORGIA	0	0	0	0
HUNGARY	0	4,000,000	0	4,000,000
KAZAKHSTAN	0	0	0	0
KYRGYZ REPUBLIC	0	0	0	0
LATVIA	0	0	0	0
LITHUANIA	0	0	0	0
MOLDOVA	0	0	0	0
MONGOLIA	0	0	0	0
MONTENEGRO	0	0	0	0
POLAND	0	0	0	0
ROMANIA	0	0	0	0
RUSSIA	1,592,375	0	0	1,592,375
SERBIA	0	0	0	0
SLOVAK REPUBLIC	0	0	0	0
SLOVENIA	0	0	0	0
TAJIKISTAN	0	0	0	0
TURKEY	0	0	0	0
TURKMENISTAN	0	0	0	0
UKRAINE	0	0	0	0
UZBEKISTAN	0	0	0	0
Total	1,592,375	4,469,086	0	6,061,461

Vintage C – Total expected loss at December 2009

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	5,568,041	0	0	5,568,041	4%	NA	NA	4%	5%	0%	0%	1%
ALBANIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
ARMENIA	0	0	1,841,535	1,841,535	NA	NA	9%	9%	0%	0%	4%	0%
AZERBAIJAN	0	2,786,600	0	2,786,600	NA	22%	NA	22%	0%	1%	0%	1%
BELARUS	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
BOSNIA AND HERZEGOVINA	3,335,234	2,714,096	0	6,049,330	13%	11%	NA	12%	3%	1%	0%	1%
BULGARIA	0	2,463,727	0	2,463,727	NA	5%	NA	5%	0%	1%	0%	1%
CROATIA	1,056,397	4,089,786	0	5,146,183	4%	5%	NA	5%	1%	2%	0%	1%
CZECH REPUBLIC	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
ESTONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
FYR MACEDONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
GEORGIA	68,863	24,765,891	0	24,834,755	25%	30%	NA	30%	0%	9%	0%	6%
HUNGARY	4,650,000	0	0	4,650,000	9%	NA	NA	9%	5%	0%	0%	1%
KAZAKHSTAN	710,868	2,536,941	0	3,247,809	4%	15%	NA	9%	1%	1%	0%	1%
KYRGYZ REPUBLIC	0	1,179,817	0	1,179,817	NA	17%	NA	17%	0%	0%	0%	0%
LATVIA	0	5,872,536	0	5,872,536	NA	32%	NA	32%	0%	2%	0%	1%
LITHUANIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
MOLDOVA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
MONGOLIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
MONTENEGRO	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
POLAND	0	8,545,495	1,848,449	10,393,944	NA	4%	9%	5%	0%	3%	4%	3%
ROMANIA	4,602,924	13,874,214	2,112,794	20,589,933	7%	7%	4%	7%	5%	5%	5%	5%
RUSSIA	67,564,735	39,076,766	35,180,271	141,821,771	18%	16%	7%	12%	67%	14%	84%	34%
SERBIA	0	1,085,639	0	1,085,639	NA	11%	NA	11%	0%	0%	0%	0%
SLOVAK REPUBLIC	0	0	1,018,638	1,018,638	NA	NA	4%	4%	0%	0%	2%	0%
SLOVENIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TAJIKISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKEY	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKMENISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
UKRAINE	13,779,270	161,943,984	0	175,723,254	19%	32%	NA	30%	14%	60%	0%	42%
UZBEKISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
Total	101,336,332	270,935,493	42,001,687	414,273,512	13%	19%	7%	15%	100%	100%	100%	100%

Vintage C – Total expected loss at June 2010

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	1,002,854	0	0	1,002,854	4%	NA	NA	4%	1%	0%	0%	0%
ALBANIA	1,400,798	0	0	1,400,798	20%	NA	NA	20%	1%	0%	0%	0%
ARMENIA	0	0	3,966,383	3,966,383	NA	NA	9%	9%	0%	0%	10%	1%
AZERBAIJAN	2,584,806	3,271,506	0	5,856,312	17%	22%	NA	19%	3%	1%	0%	1%
BELARUS	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
BOSNIA AND HERZEGOVINA	3,335,234	2,764,330	0	6,099,564	13%	7%	NA	9%	3%	1%	0%	1%
BULGARIA	0	2,463,727	0	2,463,727	NA	5%	NA	5%	0%	1%	0%	1%
CROATIA	1,056,397	4,927,453	0	5,983,850	4%	5%	NA	5%	1%	2%	0%	1%
CZECH REPUBLIC	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
ESTONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
FYR MACEDONIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
GEORGIA	80,957	29,792,735	0	29,873,692	25%	30%	NA	30%	0%	10%	0%	7%
HUNGARY	18,600,000	0	0	18,600,000	9%	NA	NA	9%	19%	0%	0%	4%
KAZAKHSTAN	271,154	2,982,483	0	3,253,637	13%	15%	NA	14%	0%	1%	0%	1%
KYRGYZ REPUBLIC	0	1,376,865	0	1,376,865	NA	17%	NA	17%	0%	0%	0%	0%
LATVIA	0	5,872,536	0	5,872,536	NA	32%	NA	32%	0%	2%	0%	1%
LITHUANIA	0	678,953	0	678,953	NA	14%	NA	14%	0%	0%	0%	0%
MOLDOVA	0	1,707,074	634,506	2,341,580	NA	17%	16%	17%	0%	1%	2%	1%
MONGOLIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
MONTENEGRO	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
POLAND	0	7,622,265	1,928,574	9,550,839	NA	3%	9%	4%	0%	2%	5%	2%
ROMANIA	4,093,804	12,755,869	5,493,265	22,342,938	7%	7%	4%	6%	4%	4%	14%	5%
RUSSIA	49,862,379	39,027,926	24,816,458	113,706,764	11%	15%	5%	9%	52%	13%	63%	26%
SERBIA	0	2,171,277	0	2,171,277	NA	11%	NA	11%	0%	1%	0%	0%
SLOVAK REPUBLIC	0	0	2,355,654	2,355,654	NA	NA	4%	4%	0%	0%	6%	1%
SLOVENIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TAJIKISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKEY	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKMENISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
UKRAINE	13,137,274	190,497,762	0	203,635,037	20%	32%	NA	30%	14%	62%	0%	46%
UZBEKISTAN	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
Total	95,425,658	307,912,761	39,194,840	442,533,259	11%	19%	5%	14%	100%	100%	100%	100%

Vintage C – Total write-offs at June 2010

	Absolute figure			
	Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	0	0	0	0
ALBANIA	0	0	0	0
ARMENIA	0	0	0	0
AZERBAIJAN	0	0	0	0
BELARUS	0	0	0	0
BOSNIA AND HERZEGOVINA	0	0	0	0
BULGARIA	0	0	0	0
CROATIA	0	0	0	0
CZECH REPUBLIC	0	0	0	0
ESTONIA	0	0	0	0
FYR MACEDONIA	0	0	0	0
GEORGIA	0	0	0	0
HUNGARY	0	0	0	0
KAZAKHSTAN	0	0	0	0
KYRGYZ REPUBLIC	0	0	0	0
LATVIA	0	0	0	0
LITHUANIA	0	0	0	0
MOLDOVA	0	0	0	0
MONGOLIA	0	0	0	0
MONTENEGRO	0	0	0	0
POLAND	0	0	0	0
ROMANIA	0	0	0	0
RUSSIA	0	0	0	0
SERBIA	0	0	0	0
SLOVAK REPUBLIC	0	0	0	0
SLOVENIA	0	0	0	0
TAJIKISTAN	0	0	0	0
TURKEY	0	0	0	0
TURKMENISTAN	0	0	0	0
UKRAINE	0	0	0	0
UZBEKISTAN	0	0	0	0
Total	0	0	0	0

Vintage D-1: Operations signed pre-2006: total expected loss at June 2010

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	12,735,087	0	125,116	12,860,203	4%	0%	0%	2%	14%	0%	0%	5%
ALBANIA	3,671,353	0	1,899,768	5,571,121	21%	0%	2%	6%	4%	0%	2%	2%
ARMENIA	422,998	162,501	0	585,499	18%	7%	0%	13%	0%	0%	0%	0%
AZERBAIJAN	7,404,060	295,847	1,638,300	9,338,207	9%	4%	2%	6%	8%	0%	2%	4%
BELARUS	653,776	1,158,896	0	1,812,672	5%	11%	17%	8%	1%	2%	0%	1%
BOSNIA AND HERZEGOVINA	729,451	493,318	1,827,028	3,049,798	10%	3%	2%	3%	1%	1%	2%	1%
BULGARIA	22,724,741	796,106	13,667,665	37,188,512	88%	6%	9%	20%	24%	1%	14%	14%
CROATIA	608,172	4,031,322	4,943,056	9,582,550	9%	2%	3%	3%	1%	6%	5%	4%
CZECH REPUBLIC	0	1,244,251	161,525	1,405,776	0%	6%	1%	2%	0%	2%	0%	1%
ESTONIA	0	0	0	0	0%	NA	NA	0%	0%	0%	0%	0%
FYR MACEDONIA	785,624	760,442	1,286,492	2,832,558	13%	3%	2%	3%	1%	1%	1%	1%
GEORGIA	341,663	936,856	630,214	1,908,732	7%	18%	5%	8%	0%	1%	1%	1%
HUNGARY	886,053	1,381,983	3,952,846	6,220,882	4%	3%	4%	3%	1%	2%	4%	2%
KAZAKHSTAN	7,563,754	1,631,499	7,186,495	16,381,748	13%	3%	4%	6%	8%	2%	7%	6%
KYRGYZ REPUBLIC	0	28,042	0	28,042	0%	1%	0%	1%	0%	0%	0%	0%
LATVIA	0	0	646,994	646,994	NA	NA	6%	6%	0%	0%	1%	0%
LITHUANIA	0	203,128	2,570,143	2,773,272	0%	1%	5%	3%	0%	0%	3%	1%
MOLDOVA	0	889,697	586,748	1,476,445	NA	19%	4%	8%	0%	1%	1%	1%
MONGOLIA	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
MONTENEGRO	0	79,970	330,390	410,360	NA	2%	2%	2%	0%	0%	0%	0%
POLAND	1,114,690	661,507	8,998,475	10,774,673	1%	1%	4%	2%	1%	1%	9%	4%
ROMANIA	3,758,188	3,967,962	16,641,337	24,367,486	2%	4%	5%	4%	4%	6%	17%	9%
RUSSIA	13,743,857	15,983,610	11,942,574	41,670,042	4%	6%	3%	4%	15%	22%	12%	16%
SERBIA	3,735,530	299,762	9,644,430	13,679,722	12%	1%	4%	4%	4%	0%	10%	5%
SLOVAK REPUBLIC	142,303	314,771	313,131	770,206	13%	1%	1%	1%	0%	0%	0%	0%
SLOVENIA	0	1,064,458	0	1,064,458	0%	5%	NA	3%	0%	1%	0%	0%
TAJIKISTAN	123,722	165,250	14,745	303,717	2%	11%	2%	4%	0%	0%	0%	0%
TURKEY	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
TURKMENISTAN	0	0	133,208	133,208	0%	0%	2%	1%	0%	0%	0%	0%
UKRAINE	4,752,542	35,365,681	6,077,602	46,195,825	14%	55%	2%	13%	5%	49%	6%	18%
UZBEKISTAN	8,396,235	89,019	1,406,684	9,891,938	72%	4%	2%	12%	9%	0%	1%	4%
Total	94,293,799	72,005,878	96,624,967	262,924,643	7%	5%	3%	5%	100%	100%	100%	100%

Operations signed pre-2006: total write-offs by June 2010

	Absolute figure			
	Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	0	5,511,797	3,090,760	8,602,557
ALBANIA	1,443,740	59,100	0	1,502,840
ARMENIA	0	457,922	0	457,922
AZERBAIJAN	0	0	0	0
BELARUS	0	0	0	0
BOSNIA AND HERZEGOVINA	0	0	0	0
BULGARIA	24,362,752	3,274,904	0	27,637,656
CROATIA	1,617,225	418,487	0	2,035,712
CZECH REPUBLIC	20,803,073	24,158,072	0	44,961,145
ESTONIA	16,018,718	1,539,567	0	17,558,284
FYR MACEDONIA	0	0	0	0
GEORGIA	0	1,794,964	0	1,794,964
HUNGARY	14,647,277	11,168,816	3,950,070	29,766,164
KAZAKHSTAN	0	0	0	0
KYRGYZ REPUBLIC	2,177,839	0	0	2,177,839
LATVIA	0	8,901,656	0	8,901,656
LITHUANIA	13,424,147	0	0	13,424,147
MOLDOVA	0	0	7,237,960	7,237,960
MONGOLIA	0	0	0	0
MONTENEGRO	0	0	0	0
POLAND	99,351,670	20,001,280	0	119,352,949
ROMANIA	8,243,649	8,879,930	0	17,123,579
RUSSIA	68,117,549	159,196,695	3,060,215	230,374,459
SERBIA	6,630,000	0	0	6,630,000
SLOVAK REPUBLIC	6,132,280	10,489,200	0	16,621,480
SLOVENIA	0	0	0	0
TAJIKISTAN	4,592,029	0	0	4,592,029
TURKEY	0	0	0	0
TURKMENISTAN	868,153	0	0	868,153
UKRAINE	11,904,788	3,015,820	0	14,920,608
UZBEKISTAN	41,188,597	0	0	41,188,597
Total	341,523,485	258,868,211	17,339,005	617,730,702

Vintage D-2: Non-crisis operations signed December 2008 to June 2010: total expected loss at June 2010

	Absolute figure				As a % of debt commitments outstanding				As a % of total expected loss			
	Sector				Sector				Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	0	0	744,518	744,518	0%	0%	1%	0%	0%	0%	2%	0%
ALBANIA	0	336,537	0	336,537	0%	12%	NA	3%	0%	0%	0%	0%
ARMENIA	5,697,471	1,546,478	638,348	7,882,297	20%	11%	21%	17%	6%	1%	1%	3%
AZERBAIJAN	1,989,858	2,165,232	0	4,155,089	16%	13%	NA	14%	2%	2%	0%	2%
BELARUS	1,269,011	7,562,556	0	8,831,567	12%	20%	NA	18%	1%	7%	0%	4%
BOSNIA AND HERZEGOVINA	505,336	2,976,701	0	3,482,037	21%	15%	NA	16%	1%	3%	0%	1%
BULGARIA	2,085,519	3,046,824	15,736,012	20,868,355	3%	5%	13%	9%	2%	3%	34%	9%
CROATIA	2,420,569	1,239,545	0	3,660,114	3%	4%	NA	3%	3%	1%	0%	2%
CZECH REPUBLIC	0	0	0	0	NA	NA	NA	NA	0%	0%	0%	0%
ESTONIA	0	0	0	0	NA	NA	0%	0%	0%	0%	0%	0%
FYR MACEDONIA	665,342	6,698	5,000	677,040	19%	0%	2%	12%	1%	0%	0%	0%
GEORGIA	4,441,160	252,718	1,245,154	5,939,032	24%	3%	16%	17%	5%	0%	3%	2%
HUNGARY	0	0	0	0	NA	NA	0%	0%	0%	0%	0%	0%
KAZAKHSTAN	1,117,527	6,083,954	564,736	7,766,216	10%	9%	1%	6%	1%	6%	1%	3%
KYRGYZ REPUBLIC	2,891,895	428,192	5,707	3,325,794	25%	28%	2%	25%	3%	0%	0%	1%
LATVIA	0	0	412,581	412,581	NA	NA	9%	9%	0%	0%	1%	0%
LITHUANIA	0	0	3,158,537	3,158,537	NA	0%	13%	11%	0%	0%	7%	1%
MOLDOVA	4,156,828	5,180,050	1,011,688	10,348,565	20%	24%	16%	21%	5%	5%	2%	4%
MONGOLIA	13,611,219	0	0	13,611,219	13%	0%	NA	13%	15%	0%	0%	6%
MONTENEGRO	1,145,786	5,002	82,185	1,232,973	18%	1%	2%	11%	1%	0%	0%	1%
POLAND	400,228	0	4,241,345	4,641,573	13%	0%	4%	4%	0%	0%	9%	2%
ROMANIA	2,413,513	585,438	865,084	3,864,035	3%	9%	9%	4%	3%	1%	2%	2%
RUSSIA	15,051,871	37,076,577	9,178,998	61,307,447	6%	15%	9%	11%	17%	35%	20%	25%
SERBIA	3,490,095	2,943,331	20,000	6,453,426	6%	8%	2%	7%	4%	3%	0%	3%
SLOVAK REPUBLIC	0	297,807	0	297,807	NA	1%	NA	1%	0%	0%	0%	0%
SLOVENIA	0	0	0	0	0%	NA	NA	0%	0%	0%	0%	0%
TAJIKISTAN	1,197,568	1,129,026	399,005	2,725,599	27%	9%	11%	13%	1%	1%	1%	1%
TURKEY	769,977	7,838,432	6,103,330	14,711,739	9%	7%	6%	6%	1%	7%	13%	6%
TURKMENISTAN	964,403	0	0	964,403	25%	NA	NA	25%	1%	0%	0%	0%
UKRAINE	18,572,582	22,903,562	2,226,325	43,702,469	11%	31%	25%	17%	21%	22%	5%	18%
UZBEKISTAN	4,620,924	1,209,119	0	5,830,043	37%	51%	NA	39%	5%	1%	0%	2%
Total	89,478,679	104,813,779	46,638,553	240,931,011	8%	12%	7%	9%	100%	100%	100%	100%

Non-crisis operations signed December 2008 to June 2010: total write-offs by June 2010

	Absolute figure			
	Sector			
Country name	Enterprise	Financial	Infrastructure	Grand total
<REGIONAL>	0	210,938	0	210,938
ALBANIA	0	0	0	0
ARMENIA	0	0	0	0
AZERBAIJAN	0	0	0	0
BELARUS	0	0	0	0
BOSNIA AND HERZEGOVINA	0	0	0	0
BULGARIA	0	0	0	0
CROATIA	0	0	0	0
CZECH REPUBLIC	0	0	0	0
ESTONIA	0	0	0	0
FYR MACEDONIA	0	0	0	0
GEORGIA	0	0	0	0
HUNGARY	0	0	0	0
KAZAKHSTAN	0	0	0	0
KYRGYZ REPUBLIC	0	0	0	0
LATVIA	0	0	0	0
LITHUANIA	0	0	0	0
MOLDOVA	0	0	0	0
MONGOLIA	0	0	0	0
MONTENEGRO	0	0	0	0
POLAND	0	0	0	0
ROMANIA	0	0	0	0
RUSSIA	0	3,455,234	0	3,455,234
SERBIA	0	0	0	0
SLOVAK REPUBLIC	0	0	0	0
SLOVENIA	0	0	0	0
TAJIKISTAN	0	0	0	0
TURKEY	0	0	0	0
TURKMENISTAN	0	0	0	0
UKRAINE	0	0	0	0
UZBEKISTAN	0	0	0	0
Total	0	3,666,173	0	3,666,173

Appendix 4:

Joint IFI Action Plan and European Bank Coordination Initiative

Conditions in the financial markets of central and eastern Europe (CEE) deteriorated significantly in the last quarter of 2008. Under such circumstances, bank behaviour becomes key to macroeconomic stability. Previous financial crises had amply demonstrated that unwillingness by foreign banks to roll over loans and maintain trade and other credits could precipitate sovereign defaults and currency runs. As the situation deteriorated in CEE, concern grew among the governments, the parent banks,[1] the bank regulators and the IFIs. The regulators of the Austrian banks were particularly concerned, given that the exposure of the Austrian-based parent banks to their subsidiaries in central and eastern Europe was of the order of 70 per cent of Austrian GDP.

The initial reactions were self-serving. Government support programmes for western European banks were initially restricted in how much of the funds could be used to support subsidiaries in CEE. On the other hand, host countries tried to prevent subsidiaries from transferring funds to their parent banks. Some of the spill-over effects were unintended. Programmes guaranteeing bank deposits in western Europe attracted deposits from eastern European countries. Uncertainty about what competitors were going to do put pressure on individual banks to scale back lending or even withdraw from CEE countries, setting up a classic collective action problem. Clearly there was need for concerted action. This led to two closely related initiatives in the first months of 2009, namely the European Bank Coordination Initiative (ECBI, often called the Vienna Initiative, as the Austrian regulators invited participants to the first meeting of the group in Vienna) and the Joint Action Plan (JAP) launched by three IFIs, namely EBRD, EIB Group (EIB and EIF) and the World Bank Group (IBRD, IFC and MIGA) to provide financial and technical support to the region's banks.

IFI Joint Action Plan

In February 2009, three months after the EBRD had launched its crisis response, the largest multilateral lenders in central and eastern Europe (the EBRD, the EIB Group, and the World Bank Group) pledged to provide up to €24.5 billion over two years to assist the banks and to provide through the banks support to the real economy, in particular to small and mid-size enterprises adversely affected by the global economic crisis. This initiative complemented actions by the IMF, EU and national governments. Under the Joint IFI Action Plan, banking groups were invited to discuss business plans for their subsidiaries and their need for funds to support lending to the real economy. Support from the IFIs was meant to contribute to the financial sector's need for capital and liquidity through complementing financing from parent banks

[1] The local subsidiaries or branches of western European banks, mainly from Austria, Belgium, France, Greece, Italy and Sweden, had aggregate total assets in CEE countries of US$ 920 billion, which represented, on average, 20 per cent of the total assets of the western European banking groups. In most countries in central and eastern Europe, the market share of the branches and subsidiaries of the western European banks exceeded 50 per cent and, in some countries, it exceeded 90 per cent of total banking assets.

and home and host countries. The IFIs also wanted to facilitate the policy dialogue between key private and public sector stakeholders, as discussed below.

By mid-May 2009, the EBRD, the EIB, and the World Bank had completed their joint needs assessment of 17 major EU-based banking groups.[2] By October 2009, the IFIs were able to report at the IMF–World Bank annual meetings that they were on track to deliver their planned commitments of crisis-related financial support. By the end of December 2009, the first of the two-year commitment period, the institutions had made available €19.3 billion, of which €15.0 billion in deals had already been signed. Hence they were well ahead of the original commitment schedule. Table 1 reports the commitments made by the three institutions under the JAP. Table 2 breaks the data down by country and includes the commitments made by the IMF.

Table 1: Commitments and delivery under the Joint IFI Action Plan
(Euro billions)

	Commitments		**Available as of end-December 2009** /2	**Signed as of end-December 2009** /2
	2009-2010	**Indicative for 2009** /1		
Total	**24.5**	**12.3**	**19.3**	**15.0**
EBRD /3	6	3	4	3.2
EIB Group	11	5.5	10.8	8.4
World Bank Group:	7.5	3.8	4.5	3.4
IBRD	3.5	1.8	2.8	1.8
MIGA	2	1	0.8	0.7
IFC	2	1	0.9	0.9

1/ Of the €24.5 billion, proportional for 2009.
2/ Board approvals (EBRD, MIGA, IBRD, EIB), signings (IFC).
3/ Includes local bank support and trade finance.

[2] The three IFIs met jointly in March–May 2009 with 17 bank groups whose subsidiaries were present throughout the region.

Table 1: Commitments made by financial institutions to individual countries 2009
(Euro millions)

Country	**EBRD**			**EIB**	**World Bank**	**IFC** /1	**IMF** /1
	Crisis /2	Non-crisis /2	Total	Total	Total	Total	Total
Albania	24	31	55	13	4	59	0
Armenia	42	43	85	0	93	3	581
Azerbaijan	133	29	162	0	131	33	0
Belarus	0	51	51	0	133	8	2,603
Bosnia and Herzegovina	70	36	106	153	29	8	1,126
Bulgaria	50	155	205	174	293	46	0
Croatia	125	98	223	415	171	40	0
Czech Republic	0	0	0	1,860	0	0	0
Estonia	0	21	21	842	0	0	0
Georgia	54	26	80	0	122	171	860
Hungary	567	0	567	0	0	0	11,256
Kazakhstan	112	315	427	0	1,524	156	0
Kyrgyz Republic	7	49	56	0	24	10	0
Latvia	104	0	104	285	0	0	1,678
Lithuania	20	0	20	1,169	0	10	0
FYR Macedonia	0	76	76	103	36	0	0
Moldova	20	31	51	0	18	5	0
Mongolia	0	31	31	0	30	3	0
Montenegro	0	29	29	111	30	10	0
Poland	258	78	336	0	1,828	9	14,769
Romania	560	113	673	0	0	97	12,547
Russia	1,581	582	2,163	133	0	385	0
Serbia	93	335	428	897	46	40	2,868
Slovak Republic	200	0	200	366	0	0	0
Slovenia	0	6	6	538	0	0	0
Tajikistan	0	24	24	0	23	12	0
Turkey	0	145	145	2,648	1,488	245	0
Turkmenistan	0	4	4	0	0	0	0
Ukraine	744	196	940	100	645	127	11,758
Uzbekistan	0	16	16	0	20	3	0

/1 Exchange rate from dollars calculated by taking the average of the monthly euro-dollar rates for 2009,1$=€0.717

/2 The EBRD differentiated between spending earmarked as “crisis” vs. “non-crisis” lending. All others represent totals.

The IMF and the European Union have provided extensive balance of payments support packages of over €50 billion, along with the €25 billion committed under the Joint IFI Action Plan, of which over €19 billion had been delivered by the end of 2009.

Traditionally the IFIs are individualistic institutions following their own particular mandates. Cooperation in the past consisted primarily of co-financing particular projects. The JAP constituted a change in approach in which the institutions attempted to act in a more collaborative fashion. That said, the JAP consisted more of actions in parallel, with each institution covering its own geographic areas and following its own remit, procedures and pricing policies. With some of the SME credit lines, there was more competition than collaboration. However, under the JAP there are some specific country cases of closer IFI collaboration including: Hungary (support to a bank group), Ukraine (major bank restructuring programme), Serbia (specific bank support), Belarus (overall assessment on a potential divestiture programme), and earlier in Georgia (post-conflict response).Moreover, the extent to which the projects funded under the JAP were a response to crisis is somewhat exaggerated, as many projects were in nature very similar to the IFIs' normal activities. But the fact that the market perceived that the IFIs were acting in concert to support the region's banking systems contributed to stability, and the collaboration provided the opportunity for useful dialogue. That dialogue has continued in the post-crisis phase. Overall, the Joint IFI Action Plan and the broader support from the international community were timely and well received by the countries affected. As a part of the international crisis response, the JAP helped to restore confidence in the CEE financial systems and prevent the economic downturn from becoming a financial and currency crisis as well.

The European Bank Coordination Initiative (Vienna Initiative)

Launched in parallel to the JAP, the European Bank Coordination Initiative (Vienna Initiative) in addition to EBRD, EIB and World Bank brought together the EU-based cross-border banking groups, the IMF, the European Commission, the ECB (as observer), and the home and host country regulatory and fiscal authorities. The EBCI delineated a division of labour among all the major stakeholders. The IMF provided macro support, the EU offered balance of payments funding, the ECB added liquidity and the IFIs invested in key areas of the economies within their respective mandates (JAP).

Under the auspices of the Vienna Initiative, both general policy and country-specific meetings were held. The first meeting in January 2009 started with a tour d'horizon of the problems. The second meeting was more concrete, aiming to define a framework within which the parent banks would make more specific commitments. The real breakthrough came in specific meetings on Romania and Serbia. Following upon IMF negotiated programmes, the parent banks made specific rollover and recapitalisation commitments. These meetings linked, for the first time, macroeconomic support by the multilateral organisations to specific commitments on rollover and recapitalisation agreements by the parent banks. The meetings helped develop a template for commitments and procedures that was followed to a large extent in subsequent country meetings. (See the box below on the bank statements on Hungary.) To date, 15 parent banks have made specific commitments in five countries, Bosnia and Herzegovina, Hungary, Latvia, Romania and Serbia, all of which have stabilisation programmes supported by the IMF and in some cases by the European Union as well.

Under the ECBI, the large bank groups with systemic presence in those countries committed to maintain their exposure and keep their subsidiaries well capitalised. The March 2009 Emergency Summit of EU leaders confirmed that government-financed support packages for parent banks would not set any restrictions on the activities of subsidiaries in EU host countries. Host country authorities agreed to pursue appropriate macroeconomic policies, strengthened their deposit insurance schemes, and provided local currency liquidity as needed. The IFIs played their part by delivering macroeconomic and private sector financial support. Lastly, the ECB's policy of enhanced credit support trickled down through cross-border banks to help liquidity outside the eurozone. Taken together, these actions prevented a very severe economic downturn from becoming a financial system and exchange rate crisis, as had happened in Asia and Russia in the late 1990s. The financial integration that could have transmitted instability from one country to another emerged instead as the bulwark of defence for the time being.

These agreements produced several unexpected positive consequences. First, they provided a framework to inter-lock incentives with parent bank support linked to IMF programmes. Second, in several countries non-systemic banks signed commitment letters similar to those provided by major parent banks, indicating that the public/markets valued these commitments. Third, private–public sector coordination allowed for concerted shifts towards monetary easing. For example, reserve requirements could be reduced with private bank assurances that this would not be followed by capital flight. Fourth, the public–private policy dialogue helped unearth some policy issues, such as EU rules leading to home bias in corrective measures when the EC approved state aid for bank restructuring. Overall it has been recognised that a regional approach is needed in dealing with cross-border banks. As a result of the consultations, home bias and financial nationalism on either end of the bank group nexus have been averted under the ECBI.

Two years after the onset of the crisis, the financial systems of CEE remain troubled. Non-performing loans are rising. Banks need to accelerate their balance sheet repair by dealing with rising non-performing loans and associated loan loss provisioning, complemented by further recapitalisation and diversification of funding sources so as to be less dependent on parent banks. Credit to the real economy, the SMEs in particular, remains depressed and may still be shrinking. Private-sector growth will not re-emerge without increased lending to the real sector. The IFIs might be able to reduce the banks' risk aversion to lending to SMEs through developing lending instruments to share the risk.

The EBCI started as a venue for joint discussions. Its very existence worked to reassure the markets that the stakeholders were acting jointly, backed with substantial resources from the international community. But the ECBI evolved into something more than a place to discuss common concerns. In the five countries with IMF agreements, it encouraged formal arrangements by the multi-national banks to maintain their level of country exposure. In other countries, the agreements were informal, but no less important and effective. Coordinated IFI work, building on complementarities in mandates and skill sets and associated synergies has been an important component of the IFI's crisis response in Europe. That said, coordination had its costs, with protracted negotiations occasionally slowing the response (as in the case of financial sector regulatory reform in Ukraine). Several of the multi-national banks have stated that they would have maintained their exposure levels in any case, as growing their subsidiaries in eastern Europe is a key element of their long-term business strategy. Noting these caveats, we consider that both the JAP and even more so the ECBI have made major contributions to mitigating financial crisis in central and eastern Europe.

Box: Summary version of the concluding statements by participating parent banks at the European Banking Group Coordination meetings for Hungary held in Brussels, on 20 May 2009 and 19 November 2009

We, the parent institutions of the six largest foreign-owned banks incorporated in Hungary, met in Brussels, Belgium, on May 20, 2009, at the joint invitation of the International Monetary Fund (IMF) and the European Commission (EC). The meeting was also attended by EBRD, European Investment Bank, World Bank, the home country banking supervisors and other relevant public institutions from Austria, Belgium and Italy, the Hungarian Financial Supervisory Authority, the Hungarian Central Bank (MNB) and the European Central Bank.

We agreed on the following considerations and conclusions:

1. We accept with satisfaction the shared analysis that all banks in Hungary are currently in good financial condition, and that the parent banks of the foreign-owned Hungarian banks have so far behaved responsibly, providing their Hungarian affiliates with capital, funding, managerial and other types of expertise as the need arose.
2. The IMF, the EC and the World Bank have agreed in October 2008 on a support package of €20 billion for Hungary. We welcome this important development that is ensuring the consolidation of macro-economic and financial stability in Hungary.
3. We are aware that the success of the macroeconomic program, as well as medium term balance of payments sustainability in Hungary also depends on the continued involvement of all banks operating in or with Hungary, including foreign-owned banks.
4. We entered the Hungarian market as strategic investors and key contributors to its transition toward an open, market-based economy. We have made substantial investments in Hungary over a number of years, and we remain committed to doing business in the country.
5. We are aware that it is in our collective interest and in the interest of Hungary for all of us to reconfirm, in a coordinated way, our commitment to maintain our overall exposure to Hungary, taking into account availability of adequate lending opportunities or alternative investment instruments in Hungary within boundaries defined by sound risk, capital and liquidity management practices.
6. We also acknowledge that our subsidiaries in Hungary may have been a need for additional capital, which will be met as necessary.
7. We have taken note of the MNB's effort to extend its existing stress testing framework, taking into account the multi-country experience of the IMF. We acknowledge the usefulness of this exercise to provide confidence in the soundness of the Hungarian banking system, and agree to support our Hungarian subsidiaries as needed. We are prepared to discuss the results of stress tests in a group, as well as bilaterally with Hungarian authorities, and to agree on any necessary further steps based on these discussions.
8. We are therefore prepared to confirm these commitments, within the framework of

the international financial support package, on a bilateral basis with the Hungarian authorities, and report to our home country supervisory authorities, according to European and the respective national regulatory frameworks.

Meeting on 19 November, 2009

In a meeting in Brussels of the European Bank Coordination Initiative held on 19 November, 2009, the parent banks of the six largest foreign banks active in Hungary reaffirmed their commitments made in May 2009 to support their subsidiaries. The purpose of this meeting was to take stock of the macroeconomic situation and to add specificity to the general commitments made on 20 May, 2009, also in Brussels.

Parent banks have behaved as responsible owners, increasing their exposures over the past year and maintaining adequate capital in their subsidiaries; the banking system's capital adequacy ratio was 13% in September 2009. Participants also welcomed the positive conclusion, earlier this week, by the IMF and the European Commission of their respective reviews of the economic programme with Hungary.

Looking ahead, the economic outlook and market access are improving though ensuring that the economy is supported by an adequate supply of credit remains a key priority. Participants underlined the continued engagement of cross-border banks in Hungary. To this end the six parent banks are expected to submit specific bilateral commitment letters in the coming weeks. The commitments include maintaining an appropriate capital adequacy ratio and exposure of at least 95% of the September 2008 level for the duration of the programme. Along with the international financial support package, they will help Hungary's banking system weather the economic downturn, support investor confidence and promote sustainable growth.

Signed by: Bayerische Landesbank, Erste Group Bank AG, Intesa SanPaolo, KBC Group, Raiffeisen International Bank Holding, and UniCredit Bank Austria AG.

Appendix 5

Table 6: IMF Statistics on Lending to Private Sector

Country Name *(QoQ% change)*	Descriptor	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Average Over Period
Albania	CLAIMS ON PRIVATE SECTOR	7.52%	10.16%	7.81%	3.44%	4.92%	0.78%	2.30%	1.94%	1.91%	4.53%
Armenia	CLAIMS ON PRIVATE SECTOR	12.41%	12.93%	12.73%	3.63%	4.60%	-3.85%	7.71%	6.27%	6.31%	6.97%
Azerbaijan, Rep. of	CLAIMS ON PRIVATE SECTOR	10.74%	27.45%	8.66%	-0.30%	-10.20%	4.29%	10.48%	4.81%	2.62%	6.51%
Belarus	CLAIMS ON PRIVATE SECTOR	9.89%	14.74%	12.68%	8.55%	11.03%	7.39%	6.40%	7.67%	5.94%	9.36%
Bosnia & Herzegovina	CLAIMS ON OTHER RESIDENT SECTORS	6.59%	7.16%	4.52%	1.22%	-0.58%	-1.09%	-1.44%	-0.69%	0.25%	1.77%
Bulgaria	CLAIMS ON OTHER SECTORS	6.81%	12.36%	7.07%	2.30%	0.71%	0.86%	1.31%	0.89%	-0.42%	3.54%
Croatia	CLAIMS ON PRIVATE SECTOR	3.11%	2.49%	1.90%	4.08%	1.37%	-1.79%	-0.85%	0.66%	0.70%	1.30%
Estonia	CLAIMS ON OTHER SECTORS	2.85%	3.03%	1.50%	-0.59%	-1.19%	-0.60%	-1.35%	-1.63%	-1.25%	0.09%
Georgia	CLAIMS ON PRIVATE SECTOR	9.83%	9.17%	-0.15%	9.99%	-5.01%	-4.78%	-2.40%	0.05%	3.68%	2.27%
Hungary	CLAIMS ON OTHER SECTORS	7.12%	-3.11%	6.50%	7.71%	9.17%	-9.24%	-1.65%	-0.86%	-0.47%	1.69%
Kazakhstan	CLAIMS ON PRIVATE SECTOR	0.71%	0.47%	1.31%	2.64%	10.08%	0.32%	-0.34%	-2.59%	-0.96%	1.30%
Latvia	CLAIMS ON OTHER SECTORS	3.33%	4.59%	4.05%	6.83%	-4.84%	-1.33%	-1.02%	-3.00%	-1.53%	0.79%
Lithuania	CLAIMS ON OTHER SECTORS	4.99%	6.25%	4.69%	1.54%	-2.88%	-1.92%	-1.20%	-2.24%	-2.12%	0.79%
Macedonia, FYR	CLAIMS ON PRIVATE SECTOR	9.72%	8.84%	7.29%	4.55%	1.81%	-0.52%	0.01%	1.87%	1.47%	3.89%
Moldova	CLAIMS ON PRIVATE SECTOR	9.62%	5.37%	1.93%	-1.06%	-1.66%	-3.77%	-1.45%	1.70%	-1.63%	1.01%
Mongolia	CLAIMS ON PRIVATE SECTOR	13.14%	9.91%	6.05%	-3.74%	2.10%	-4.21%	2.43%	1.35%	6.11%	3.68%
Montenegro	CLAIMS ON PRIVATE SECTOR	9.55%	9.94%	4.68%	-1.07%	-4.38%	-1.63%	-2.56%	-7.34%	-2.26%	0.55%
Poland	CLAIMS ON OTHER SECTORS	6.59%	5.77%	8.16%	11.78%	5.43%	-0.11%	0.71%	3.71%	-0.64%	4.60%
Romania	CLAIMS ON PRIVATE SECTOR	11.24%	8.06%	9.07%	2.17%	2.41%	-2.04%	0.61%	0.41%	-0.13%	3.53%
Russian Federation	CLAIMS ON PRIVATE SECTOR	8.33%	9.50%	8.32%	5.74%	3.09%	-1.36%	0.69%	-0.44%	0.00%	3.76%
Serbia	CLAIMS ON PRIVATE SECTOR	8.85%	5.21%	5.83%	10.19%	7.68%	0.03%	1.66%	4.41%	6.17%	5.56%
Turkey	CLAIMS ON PRIVATE SECTOR	10.15%	7.39%	5.29%	0.03%	-0.28%	2.56%	4.10%	5.37%	7.37%	4.66%
Ukraine	CLAIMS ON PRIVATE SECTOR	13.25%	7.50%	9.20%	25.66%	-3.47%	-1.30%	1.90%	-1.36%	0.76%	5.79%
Total Average QoQ% Change		8.10%	8.05%	6.05%	4.58%	1.30%	-1.01%	1.13%	0.91%	1.39%	3.39%

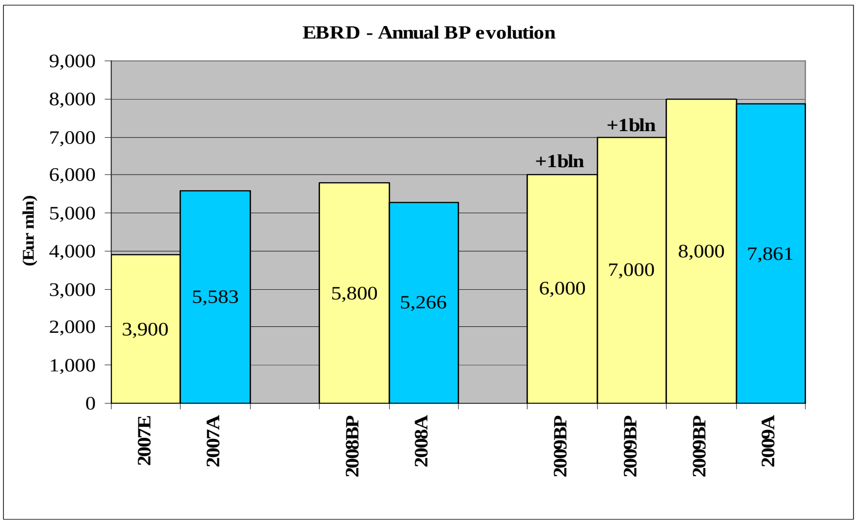
Appendix 6a:

Crisis Response Business Plan

Business plan evolution

To support the response to the crisis in the COO, the Board of Directors approved a total €2 billion increase of 2009 business plan to €8 billion. The increase was produced in two tranches: the first of €1 billion in November 2008 and a second €1 billion increase in September 2009.

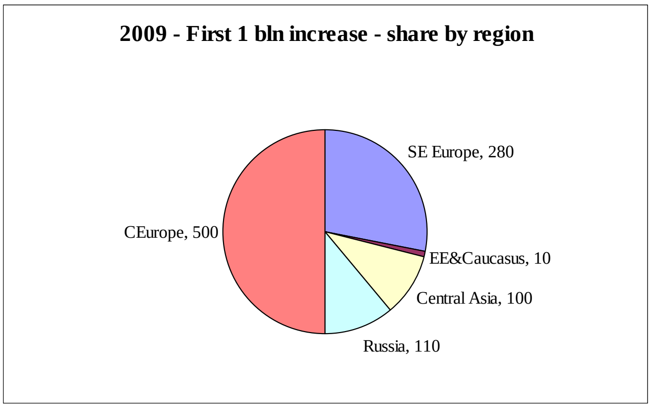
Chart 1:

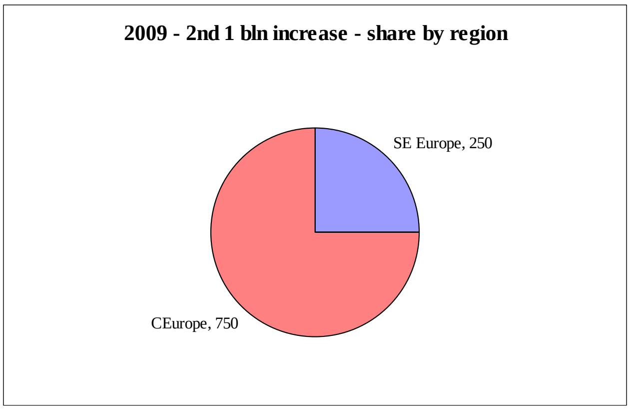


By region

The first increase (November 2008) was allocated to all the Bank's regions[1] but with higher weight to central Europe (€500 million) and south east Europe (€280 million), while Russia was allocated €110 million, Central Asia €100 million and only €10 million were placed to eastern Europe and the Caucasus region.

Chart 2:

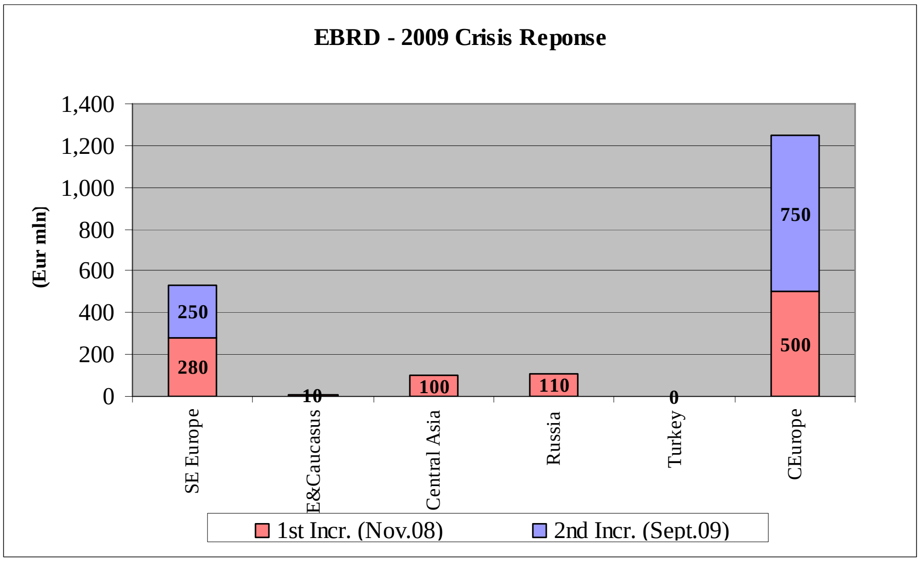




[1] SEE: Albania, BiH, Bulgaria, Croatia, FYR Macedonia, Montenegro, Romania, Serbia, Slovak Rep., Slovenia
EE&Caucasus: Armenia, Azerbaijan, Georgia, Moldova, Ukraine
Central Asia: Kazakhstan, Kyrgyz Rep., Tajikistan, Turkmenistan, Uzbekistan
CE: Belarus, Czech Rep., Hungary, Estonia, Latvia, Lithuania

The second increase (September 2009) was limited to south east Europe (€250 million) and mainly to central Europe (€750 million). South east Europe was allocated in total €530 million or 27 per cent of total, Central Europe was allocated €1,250 million or 63 per cent of total budget increase and the remaining 11 per cent was shared among Russia (6 per cent), Central Asia (5 per cent) and a residual 1 per cent to EE&Caucasus.

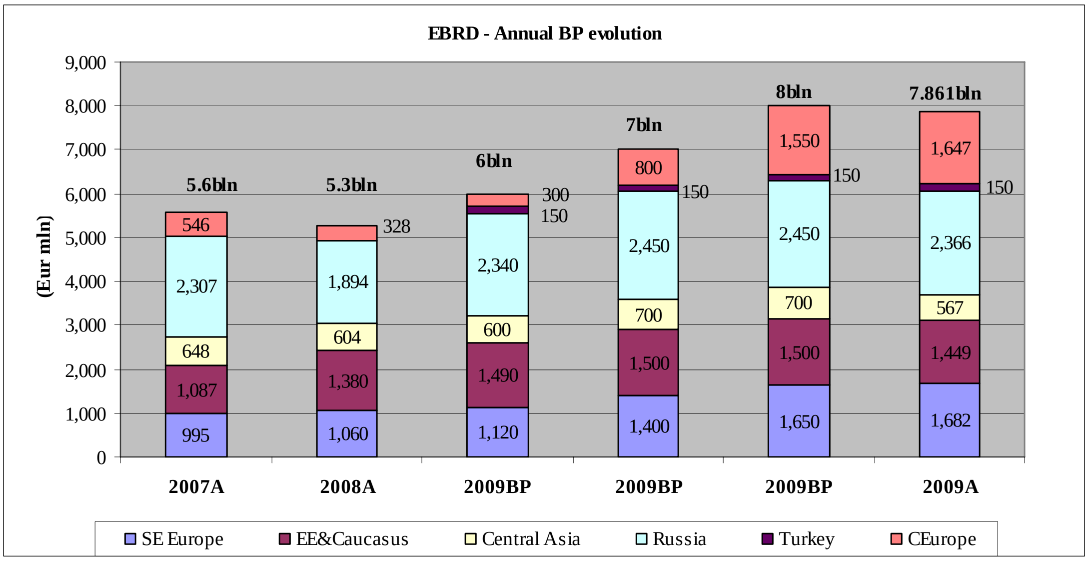
Chart 3:



For Central Europe, that represented an increase of 373 per cent of previous year 2008 actual portfolio of €328 million. For SE Europe, it represented an increase of 56 per cent and for Russia 29 per cent. As a result, the total 2009 budget split by regions presented a shift compared with previous years: Russia decreased its weight from 35 per cent to 31 per cent, and central Europe presented a substantial shift in its weight in the portfolio, which had been decreasing over the last few years to 6 per cent in 2008, to represent a 19 per cent of the total portfolio in 2009.

EE&Caucasus also decreased its weight from 26 per cent to 19 per cent and Central Asia presented a slight decrease from 12 per cent to 9 per cent, compensated by new allocation to Turkey that represented 2 per cent of budget, while SE Europe remained virtually unchanged at 21 per cent.

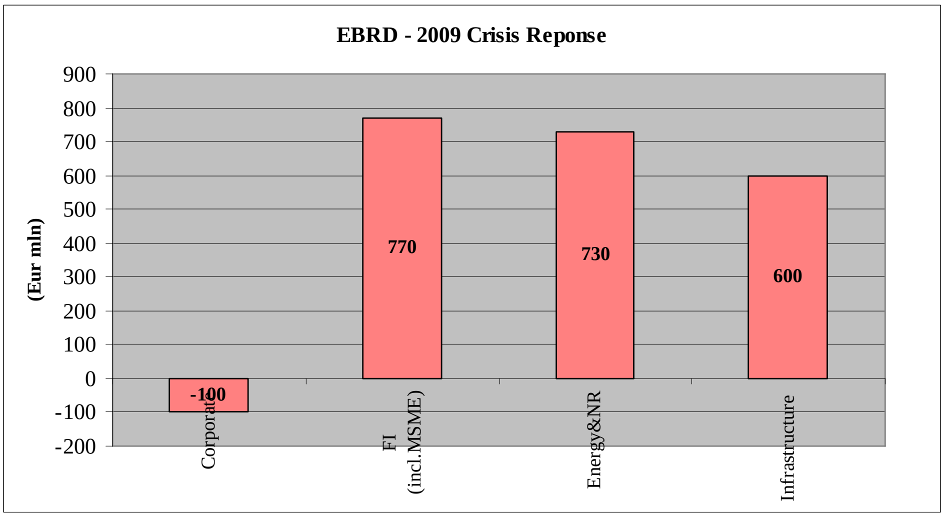
Chart 4:



By economic sectors

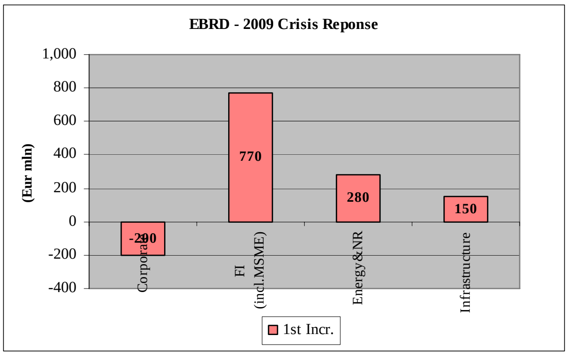
The bulk of the budget increase was split more or less evenly between FI (including MSME) with 39 per cent of total 2 billion, Energy&NR (37 per cent) and Infrastructure (30 per cent), while the Corporate sector experienced a budget cut of €100 million.

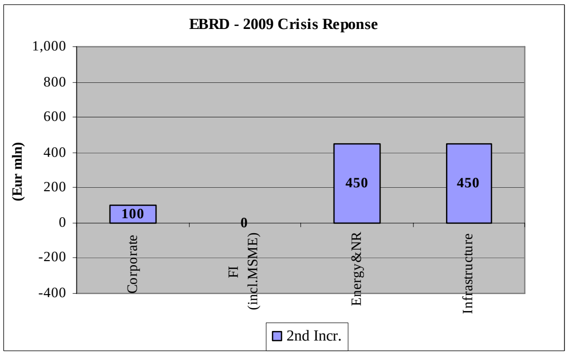
Chart 5:



The first increase presented a higher weight of the financial sector, which was allocated 77 per cent of total €1 billion increase, or €770 million, but there was no further allocation to FI in the second increase, so that the final share of FI in the total 2 billion CR package was of 39 per cent. The Corporate sector was decreased in budget allocation by €200 million in the first budget increase, partially compensated with a €100 million increase in the second budget increase, leaving the total budget decreased by €100 million net.

Chart 6:





The second increase was targeted mainly to Energy&NR and Infrastructure projects, which represented each 45 per cent of this second budget increase (€450 million each).

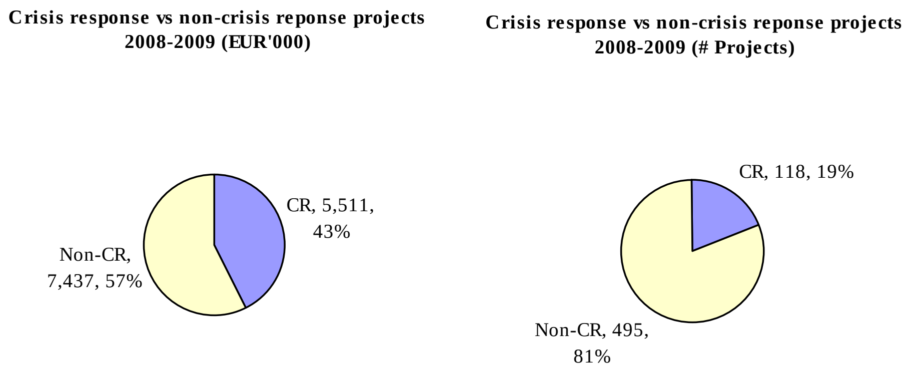
As a result of this budget increase allocation, the portfolio distribution by sector presented some shift compared with previous year 2008: Corporate sector decreased its weight from 26 per cent to 20 per cent; Financial institutions' weight was also decreased, from 25 per cent to 21 per cent, while Energy&NR increased its weight from 17 per cent to 22 per cent (double of 11 per cent in 2007), and MSME and Infrastructure experienced small increases in its weight. It should be noted that the increased budget in Energy&NR of €1750 million represented almost the double amount executed in 2008 (€884 million).

Appendix 6b:

CR project allocation and the intensity of the crisis response

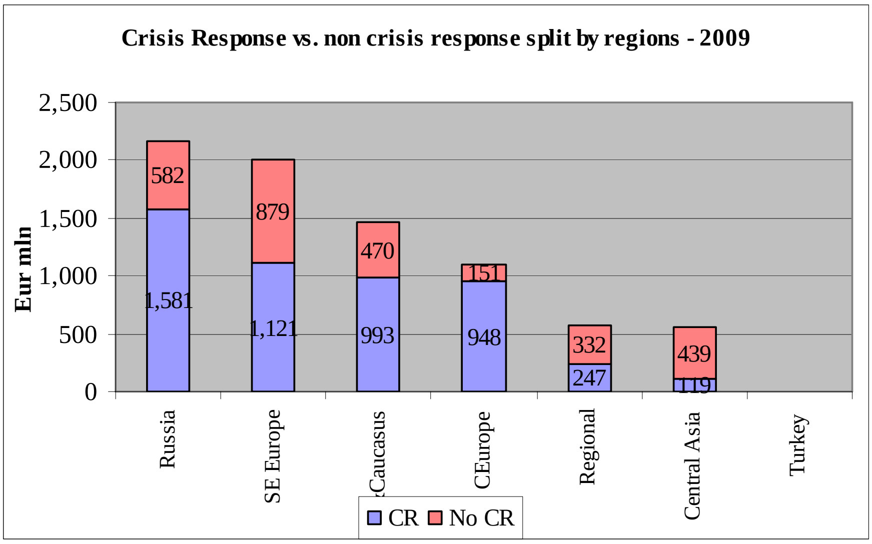
Reported CR project allocation. The designation of certain projects as "crisis response" started in the last quarter of 2008. Between the fourth quarter of 2008 and 2009, a total of 118 projects were done as part of the Bank's crisis response package, which represents 19 per cent of total projects signed in the period. If only 2009 is considered (as the classification as crisis response only started in the fourth quarter of 2008), the weight of crisis response projects, by number of projects, was 34 per cent. However in volume terms, the crisis response projects represented 64 per cent of total volume in 2009 and 43 per cent if the total period is considered.

Chart 1:



The larger weight in volume terms is due to the larger average size of crisis response projects, at €47 million, compared with €15 million for non-crisis response projects.

Chart 2:

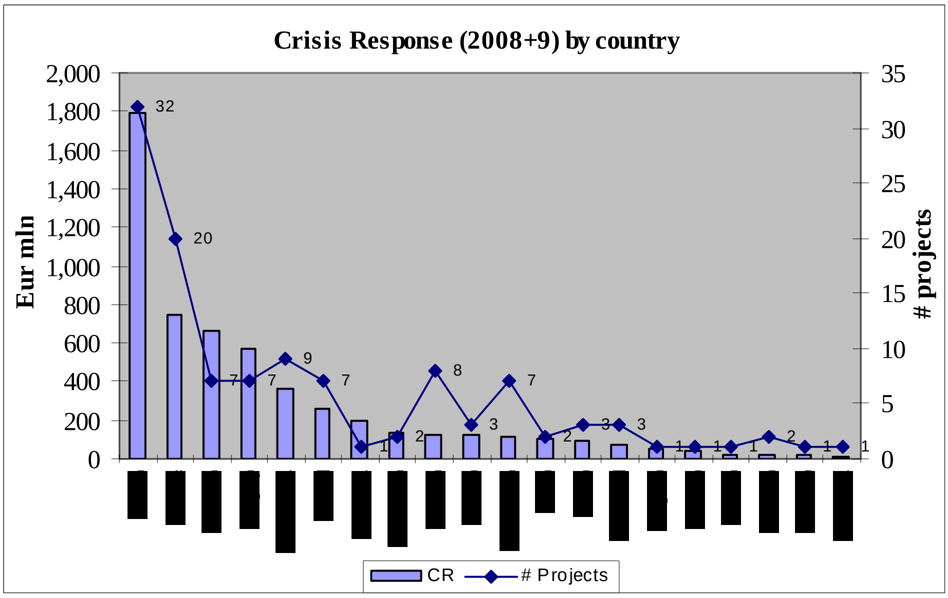


If only 2009 is considered (again, as in 2008 projects were classified as crisis response only in the fourth quarter), the weight of CR projects was particularly high in central Europe, where they represented 59 per cent by number of projects and 86 per cent of the volume. Also in Russia the weight of CR projects was significant, representing 49 per cent of projects and 73 per cent of business volume.

Crisis response projects by countries/region

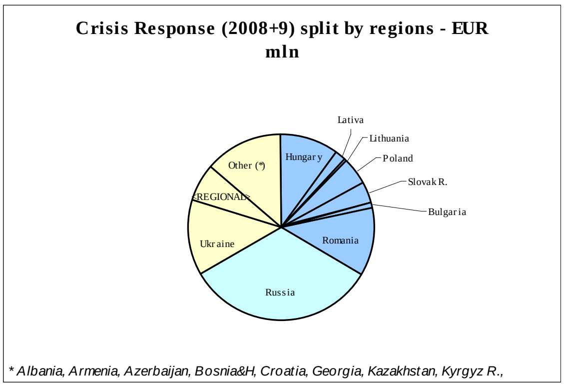
Crisis response projects were signed in 19 of the EBRD's 29 COOs. In many countries only one or two projects were signed as part of the CR. Russia accumulated the largest number, with a total of 32 projects, followed by Ukraine with 20. By regions, approximately one-third of all crisis response projects was directed to the EU countries, one-third to Russia and one-third to other countries (including regional projects), mainly Ukraine.

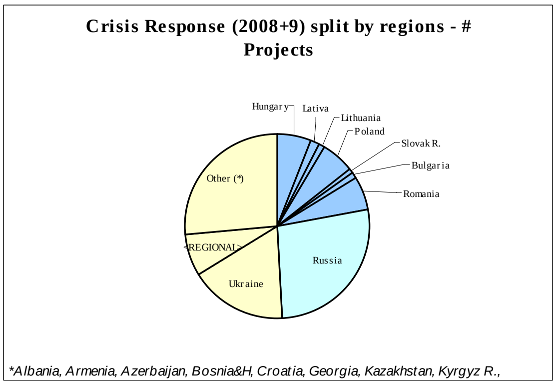
Chart 3:



In the EU countries, CR projects were signed in only seven of the 10 EU-EBRD countries, namely Bulgaria, Hungary, Latvia, Lithuania, Poland, Romania and Slovak Republic. Romania, with seven projects for a total of €660 million and Hungary with also seven projects totalling €567 million, were the largest beneficiaries, accumulating together two-thirds of the total volume response invested in the EU countries.

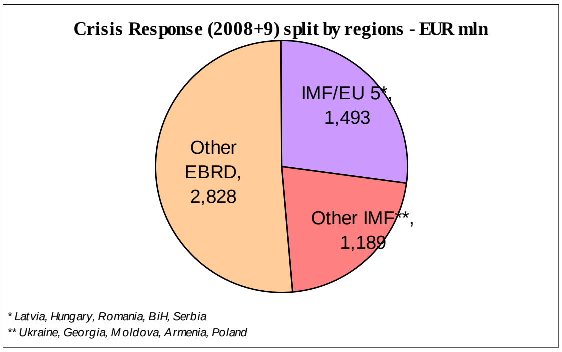
Chart 4:

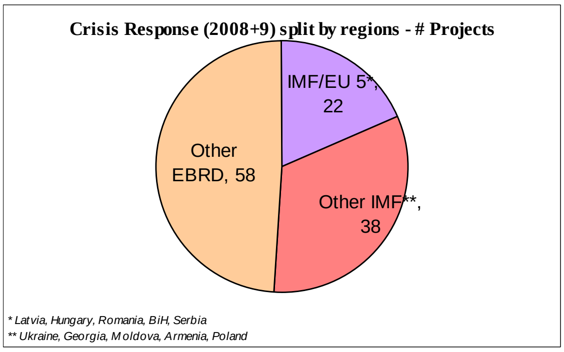




The Bank's response was coordinated with other IFIs in the framework of the Vienna Initiative. Almost half of the Bank's CR projects, both by number and by volume, were allocated to countries that received support from the IMF.

Chart 5:





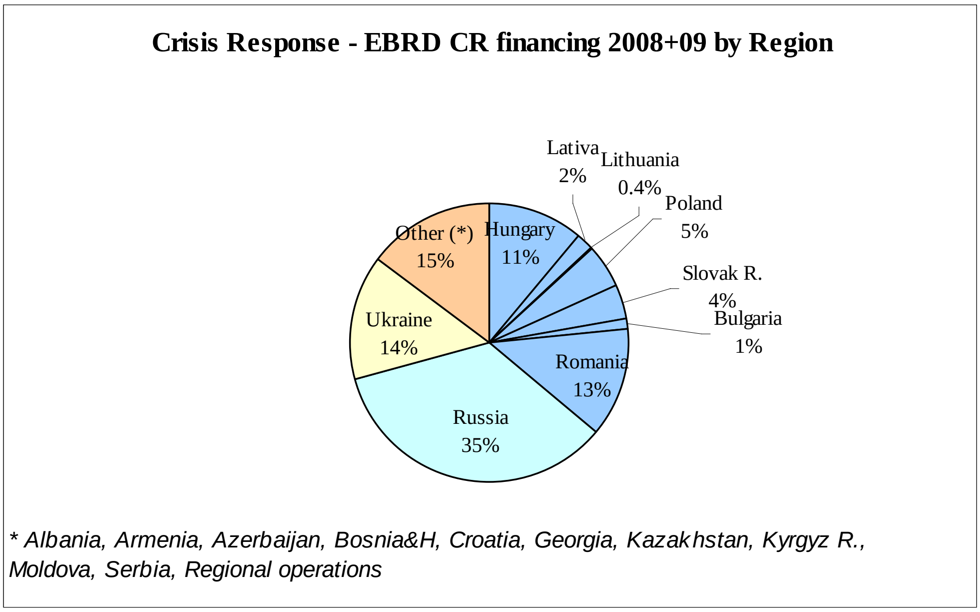
Intensity of CR project allocation by region and country

EBRD response to the crisis focused on 19 of EBRD's countries of operations, while 11 countries[1] (including graduated Czech Republic) did not benefit from a CR project.

Chart 6 depicts the share of CR funds allocated to each country. As can be seen, Russia accumulated the largest share of the CR package with 35 per cent of all funds, followed by Ukraine (14 per cent), Romania (13 per cent) and Hungary (11 per cent).[2] The EU countries altogether accumulated 36 per cent of the total CR package.

By regions, 24 per cent of the funds went to SE Europe, 21 per cent to EE&Caucasus, 18 per cent to central Europe, and only 2 per cent to Central Asia.

Chart 6:



The EBRD's response in relation to output loss and external debt

The following section tries to measure the intensity of the Bank's response in relation to the share of the total output loss in the general economy in each country and the level of external debt accumulated in each country.

To this end, a ratio has been calculated to compare the share of the Bank's funds allocated to each country with the share of output loss and external debt in each same country, with each of these parameters weighted 50 per cent for the purpose of the calculation of the ratio.

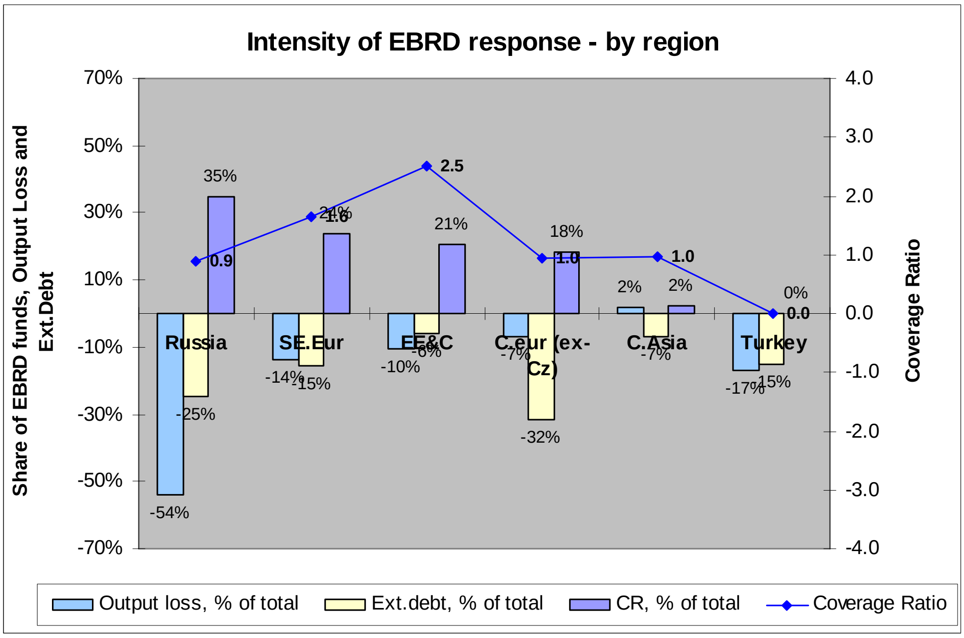
---

[1] Belarus, Czech Republic, Estonia, FYR Macedonia, Mongolia, Montenegro, Slovenia, Tajikistan, Turkmenistan, Uzbekistan, Turkey.

[2] Appendix 1 looks at the allocation in terms of risk, while this appendix focuses on allocation in terms of ABV.

Chart 7 depicts the comparison between the share of EBRD CR funds allocated to each country/region and the share, in each same country/region, of the total output loss and external debt in the whole region and the resulting "coverage ratio".[3]

Chart 7:



When considered in relation to the output loss and the external debt accumulated by end 2009, the response of the EBRD presented a higher concentration in some countries and regions than others, as measured by the *coverage ratio*:

- **<u>Russia</u>** represents almost 40 per cent of the EBRD's region economies (GDP 2009) and it received an approximately equivalent amount (35 per cent) of the Bank's CR package. However in relation to the output loss in the country, the EBRD response may have seemed under-covered as Russia suffered one of the largest recessions in the region with GDP decline of -7.9 per cent in 2009, which represented 54 per cent of the total output loss in the region in 2009. However, the level of external debt accumulated was not so dramatic and at end 2009, the Russian external debt represented 25 per cent of the total external debt in the region. Taking both parameters into account, the calculated coverage ratio for Russia of 0.9 shows a proportionate amount of the Bank's funds allocated to the country by this optic.

- **<u>SE Europe</u>** is the second region that received a larger share of the Bank's funds, of 24 per cent. The EBRD response to the region may have been over-covered, as both in terms of GDP size, output loss and external debt, the SE Europe countries

[3] The coverage ratio is defined as the relation between share of EBRD's funds allocated to a country/region and the share of that country/region's output loss and external debt. The average for the whole region is necessarily 1. A ratio above 1 means over-response and below 1 under-response. In some cases the ratio is negative as some countries did receive CR funds while still had positive GDP growth (hence, negative output loss). Coverage ratio = (EBRD CR funds 08-09 in the country/Total EBRD CR funds 08-09) / (0.5 x (Output loss in the country 2009/ total output loss in the region 2009) + 0.5 x (External debt in the country 2009/ total external debt in the region 2009).

represent altogether around 14 per cent of the whole EBRD region. The over-response in this region was led mainly by the large level of funds contributed to Romania, which represented 13 per cent of the total CR funds. Romania suffered intensely the effects of the crisis, with a GDP decline of over 7 per cent in 2009, but still, given the relatively small size of the economy, this represented only about 6 per cent of the total output loss in the region and a similar share of the total external debt, however it was allocated a significant 13 per cent share of the funds. On the other hand, the region includes countries like Slovenia and Montenegro, which were severely affected by the crisis in terms of GDP decrease but received no funds under the Bank's CR.

- **<u>The eastern Europe and Caucasus region</u>** would be the most over-covered based on the mentioned analysis parameters. The region, which overall GDP represents 6 per cent of the total Bank's region received 21 per cent of the Bank's CR funds. The severity of the crisis expressed intensely in Ukraine with a GDP decline of -15 per cent but the level of the response (Ukraine received 14 per cent of the total Bank's CR funds) was above the share in the output loss of 11 per cent and well above the share in the total external debt (5 per cent). Anecdotally, the level of response in Georgia was very high in relative terms. A small country representing only 0.3 per cent of the Bank's regional economy received 2.4 per cent of all the CR funds.

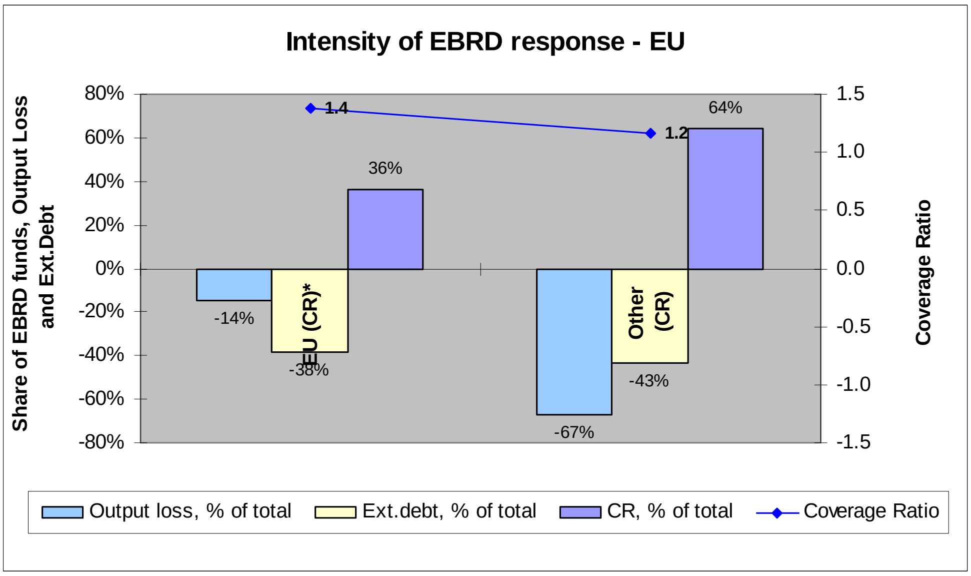
- **<u>The central Europe region</u>** represents around 20 per cent of the EBRD region in terms of GDP and received a similar amount of 18 per cent of the Bank's CR funds. The amount allocated could have seemed excessive if measured only by the output loss in this region, which was not so severe and represented only 7 per cent of the total output loss. Although some of the countries, especially the Baltic countries, experienced large contractions in GDP of around 15 per cent, the small size of their economies made their share in total output loss relatively small, and the allocation of funds to them was relatively small too. However the level of external debt reached in larger economies like Poland (in spite of positive growth in GDP) and Hungary was matched by a larger allocation of funds to these countries (Hungary received 11 per cent of the total Bank's CR funds while Poland received 5 per cent).

- **<u>Central Asia</u>**: The CR funds allocated to the Central Asia region represented only 2 per cent of the total CR funds, an amount not so small if considering that the six countries in this region represent altogether only 4 per cent of the total EBRD's region GDP and that most of the countries (all except Mongolia) actually experienced positive growth in their economies. Indeed four countries (Mongolia, Tajikistan, Turkmenistan and Uzbekistan) received no CR funds at all and the bulk of the Bank's contribution took place in Kazakhstan, a country that experienced a positive moderate growth of 1 per cent but had accumulated a significant level of external debt representing 6 per cent of the total external debt in the Bank's region.

<u>EU versus non-EU</u>:

- Considering all the nine EU countries in the region together (excluding the Czech Republic, which received no support during the crisis as the country had previously graduated), the response of the Bank to the EU region of 36 per cent of total funds shows a slightly high degree of concentration if compared with the total GDP (28 per cent) or output loss (17 per cent) but commensurate with the level of external debt (39 per cent).

Chart 8:

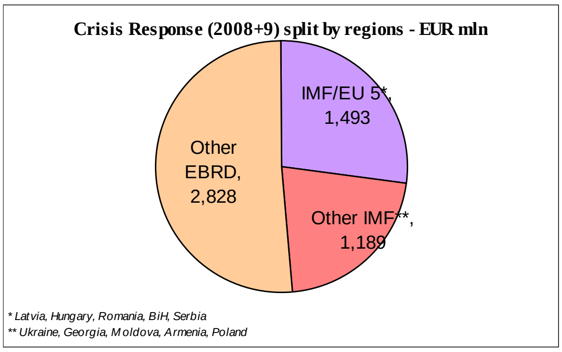


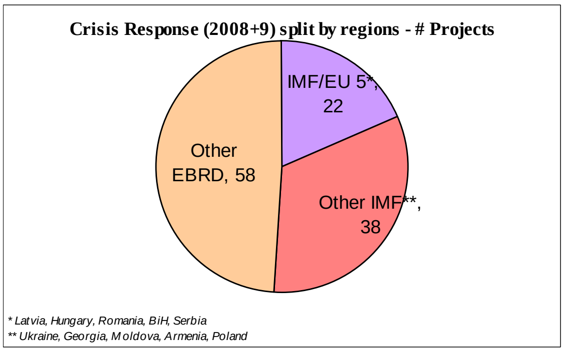
- There were however discrepancies between EU Countries: Romania (which received 13 per cent of the total CR package), Hungary (11 per cent), Poland (5 per cent) and the Slovak Republic (4 per cent) presented the highest allocation of funds. In the case of Romania, as mentioned above, this represents a high concentration of the Bank's funds in relation to both the size of the economy, output loss and external debt, which all represented around 6 per cent of the total. The Slovak Republic also received a large injection of funds in relation to the size of its economy and output loss of around 2 per cent. The response in Hungary (11 per cent of total funds) was large in relation to the size of the Hungarian economy and output loss, both around 4 per cent of total, but commensurate with the high level of external debt, which represented 10 per cent of the whole Bank's region as of end 2009. Also Poland presented a high level of external debt, representing 15 per cent of the total region in spite of maintaining positive growth, which justified the Bank's support.

IMF versus non-IMF response countries

- EBRD countries that received IMF support also received a larger share of funds than those that did not. Five countries received balance of payment programmes from both the IMF and the EU: Hungary, Romania, Latvia, Serbia and Bosnia and Herzegovina. A second group of countries received assistance from the IMF but not from the European Union. The following graphs show the allocation of CR project volume and number of projects to these groups of countries.

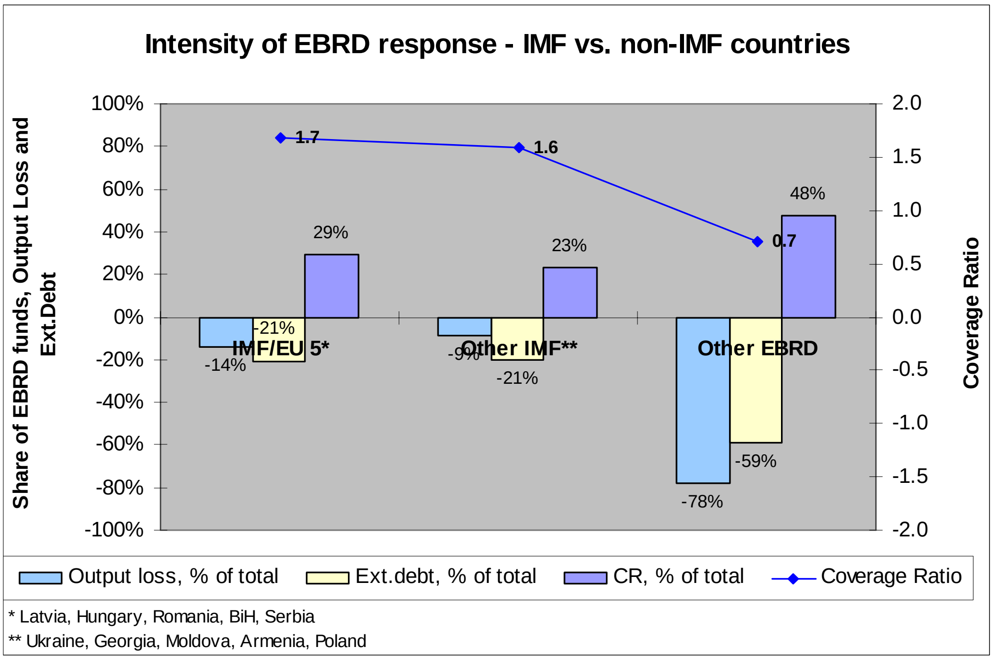
Chart 9:





- The EU-5 countries received 29 per cent of EBRD CR volume and the other IMF countries 23 per cent. Together, the IMF programme countries received more than half (52 per cent) of the Bank's CR volume, a larger share than their 29 per cent share of the region's GDP. The allocated share of EBRD CR volume represents a large concentration compared with the output loss in these countries (-22 per cent) but also with the external indebtedness (42 per cent).

Chart 10:

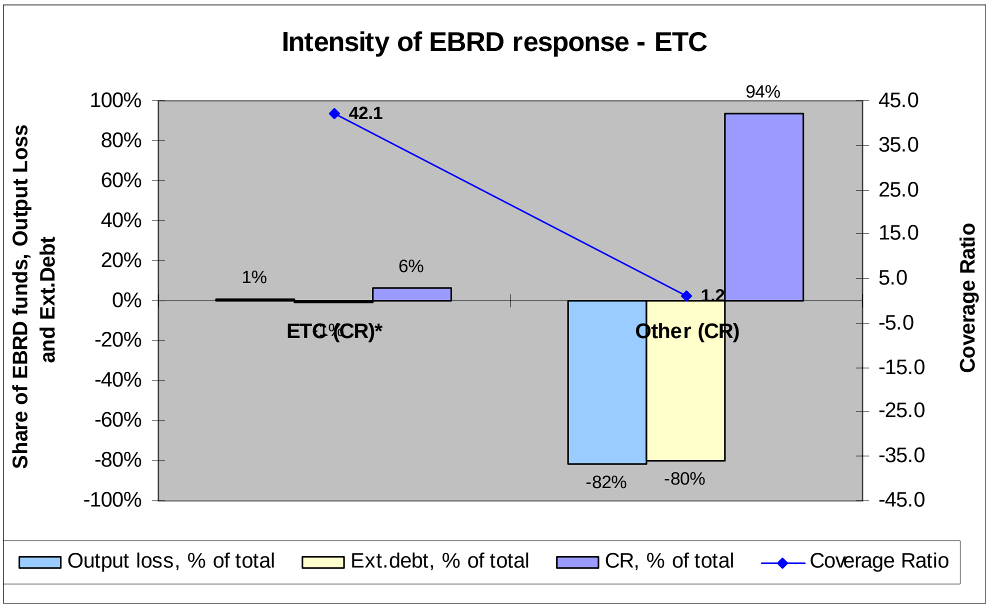


ETC countries

- Lastly, ETC countries considered together were allocated 6 per cent of the Bank's CR funds. This amount, which may seem small, actually represents a high level of response, taking into account the small size of these economies and the moderate impact of the crisis in terms of output loss and level of external debt. Only five ETC countries (Armenia, Azerbaijan, Georgia, Kyrgyz Republic and Moldova) received funds as part of the CR package. The size of these economies altogether represented 2 per cent of the Bank's region while output loss was actually negative (positive output increase) as economic growth was positive in

Azerbaijan, the largest among these economies, and the level of external debt was also moderate, representing only 1 per cent of total accumulated external debt in the region.

Chart 11:



Appendix 7: Key events in the 2008-09 financial crisis

17/07/2007	Bear Stearns reveals that one of its sub-prime hedge funds has lost all of its value
05/07/2007	Warren Spector, co-CEO of Bear Stearns, resigns
09/08/2007	BNP halts withdrawals from three mortgage security investment funds for lack of fair value
17/08/2007	Fed cuts Fed Funds by 0.5% to 5.75%
14/09/2007	Run starts on Northern Rock Bank in the UK
18/09/2007	Fed cuts Fed Funds by .5% to 4.75%
01/10/2007	UBS announces sub-prime losses
30/10/2007	Merrill Lynch announces $8 billion sub-prime exposure, CEO resigns
30/10/2007	S&P Downgrades Kazakhstan to BBB-
09/01/2008	World Bank projects worldwide output decline in 2008
21/01/2008	Global stock markets' biggest fall since 11 September 2001
22/01/2008	Fed cuts Fed Funds by 0.75% to 3.5%
14/03/2008	NY Fed funds Bear Stearns
25/03/2008	Bear Stearns sold to JP Morgan
12/05/2008	S&P puts several Kazakh ratings on negative watch
07/09/2008	US rescues Fannie Mae and Freddie Mac
17/09/2008	Lehman Brothers files for Chapter 11 bankruptcy protection
18/09/2008	US rescues AIG
26/09/2008	The EBRD's President proposes to move up CRR-4 planning, citing crisis
28/09/2008	Part nationalisation of Fortis Bank
30/09/2008	Part nationalisation of Dexia
03/10/2008	US TARP signed into law
03/10/2008	Fortis Bank, Dutch government buys Dutch (former ABN) business
10/10/2008	Fortis Bank, Belgian government buys 99% of Belgian business
11/10/2008	G-7 countries 5-point plan
11/10/2008	WB Meeting: International Monetary and Finance Committee endorses G-7 plan
13/10/2008	World Bank Fall Meeting, Plenary concluding remarks note crisis and IMF readiness to respond
13/10/2008	UK takes control of RSB and HBOS
15/10/2008	EBRD Board Meeting, minutes record rejection of invitation to invest in IFC's equity crisis fund
15/10/2008	Dow falls 7.8%
26/10/2008	IMF announces tentative agreement with Ukraine, Hungary
17/10/2008	EBRD President's letter to Board, the EBRD to use all available resources in concert with other IFIs

30/10/2008	Fed cuts Fed Funds by 1% to 1.5%
30/10/2008	Erste subscribes €2.7 billion from Austrian state
06/11/2008	IMF Programme for Hungary US$ 15.7 billion
06/11/2008	IMF Programme for Ukraine US$ 16.4 billion
06/11/2008	First "CEE Action" meeting in Vienna at RI chaired by Dr Stepic, EIB attends
13/11/2008	Letter from PM of Hungary to EBRD Governors
13/11/2008	EBRD 2008 Bank Retreat: Background Notes
14/11/2008	Eurozone in recession, -0.2% in Q3
15/11/2008	G-20 Declaration calling for MDBs to use full capacity and be adequately resourced
17/11/2008	IMF Precautionary Loan for Serbia US$ 0.5 billion
18/11/2008	EBRD 2008 Bank Retreat
19/11/2008	Letter from the President following the Bank Retreat to the Board of Directors
19/11/2008	IMF Programme for Iceland US$ 2.1 billion
21/11/2008	EBRD 2009 Business Plan and Budget: Crisis Response (mentions Hungarian PM request)
23/11/2008	US$ 20 billion rescue of Citigroup
27/11/2008	"Six Banks" letter to senior EU officials (Erste, Intesa, KBC, RI, SocGen, UC)
01/12/2008	EBRD Board Executive Session on crisis response
03/12/2008	Board approves special fund FI sector project for Ukraine
10/12/2008	EBRD Board Meeting discussion of Operational Crisis Response
16/12/2008	Fed cuts Fed Funds by 1% to 0.25% to 0% range
17/12/2008	2nd "CEE Action" meeting in Vienna at RI chaired by Dr Stepic, EBRD attends
23/12/2008	IMF Programme for Latvia US$ 2.3 billion
12/01/2009	IMF Programme for Belarus US$ 2.4 billion
16/01/2009	IMF Programme for Serbia US$ 0.5 billion
23/01/2009	First "Vienna Club" meeting with host and home country authorities
23/01/2009	2nd "Six Banks" letter to eight central banks asking for ECB leadership
26/01/2009	Kiev meeting of banks, IFI, host country authority
04/02/2009	Kazakh currency devalued 18%
15/02/2009	Moody's report voices concern over parent bank support for eastern European subsidiaries
27/02/2009	Joint IFI Action Plan announced
01/03/2009	Armenia IMF Programme
01/03/2009	Letter to EU Leaders from PM of Hungary stressing need for a crisis response package (ESIP)
14/03/2009	G-20 meeting London, communiqué on “estoring lending: a framework for

	financial repair and recovery”
02/03/2009	EU Summit rejects ESIP proposal
04/03/2009	Financial Institutions: Meeting the Crisis, FOPC session
25/03/2009	IMF Programme for Romania US$ 17.5 billion and Joint Ecofin/EC assistance announced
25/03/2009	EU announces medium-term assistance to Romania of up to €5 billion, asks for parent bank support
26/03/2009	Financial Sector Coordination meeting on Romania, joint banks announcement
02/04/2009	G-20 meeting London, Declaration on Delivering Resources via IFIs
13/04/2009	Alliance Bank Kazakhstan seeks standstill after default
17/04/2009	Letter to Governors – Fighting the Crisis, Promoting Recovery and Deepening Transition
06/05/2009	EBRD OCR, Progress Report for annual meeting
20/05/2009	Romania, banks agree to bilateral commitment letters re March
20/05/2009	Financial Sector Coordination meeting on Hungary, joint banks announcement
27/10/2009	EBRD engagement with the EU-7 countries during the crisis and post-crisis recovery
22/02/2010	EBRD Progress Report to G-20
27/02/2010	G-20 Deputies meeting in Songdo, Incheon on 27-28 February

MEMORANDUM

To: Directors and Alternate Directors SGS08-257

From: Acting Secretary General *hR* **Date:** 13 November 2008

Subject: Letter from the Prime Minister of Hungary

Attached is a letter from the Prime Minister of Hungary with an accompanying cover note from the Governor, Dr János Veres.

The Prime Minister has requested that his letter be sent to EBRD shareholders and a mailing is in preparation and will be sent to Governors tomorrow, 14 November. The letter is being forwarded to you directly as you may wish to communicate its contents to your authorities as soon as possible.

Distribution

President
Executive Committee

For Official Use Only

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E-MAIL: janos.veres@pm.gov.hu

MINISTER OF FINANCE
REPUBLIC OF HUNGARY

PÉNZÜGYMINISZTÉRIUM

18152/2008

Mr. Thomas Mirow

President

European Bank for Reconstruction and Development

London

Budapest, 13 November 2008

Dear Mr. President,

I am pleased to send the letter from the Hungarian Prime Minister, Mr. Ferenc Gyurcsány on the need to strengthen EBRD's presence in Central Europe to support overcoming the current financial crisis. I hereby ask you to kindly forward the letter of the Prime Minister to the shareholders of the EBRD and find best and effective ways of formulating the Bank's strategic operations in line with orientations outlined in the Hungarian initiative.

Yours sincerely,

Dr. János Veres

Attachment:

Letter from the Hungarian Prime Minister

Copy to:

Mr. Nicolas Sarkozy, President of the Council of the European Union

Mr. José Manuel Barroso, President of the European Commission

The Prime Minister of the Republic of Hungary

13th November, 2008

To Shareholders of the EBRD

The Central European transition economies face significant economic pressure as a result of the global financial turmoil. At the same time, their financial capacity to replace volatile capital flows and establish market confidence is limited. Therefore, we need to ensure that existing sources of stable financing, especially those established specifically to support Central Europe, play their full part to enhance the resilience of our market economy.

At this difficult juncture, we therefore urge the EBRD to strengthen its presence and, rather than investing less, to substantially step up its financing for Central Europe for as long as is necessary to help overcome the current crisis, preserve and consolidate the achievements of transition, and set our economies back on a path of recovery.

GYURCSÁNY Ferenc

Appendix 9: <u>Country case study: Ukraine</u>

<u>Vulnerability conditions</u>

Ukraine was among the hardest hit countries by the global crisis.

The economic and financial vulnerability of the country to event risk was rising already in the mid-2000s. By 2006, the country should have been added to the Watch List of vulnerable countries at the yellow or first level of concern. By then, the country was breaching five economic and financial tripwires (inflation rate, domestic credit growth, rising exchange rate over-valuation, total external debt/GDP and short-term external debt as a share of total external debt) and all six governance tripwires (see box below).

To these regular tripwires should be added the high external debt of the private sector, high foreign currency exposure of households and the country's dependence on commodity exports, particularly metals. By 2007, Ukraine breached another tripwire as its current account/GDP registered a deficit of 4.2% of GDP. At that point, the country should have been downgraded on the Watch List to the orange or second level of concern.

<u>Table 1: Ukraine – vulnerability conditions</u>

	2003	2004	2005	2006	2007	2008	2009
GDP growth	9.6	12.1	2.7	7.3	7.9	2.1	-15.1
Consumer prices	5.2	9.0	13.5	9.1	12.8	25.2	15.9
Unemployment	9.1	8.6	7.2	6.8	6.4	6.4	8.0
Domestic credit	38.4	24.8	34.3	69.4	77.0	76.9	4.0
Budget balance	-0.7	-4.4	-2.3	-1.3	-2.0	-3.2	-11.4
Current acct/GDP	5.8	10.5	2.9	-1.5	-4.2	-7.1	-1.7
REER (2000=100)	95.4	96.0	112.8	112.7	114.5	97.7	98.7
External debt/GDP	47.5	47.3	46.0	50.6	56.0	56.4	91.7
ST Ext Debt/Ext Debt	37.9	34.0	30.5	28.2	28.7	20.1	23.8
Voice and							
Accountability	27.4	28.9	35.1	45.2	46.2	47.1	NA
Political stability	36.1	34.6	34.6	45.2	49.5	44.0	NA
Govt effectiveness	36.5	32.2	42.7	38.4	29.9	32.7	NA
Regulatory quality	25.4	37.1	44.9	34.2	36.4	39.1	NA
Rule of law	20.5	26.2	33.8	24.8	26.7	31.1	NA
Control of corruption	18.9	19.9	37.9	33.5	27.0	28.0	NA

In 2008, the country's vulnerability was shifting from the foreign to the domestic tripwires, including breaching an additional domestic tripwire, the budget deficit. The country would have remained on the Watch List at the orange level of concern.

By mid-May 2008, the IMF noted retrospectively that the country's vulnerability had increased. Addressing particularly the growing vulnerabilities in the banking sector, it called for consolidated supervision, increased transparency, enhanced risk management, relaxed bank secrecy provisions, strengthened prudential requirements and better mechanisms for bank exit. Problems deepened in the real economy due to rising global financial turmoil and a plunge in commodity prices. The economy's growth fell to 2.1 per cent in 2008. By the end of the year, Ukraine had agreed to an IMF programme.

2009 was a politically turbulent year for Ukraine, leading to policy paralysis in the country. Indeed, the Bank noted in its 7 May 2010 *Ukraine Country Strategy Update – 2010* that the central bank's poor crisis management capacity and the lack of policy coordination within the government exacerbated the impact of the crisis. In response to the crisis, the government pursued a strategy of pre-emptive recapitalisation of commercial banks and nationalised several medium-sized banks. An important challenge is to ensure that recapitalisation is completed by all banks. The country fell out of its IMF programme in November 2009. The real economy's deterioration deepened to a decline of 15.1 per cent that year. The country would have remained at the orange level of concern on the Watch List.

The new Ukraine government agreed a new IMF programme in July 2010. The staff appraisal noted "implementation of policies consistent with the programme provides the best chance for Ukraine to succeed with reforms, reinvigorate growth, and reduce vulnerabilities". The IMF forecast the Ukraine economy will grow by 3.7 per cent in 2010.

Portfolio overview

At the end of 2006, the EBRD's active portfolio in Ukraine comprised 101 projects totalling €1.7 billion. These operations included projects totally within Ukraine, and the Ukrainian portions of broader, regional projects. The Financial sector accounted for 19.7 per cent of the portfolio by volume. Annual new business volume fell from €789 million in 2006 to €650 million in 2007, then rose to €835 million in 2008 and €1,013 million in 2009. Disbursements almost doubled from €436 million in 2006 to €838 million in 2009. By the end of 2009, the volume of the active portfolio (net of repayments, exits, cancellations and write-offs over the period) had increased by 80% to €3.1 billion.

In 2006, the Financial sector accounted for 20 per cent of the active portfolio by volume and 45 per cent by numbers of projects, indicating that Financial sector projects were on average smaller than those in other sectors. This changed little in 2007 but then rose to 29 per cent by volume in 2008 and 36 per cent by the end of 2009. At this date the Financial sector accounted for 40 per cent of the portfolio in terms of numbers of projects, as the main increase had been in the size of individual projects. Between 2007 and 2009, the share of the Enterprise sector fell from 43 per cent to 32 per cent by volume (40 per cent to 39 per cent by number) and the share accounted for by Infrastructure fell from 36 per cent to 32 per cent by volume (but rose from 18 per cent to 21 per cent by number). Table 2 below shows the development of the portfolio in more detail.

The Bank signed 23 operations classified "crisis response", all in 2009. These totalled €778 million in volume.

Table 2: Development of the EBRD portfolio in Ukraine, 2006-2009

		2006	2007	2008	2009
Net Cumulative business volume		**2,852,497,877**	**3,242,570,163**	**4,089,435,367**	**4,818,752,975**
	Financial	592,295,968	714,440,947	1,079,235,903	1,507,818,236
	Enterprise	1,468,082,255	1,643,649,191	1,892,340,543	2,042,472,216
	Infrastructure	792,119,653	884,480,024	1,117,858,921	1,268,462,522
Current portfolio stock		**1,718,903,366**	**1,956,266,649**	**2,570,729,736**	**3,109,176,820**
	Financial	339,120,613	422,135,657	751,330,353	1,126,961,794
	Enterprise	747,139,816	833,898,935	943,845,489	987,649,218
	Infrastructure	632,642,938	700,232,057	875,553,894	994,565,807
Number of projects		**101**	**121**	**139**	**152**
	Financial	45	50	60	61
	Enterprise	41	49	54	59
	Infrastructure	15	22	25	32
Annual new business		**789,090,908**	**650,380,280**	**835,427,141**	**1,012,983,759**
Non-crisis related		*789,090,908*	*650,380,280*	*835,427,141*	*234,641,129*
	Financial	133,830,556	184,828,756	418,366,112	49,477,184
	Enterprise	447,666,185	328,235,615	201,177,560	133,118,064
	Infrastructure	207,594,168	137,315,909	215,883,468	52,045,880
Crisis-related		*0*	*0*	*0*	*778,342,631*
	Financial	0	0	0	523,935,320
	Enterprise	0	0	0	133,061,725
	Infrastructure	0	0	0	121,345,586
Annual Gross disbursements		**436,592,586**	**490,739,222**	**701,771,236**	**837,730,922**
Non-crisis related		*436,592,586*	*490,739,222*	*701,771,236*	*224,815,723*
	Financial	62,515,776	116,196,043	314,709,028	32,935,306
	Enterprise	327,921,478	287,684,395	262,378,446	89,936,490
	Infrastructure	46,155,331	86,858,784	124,683,761	101,943,927
Crisis related		*0*	*0*	*0*	*612,915,198*
	Financial	0	0	0	519,120,909
	Enterprise	0	0	0	93,794,290
	Infrastructure	0	0	0	0
Annual number of projects		**33**	**48**	**35**	**42**
Non-crisis related		*33*	*48*	*35*	*19*
	Financial	9	17	15	4
	Enterprise	22	22	15	9
	Infrastructure	2	9	5	6
Crisis related		*0*	*0*	*0*	*23*
	Financial	0	0	0	9
	Enterprise	0	0	0	9
	Infrastructure	0	0	0	5

NB. Numbers of projects exclude TFP but include regional projects with Ukrainian elements.

Increased vulnerability and the EBRD's portfolio growth

As noted earlier, Ukraine's risk rating at the Bank remained unchanged at 6+ in the lead-up period to the global financial crisis from the beginning of 2006 to late 2008. However, tripwires were being increasingly breached through this period and the country should have been placed on the Watch List in 2006 at the yellow or the first level of concern. As the country's situation deteriorated, it should have been downgraded to orange or the second level of concern in 2007 and, then, maintained at this level in 2008.

During the period from the first quarter of 2006 until the third quarter of 2008, the Bank's portfolio in Ukraine almost doubled, from €1,091 million to €2,092 million.

Two conclusions emerge during this period: first, the Bank was not robustly prepared for the economic crisis that ensued in Ukraine as its strategy was predicated on a stable risk rating for the country; and second, as a result, it was accelerating the ramp-up in the Bank's operations in Ukraine during the period.

Presumably following the deposit run on Ukrainian banks and the exchange rate devaluation of the Hryvnia that began in October 2008, the Bank downgraded Ukraine four times (by five risk classes) to 7- in the next 12 months (before, surprisingly, upgrading the risk rating to 7, only 14 days after its previous downgrade).

In the period from the third quarter of 2008 to the fourth quarter of 2009, the Bank increased its portfolio operations in the country by almost €800 million, or 35.8 per cent, to €2,841 million. With the risk rating downgrades and the continued increase in portfolio operations, the per cent trigger rose from 69.9 per cent to 316.8 per cent during this period.

Overall, there appears to have been little meaningful link between the Bank's operations in Ukraine during this period and the country's risk rating and, indeed, the Bank's stated policy that the maximum amount of committed loans, guarantees and equity investments extended to any one country of operations will be 90 per cent of statutory capital less callable capital.

Assessment of the EBRD's crisis in Ukraine

Turning to the Bank's crisis response in Ukraine, generally, in discussions with customers, the EBRD's response was felt to be both positive and significant. The Bank's actions were considered to have given a supportive signal to banks' customers and the market by providing funds to banks to recapitalise and to make new loans and to restructure old ones.

The National Bank of Ukraine (NBU) stated that the EBRD only helped foreign bank subsidiaries (notwithstanding EBRD crisis operations with two domestic banks,) and yet these subsidiaries took the most risk before the crisis and had parent banks to rely on. Various people interviewed in Ukraine also expressed the view that the foreign bank subsidiaries were too reckless in their lending and funding activities in the period leading up to the crisis. Before the crisis, it was generally thought in the country that the foreign bank subsidiaries and their parents would have been more knowledgeable and risk-averse than their domestic counterparts.

While the NBU was wrong in stating that the EBRD only helped foreign bank subsidiaries in the crisis, it and other commentators suggested that the Bank contributed to the Ukrainian banking crisis by supporting risky foreign bank subsidiaries in the period leading up to the crisis and then having to bail them out when they got into trouble during the crisis. In this context, the question arises as to what distinguished the EBRD’s behaviour in the pre-crisis period from commercial investors and financial institutions?

Foreign bank subsidiaries aside, the EBRD’s crisis response with a local bank was well-targeted and significant. The co-investment of equity with another donor plus a senior loan together with technical assistance (TA) were invaluable to the bank in supporting it and its customers.

Another EBRD crisis operation with a domestic bank in the crisis period was the subordinated bilateral loan and the syndicated senior A/B loan to a local bank. The bank’s senior management lauded the EBRD’s support for the continuity of its business in the crisis and for institution-building. The EBRD helped the borrower and its customers by financing, among other things, energy efficiency projects and export-oriented companies. As well, the Bank’s support was seen to be real and timely, unlike with other international financial institutions (particularly the IFC, but also the World Bank).

The local bank is totally government owned and controlled. While lending funds to the bank for promoting lending to targeted sectors of the real economy is positive and additional, it is debatable that the EBRD should be lending money to help a totally government-owned and controlled bank to recapitalise itself.

Banking sector restructuring and recapitalisation has been a government priority since the onset of the crisis. In late 2008 the Ukraine government requested EBRD support and participation in these efforts. The EBRD responded quickly with a technical assistance operation to be implemented in two phases. The first phase began in early 2009 and supported the NBU’s diagnostic studies of banks. This phase of the TA was widely welcomed and appreciated by the public and private sectors. It was better designed and more efficient than the second phase, because the NBU allowed the second round of diagnostics to be less demanding than the first round and, as a result, it was less successful.

Lessons learned

The lessons learned for the EBRD in Ukraine are similar in some respects to the lessons learned in other countries of operations, but also have their differences.

- Ukraine demonstrates most significantly the need for the Bank to have a proactive country risk rating system linked to binding country limits and a Bank strategy in the country reflecting the deteriorating economic, financial and political conditions. The near-doubling of the Bank's portfolio in Ukraine by almost €1 billion in the pre-crisis period appeared to have occurred in a policy vacuum about the country at the Bank. Then, the additional €1 billion crisis response, together with the late recognition in the Bank that Ukrainian country risk had deteriorated significantly, drove the Bank's exposure far above its own credit trigger, with no subsequent reaction by the Bank.
- Technical assistance can be more successful in assisting countries to transition to market-based economies, both outside a crisis and inside a crisis, than simply lending more money. This would be particularly the case where, as in Ukraine's case, the country's risk rating is worsening and the Bank is reaching its own exposure risk limits for the country.
- Funding foreign bank subsidiaries to lend more, and in foreign currency to borrowers with no natural hedge and/or with no domestic market for hedging in the country, do not succeed in establishing a sound financial system. This is a common lesson to be learned in the EBRD's lending activity in many countries of operation. The excuse that "there was no other way to lend money in the country" may be true but, in the event, it contributed to building crisis conditions in the countries where it was pursued. If there is no other way (that is, to lend to domestic banks and enterprises in local currency) and it is harmful, it should be avoided.
- Following on from the former lesson, more attention needs to be devoted towards local currency funding and financing, particularly longer term, and establishing hedging instruments and markets, difficult though these are to accomplish.
- In Ukraine, there is resistance at the official level, both political and at the NBU, to allowing, never mind assisting, the development of new instruments and markets. As well, corruption and cronyism appear rife, even at the highest levels of the political establishment and the official sector. Advocacy at the most senior Bank level should be utilised to press the Ukraine and other governments and official institutions in countries, where relevant, on these issues.

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