

SECURING PERFORMANCE AND PAYMENT

IN PROJECT FINANCE – MINING INDUSTRY

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Executive summary

As project finance gains more popularity in structuring mining projects, the need to improve its contractual security aspects, both through financial and legal instruments, is growing. This study brings broader analysis of security devices that exist, and are being promoted, in the general scope of mining project finance. Its main objective is to provide institutional and private lenders of the mining project finance effective security tools that they can use in their investment against political, legal, and other risks that threaten the repayment of extended investment. The essence of the analysis consists in identification of available security instruments, what their features are, their advantages and deficiencies, and how they interact with other norms of law.

The importance of the thesis rests with making security concerns of mining lenders solvable and effectively enforceable – through a scope of legal and political measures – with a view of giving mining investments economic attractiveness. What this study achieves at the end is an assessment of security devices that lenders should consider before investing in a mining project.

As an introduction, thesis provides insight into the nature of project finance, revealing its conceptual framework and historical aspects. It then develops to expand on the main participants of mining project finance, assessing their motivational and functional roles with regard to the project. Further, political, commercial, and legal risks are discussed – the foundation of the study upon which security instruments are examined. The study concludes with the exploration of mining stages and different security options that are available for mining project finance, analyzing their content, application and the level of security it can provide to lenders.

Introduction

As more world economies encounter development challenges, the need for commodities and infrastructure investment has put pressure on mining industry to satisfy the growing needs of states in metals and minerals. This pressure, in turn, has created demand for the improvement of legal and financial environment for investors within mining industry.

One of the methods of making capital intensive investments in mining has been possible thanks to the instruments of project finance – a financial strategy that combines legal and financial leverages in order to pool vast capital to implement economically crucial and significant projects. The advancement of project finance today depends very heavily on how we design our policy in this area: what rules we create for participants, how we accommodate their key needs and concerns, how we respond to inconveniences they face working with the existing laws. And secured transactions is exactly the element of mining project finance which needs deeper exploration, within its own realm as well as within its intersection with other areas of law, development of more efficient and practically reliable security devices, as well as creation of unique policy instruments to balance and compromise conflicts that are created with the effort of 'implanting' essential security rules into the existing legal body of law.

Techniques inherent to project finance today allows for implementation of important mining investments, which span from development of small pits to huge multi-billion dollar mining ores. Throughout history this financing method has developed, together with economic, legal, and financial changes taking place in the world. Today it offers a practical solution of efficiently sharing the risk of mining projects among its participants.

However, project finance, be it for the purposes of mining industry or any other investment project, does not exist outside the realm of law, and this consideration gives rise to the importance of exploring its features within existing legal rules. The main pillar on which project finance rests, and which has become available with the development of rule of law and capitalism, is the credit relationship of its participants, who rely heavily on security instruments in creating among each other contractual obligations. The element of security, even in minimal proportions, provides the foundation of contractual structure of project finance, which will be examined more broadly in this paper.

This research explores, in its main essence, the legal aspects of different security devices employed by lenders in project finance vis-à-vis mining industry. Its first part provides a conceptual framework of project finance, which aspires to illustrate the manifold definition of project finance proposed in the academic field, its historical context, and its main features that attract project participants into, and discourage from, using this method of financing.

The second part of the paper describes the main participants of mining project finance, what their motivational bonds are, and their main functions in relation to project finance. Broader understanding each entity's roles, obligations, and expectations can help better structure security agreements. The chapter concentrates on the project sponsors, lenders, special purpose vehicle, host government, contractors, insurance companies, and product purchasing entity.

Chapter three will be dedicated to risks that are inherent in mining project finance. Detailed discussion on political, legal, corruption, and commercial risks of the mining project will be provided in four sections of the chapter. The importance of understanding possible risks in mining project is fundamental for constructing security devices.

In fourth chapter this paper aspires to give the reader an insight how a mining project progresses from exploration until liquidation of the project company. Different stages of

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mining are examined, exploring the activities, participants, and legal agreements that integrate on different levels of mining project.

The last chapter of the paper will analyze in detail different security instruments available for mining project finance lenders. The chapter will concentrate on the main contracts of mining project finance and other issues associated with the security of lenders' interests.

The thesis closes with the summary of the main chapters, underlining the importance thorough analysis of local law and inherent risks before architecting security devices for a particular mining project.

Chapter 1. Introduction to project finance

This chapter starts with the analysis of definition of project finance, since better understanding of its meaning could provide a convenient platform to study security devices used in projects that resort to this method of financing. The chapter then gives a brief insight into the history of project finance, illustrating its evolutionary stages that it underwent before taking its modern shape. The third part of this chapter explores the pros and cons of project finance, and how participants of project finance use the advantages of this method for securing their interests in the project.

1.1. Defining 'project finance'

The importance of defining the concept of 'project finance' stems from at least two, but of very practical and significant, reasons: building the firm foundation of the subject's area, which can be useful for furthering research in this academic field, and for legislative authorities that intend to create useful policies in improving legal relationships of project finance players, who can, through wise isolation of the 'project finance' area, effectively apply their regulation policies. Although no solid and clear concept of 'project finance' has developed in the academic world, it would be fair to conclude that the main ingredients of its definition have received widespread recognition. In the following section of this chapter, I will set out attempts by some scholars and practitioners to define 'project finance' (assuming no absolute definition exists), highlighting the most essential features attributed to it.

Put very simply, 'project finance' is a method of arranging funds by banks, project organizers, and other participants in a risk-minimum way to build huge projects: power plants, mining ores, pipelines, etc. Scott Hoffman in "A Practical Guide to Transactional

Project Finance: Basic Concepts, Risk Identification, and Contractual Considerations" proposed the following construction of the term:

"The term project finance is generally used to refer to a nonrecourse or limited recourse financing structure in which debt, equity, and credit enhancement are combined for the construction and operation, or the refinancing, of a particular facility in a capital-intensive industry, in which lenders base credit appraisals on the projected revenues from the operation of the facility, rather than the general assets or the credit of the sponsor of the facility, and rely on the assets of the facility, including any revenue-producing contracts and other cash flow generated by the facility, as collateral for the debt."¹

In this continuous piece of description, fragments of phrases convey us the fundamental components that project finance possesses.

First of all, project finance is a financing structure. It is a structure, because the financial scheme it refers to constitutes a complex web of relationships. This 'structure' involves, besides project company, the initiators, and commercial lenders, and also other participants such as the host government, construction companies, insurance companies, suppliers, purchasers, and in some cases even international agencies. These entities connect among each other to form a financial structure that aims to implement a certain project.

Secondly, in Hoffman's definition the financial structure is of limited and non-recourse nature. Whereas 'recourse', which refers to the type of loan, basically means the "loan that allows the lender, if the borrower defaults, not only to attach the collateral but also to seek

¹ Scott L. Hoffman. "A Practical Guide to Transactional Project Finance: Basic Concepts, Risk Identification, and Contractual Considerations", *45 Bus. Law.* n.1 (1989), 181, quoted in Scott L. Hoffman. *The Law and Business of International Project Finance*, 3rd ed. (Cambridge: Cambridge University Press, 2008), 4.

judgment against the borrower's (or guarantor's) personal assets"², the project finance is such an arrangement where lenders do not compensate unreturned debt from the assets of the borrower. Although this may seem unnatural to business's and credit's nature, certain techniques, coupled with high credibility of the project's profit return, allow the lenders to minimize the risks of payment default to a maximum extent. As Gatti has formulated it,

"project finance...as a priority does not depend on the soundness and creditworthiness of the...parties proposing the business idea to launch the project. Approval does not even depend on the value of assets sponsors are willing to make available to financers as collateral. Instead, it is basically a function of the project's ability to repay the debt contracted."³

Thus, when the borrowing entity seeks credit from the lenders, it will give an almost no or very limited security in the form of collateral, which is why project finance is known as a non-recourse method of financing. The stress on nonrecourse nature of project financing is made in yet another definition by Graham D. Vinter, who unpacked its meaning in the context of mining project: project finance

"is financing the development or exploration of a right, natural resource or other asset where the bulk of the financing is not to be provided by any form of share capital and is to be repaid principally out of revenues produced by the project in question."⁴

However, mining industry is hybrid with regard to recourse policy, and

² Black Laws Dictionary

³ Stefano Gatti, Project Finance in Theory and Practice (Burlington: Academic Press, 2008), 2

⁴ Graham D. Vinter, *Project finance*, 3rd ed. (London: Sweet and Maxwell Ltd., 2006), 1, accessed March 1, 2012, <u>http://goo.gl/3B3A8</u>

"having a lengthy construction period with no available cash flow, lenders may [emphasis added] require an initial full recourse phase, during which they have recourse to a creditworthy parent of the project company under a guarantee or support agreement. This may involve financial obligations and/or a completion guarantee of the project itself, with the obligation to procure completion by the project company and to step into the project in the event of project company failure."5

This structure can give a great incentive to the project sponsors and project company to fulfill their obligations, and relieve the lenders of additional risks involved with the start-up phase. Thus, in mining it could be that a full recourse phase would be extending until completion⁶, "at which point the obligations of the parent will normally fall away."⁷

Thirdly, Hoffman mentions that the construction in project finance concerns of a particular facility.⁸ This means that the objective of any given project finance is the facilitation of one project only. For this purpose participants create a special company, usually called a 'special purpose vehicle', which is terminated upon completion of the project.

Better understanding of the nature of project finance can be attained if studied in contrast to traditional corporate financing, although in the very essence they are indistinguishable. In a traditional scheme, the company with a solid business and credit history raises money by borrowing a credit. In project finance, the company which borrows capital from the lender does not have any credit history, and is created simply for the purpose of one project, and not

⁵ Watson, Farley & Williams, Mining Project Financing. Accessed March 1, 2012,

http://www.wfw.com/Publications/Publication476/\$FILE/WFW%20Mining%20Project%20Financing%20Mini %20Brochure%2004.08.pdf

⁶Ibid. ⁷Ibid.

⁸ Scott L. Hoffman. "A Practical Guide to Transactional Project Finance: Basic Concepts, Risk Identification, and Contractual Considerations", 45 Bus. Law. n.1 (1989), quoted in Scott L. Hoffman. The Law and Business of International Project Finance, 3rd ed. (Cambridge: Cambridge University Press, 2008), 4.

for an indefinite business. In traditional financing, a company secures the repayment of the loan by an asset, letter of credit, bank guarantee, or some other type of credible security device. In project finance, as we mentioned earlier, guarantee of repayment comes from the fact that an intended project's return, if the project is implemented, is almost risk-free, since the end product or service offered by the project is of certain and stable demand in the market.

The definition of project finance is not agreed unanimously in one single form, but only in its essential features. "It is no surprise that the market has not standardized these definitions because the field of finance is extremely dynamic and constantly changing."⁹ However, we can infer and conclude that even without a certain definition, it is still possible to single out its main elements: nonrecourse or limited recourse debt scheme; one project purpose, usually in the sphere of infrastructure, energy transfer, mining, industrial projects; and creation of a special company to facilitate the project. It would be also fair to include one more feature, which would underline the essence of this study: allocation of risks and creation of security mechanisms for its participants. This feature is its indispensable quality, since numerous contracts concluded within project finance are possible mainly because of security instruments and skillful distribution of risks.

1.2. Short history of project finance

It is difficult to study the past of project finance without having a clear and unanimous definition of project finance, since this method of financing, in the form as we know it today, was first employed only very recently¹⁰. Thus, it is somewhat incorrect to speak of the

⁹ Anthony Merna, Yang Chu and Faisal Al-Thani, *Project finance in Construction: A Structured Guide to Assessment* (Chichester: Wiley-Blackwell, 2010), 12, accessed March 2, 2012, http://www.scribd.com/doc/37249860/Project-Finance-in-Construction

¹⁰ Tinsley, R. "Advanced Project Financing: Structuring Risk", 1st ed. (London: Euromoney Books, 2000) quoted in Merna, Chu and Al-Thani, *Project finance in Construction: A Structured Guide to Assessment*

'history of project finance', but rather right to speak of 'financing forms' used in the past that resemble the main features of our understanding of project finance. Although research into the history of project financing forms may provide little practical value, it nevertheless poses as an integral and academically interesting part of project finance's discipline.

Esty mentions that as early as in 1299, the English Crown secured a loan from an Italian merchant bank Frescobaldi, which was secured by an output from the Devon silver mines.¹¹ The bank secured a right to lease the mine for one year in exchange for covering all operating costs, without any further recourse to the Crown, even if the extracted ore was unprofitable. ¹² This financial arrangement from the past interestingly reveals the backbone of the project finance we have today: nonrecourse nature of the debt and the repayment of it from the project output. Although no separate legal entity is created that would manage contractual transactions, no insurance companies participate in the project, and no other essential bells and whistles of today's project finance can be observed, still the essence of shifting the risk of project failure to the lender is exemplary in this ancient financing option.

Projects that used financing that more resemble today's project finance, according to Tinsley, were used in the 30s, when the Texas oilfield projects were developed.¹³ "A driller founded the well-drilling costs in exchange for a share in future oil revenue."¹⁴ These examples may be considered only as early forms of project financing, as detailed financial nuances such as

http://faculty.fuqua.duke.edu/~charvey/Teaching/BA456 2004/Esty Overview project finance.pdf

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⁽Chichester: Wiley-Blackwell, 2010), 12, accessed March 2, 2012,

http://www.scribd.com/doc/37249860/Project-Finance-in-Construction

¹¹ Benjamin C. Esty, *Modern Project Finance* (U.S.A.: John Wiley & Sons, Inc., 2004) quoted in Merna, Chu and Al-Thani, 1.

¹² J.W. Kensinger, and J.D. Martin. "Project Finance: Raising Money the Old-fashioned Way," *Journal of Applied Corporate Finance* (1988): 69-81, quoted in Benjamin Esty and Irina Christov. "An Overview of Project Finance", accessed March 3, 2012,

¹³ Tinsley, R. "Advanced Project Financing: Structuring Risk", 1st ed. (London: Euromoney Books, 2000) quoted in Merna, Chu and Al-Thani, 1.

nonrecourse nature of lending and equity to credit ratio factors are the assumptions that can, upon verification, allow a better conclusion to consider these first oil projects as the beginning of modern project financing. However, as Esty has put it, modern project finance began in the 1970s through the launch of North Sea oilfields by British Petroleum.¹⁵ In that project, the banks "raised US 945 million on a project basis from a syndicate of 66 banks"¹⁶ "Since then, this form of financing has been used extensively in various industries..."¹⁷ The coming of project finance only in the 1970s had to do, most possibly, with the fulfillment of economic preconditions that made such financing possible. Today's form of project finance would not have been achieved without basic imperative 'infrastructure' on which it is possible to build today. This 'infrastructure' mainly developed thanks to the advancement of financial and investment institutions, improvement of credit culture and legal enforcement, invention of new security devices and birth of credit insurance techniques. Indeed, absence of any fundamental 'infrastructure' element, for example proper legal enforcement of civil contracts or commercial insurance devices, would hardly allow for an environment where capital holders would invest their resources. Thus, it is the structural changes in the rule of law, finance, and economy that gradually developed credit financing into what we know as project finance. Today, financial devices and economic possibilities, coupled with a strong demand for infrastructure products and services, allow for project financing to advance into the future, develop its structure and mechanism, and aid the development of a more globalizing world.

¹⁵ Benjamin C. Esty, *Modern Project Finance* (U.S.A.: John Wiley & Sons, Inc., 2004) quoted in Merna, Chu and Al-Thani, 1.

¹⁶ Ibid.

¹⁷ Bank for International Settlement, *BIS Working Papers No 159*, "The term structure of credit spreads in project finance",1, (Basel: Bank for International Settlements, 2004), accessed March 3, 2012, <u>http://www.bis.org/publ/work159.pdf</u>.

1.3. Advantages and disadvantages of project finance

Advantages of project finance are numerous, and each project participant has its own benefit from this financing method. Most of the time, these advantages go in parallel with the main distinctive features of the project finance that we discussed above: high leverage option, risk sharing, etc. Some of the books and articles that relate to the topic discuss 'motivation for using project finance', although I consider 'advantages' and 'motivation' as one concept here that mainly serve to be the 'reason' for using project finance. Below some of the main reasons for resorting to project finance are elaborated.

One of the reasons that this system of financing is employed by project sponsors is because it allows for minimum investment to the project on their part in the form of equity. Often called a 'high leveraged' option, project financing opens lucrative opportunities for companies that do not have enough resources to initiate capital-intensive projects, since the project's feasibility and profitability potential grants it a security against which the companies can rely in acquiring affluent loan resources.

With minimal investment, project sponsors also face little or no recourse risks from lenders in case the project fails to materialize. If something goes wrong, lenders will usually be able to reach only the assets of the project company and as a rule cannot get remuneration from collateral of the project sponsor. This arrangement is certainly appealing to project sponsors, because it can initiate and enter the project not only with minimal investment, but with minimal risk of recourse against its assets in case the wrong scenario comes into play.

Designing and implementing an expensive project is swarmed with risks. From initiation till the last dollar is repaid, the project has to overcome many pitfalls, and any risk that the project will cease is too heavy a risk for any participant to bear. Project financing allows the distribution of the risk in a balanced and proportional manner. Risk allocation is achieved through different methods, and can usually involve special financial institutions that specifically deal with handling risks in big projects. The possibility to create such balanced risk allocation probably is the main factor why different companies are willing to join the project finance.

Also,

"a project financing is selected in many circumstances because more attractive interest rates and credit enhancement are available to the project than are otherwise available to the project sponsor. A credit appraisal of an individual project is sometimes more favorable than a credit appraisal of the project sponsor. Thus, a more attractive risk profile can result in more favorable interest rates and lower credit enhancement costs."¹⁸

But project finance is not free of disadvantages, and risk of non-completion may be the worst of it. Although due care is taken in assessing all the possible concerns of future, projects of big scale are always vulnerable to either known risks, or to risks that are unknown to project developers. As the project commences, and as more investment instigates the point of no return, project participants will be under constant risk of losing invested money until the project is pushed to completion. This risk of 'all or nothing' increases as more investment is injected into the project.

Another disadvantage that is related to project finance is the 'increased insurance coverage.'¹⁹ With numerous risks, project finance developers are in desperate need to cover risks with

¹⁹ Ibid.

¹⁸ Scott L. Hoffman. *The Law and Business of International Project Finance*, 3rd ed. (Cambridge: Cambridge University Press, 2008), 11.

insurance packages for risks that pose greatest danger to project's completion. This, in turn, increases the overall cost, and affects the return of investors.

And as concerns the management of the project company, one more disadvantage comes with the nature of the financing. Since most of the capital is contributed by lenders, their increased concern for the security of these resources extends to exert some the control over the project. "The degree of lender supervision during construction, start-up, and operations results in higher costs that are typically borne by the project company."²⁰ Cost of the control and potential risk associated with such 'supervision', and easy step-in thresholds create certain risks for project developers and the venture itself.

²⁰ Ibid.

Chapter 2. Participants of project finance in mining industry

In this chapter more elaborate insight into the roles and other aspects of the main participants of mining project finance are discussed. The chapter is divided into separate subparts, each concentrating on a particular entity of project finance.

Mining project financing venture holds many participants under its umbrella, all of which are connected to the project company, and to each other, in the web of legal, economic, and business relationships. Although each of them carries different task with regard to the project, they are all united with a goal, and are bound by the interest, of implementing the project's objectives. More profound awareness about mining project finance players, better understanding of their role, motivation, and position with regard to the project, their legal characteristics, limitations, possibilities, and interplay of these attributes with other participants can aid academics and practitioners in furthering project finance's possibilities. It is especially helpful in the context of payment and performance security options, since policies designed with respect to these objectives should always take into consideration the nature of different participants, their motivational and capacity factors. The key players in mining project finance are similar to the participants of project finance related to other industries such as power or oil and gas. The main participants in the mining area are: project sponsor, lenders, host government, project company, contractors, insurance company, and product purchasing entity.

2.1. Project sponsor

"The project sponsor can be a company, a group of companies, a joint venture, or a subsidiary of another company that initiates a project."²¹ In mining sector, initiators of a mining project could be companies that specialize in mining business, or venturers that buy mineral rights to proven deposits which they later develop through project finance. In project finance overall, it is also possible that a project sponsor gets involved in a project either through participation in a government tender, or a company or group of companies initiate a project on their own.²² Project sponsors may be considered a backbone of the project, since it carries out not only the initiation activities of the project, but also its financing, launch, and operation. If the project stems from government tendering, project sponsor will take steps in order to secure the winning of the contract. It is also the main task of the project.²³ The main motivation of the project sponsor from an economic perspective is to secure system where minimum input can allow them to generate maximum credit through lending. In the process they may tend to share initiation costs with other interested companies, thus sharing the cost of risk in case the project does not develop.

In mining, project sponsors contact the lenders as soon as the deposits have been proven. Besides proven deposits, the lenders will require a thorough feasibility study which will include the economic, environmental, legal, and other considerations which, at the end, can provide a proven picture that the loaned money will be returned through a successful development of mine and sale of the mined product.

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²¹ Anastasia Slivker. "What is project finance and how does it work?,". Accessed March 4th, 2012,

http://ebook.law.uiowa.edu/ebook/sites/default/files/Anastasia%20FAQ.pdf

²² İbid.

²³ Ibid.

2.2. Lenders

Lenders are the entities that provide financing for projects. They are usually represented by commercial banks, insurance companies, pension funds²⁴, hedge funds²⁵, credit operations, and other funding entities. Lending entities provide debt financing for projects, and might be based in the host country or in another country.²⁶ Lenders come to project financing with a security that an undertaken project will have a mathematically favorable chance of being realized and yielding profit. In mining projects, firm feasibility studies which provide a realistically calculated considerations and proven reserves provide the 'security' for lenders to extend loans. This security allows them to risk huge capital without recourse and collateral security. Most of the time the lending capabilities of certain banks do not allow to completely sponsor a project, and in this case banks may join efforts and resources in order to cooperatively secure credit for the project. This is also advantageous for each separate bank, since it shares risk among the two or more participants.

"Sometimes, the lenders are strategically selected from a range of countries. The purpose of this syndicate diversity is to discourage the host-country government from expropriatory acts or other discriminatory action."27 "Most projects engage some combination of multilateral organizations (for example, the International Finance Corporation), regional development banks (for example, the Islamic Development Bank), bilateral organizations (for example, the U.S. Ex-Im Bank), and commercial bank financial assistance."28

²⁴ John M. Elias, "Raising Mining Debt Capital", (Toronto: Canadian Executive Forums Conference "Canadian Mining Law & Finance 2008", 2008), accessed December 2, 2012, http://goo.gl/JCcGV

²⁵ Ibid.

²⁶ Hoffman, 72.

²⁷ Ibid.

²⁸ Slivker, 8.

2.3. Project company, or special purpose vehicle

Any project finance will usually involve the creation of a project company, or the special purpose vehicle, which is true, to a certain extent, to the mining industry as well. 'Special purpose vehicle' is the label given to a legal entity that carries out the project (here 'carrying out' means owning the project's assets, contractual and license rights, and serves as an intermediary between all the parties), since the only purpose of this entity is the implementation of the project. Creation of a project company itself can be an intricate task, since project sponsors have to take many factors and interests into consideration, not to mention the imperative laws for project finance or of investment that they will have to deal with in the host country. As concerns the local laws for the project company, indeed, it

"must be examined to determine, for example, whether a form of organization is prescribed; whether a foreign entity can do business in the host country; whether a foreign entity can own real property in the host country; the extent to which liability limitations, such as is enjoyed by a corporation or limited liability partnership, is permissible; requirements for local investor participation in the entity organized in the host country; and similar concerns."²⁹

Factors such as tax laws of the host country, treaties relating to tax, and rules concerning foreign exchange also influence the selection of the form of organization.³⁰

It would unfair to conclude that project finance creates a special purpose vehicle solely because of one incentive. There are many, intertwined, advantages to founding a project finance on a special project company.

²⁹ Hoffman, 71.

³⁰ Ibid.

First, "the project company owns, develops, and operates the project."³¹ Legally, the project should have an owner, and the creation of a project company allows for a convenient mechanism of ownership. Since project consists of certain physical facilities, of a certain capital that employs labor and materials, of legal rights that allow for the implementation of the project (land rights, concession contract), they best serve the interest of all parties if are under one legal ownership. This is reasoned by the potential risk of a noncompliance by the party who controls certain rights which can be crucial to the project. Thus, under special purpose vehicle system, the project company secures under its ownership the site, the plant, and all legal relationships with third parties needed to build and operate the project.

Secondly, project company is advantageous because it secures project from the potential recourse by creditors in case the project sponsor becomes bankrupt. If the project were to be initiated under the 'jurisdiction' of one of the sponsor companies, and the company were to declared bankruptcy, the project could face the risk of expropriation by creditors of the sponsor company. Project finance, through establishment of a special purpose company, gives security exactly from these kinds of risks, which is why it enjoys the popularity among project sponsors.

2.4. Host government

Depending on an individual project, host government plays various roles in the undertaken venture. As far as mining sector concerns, host governments are interested in the most efficient use of its natural resources – if the resources belong to the government. If the state policy is such that resources are the objects of private ownership, government's role in mining project finance is reduced with regulating other aspects of the venture.

³¹ Gatti, 235.

As an owner of resources, host government is motivated to extract the most gain from any given mining project. As the aim of this thesis is defining security devices for lenders involved in mining projects, relationship of lending entities and host government should be given a special consideration.

Mining projects consist of numerous mini-projects (construction of plant, construction of power lines, transportation infrastructure, communication support projects, waste disposal work, etc.) all of which in turn need a separate authorization by the host government in order to be initiated. Besides these concerns, mining project sponsors are also preoccupied with questions that relate to finance (currency exchange policies), to employment issues, to import and export rules, use of technology restrictions, security concerns. Failure of implementation of any of these mini-projects can put entire project under risk, making it either practically impossible or materially non-feasible to implement. With this in mind, it is hard to armor a project with bulletproof security against these mini-failures, because these factors depend on numerous causes. Thus, creating an effective machine which would induce the host government to comply fully with its obligations in project finance would be the main goal of secured transactions in this area. Chapter 5 will further describe how lenders should approach governmental authorities in securing their interest in mining projects.

2.5. Contractors

"The contractor is the entity responsible for construction of the project". Its main interest with the project is fixed to a particular construction object, which it undertakes to provide, with certain quality and warranty, in return for financial compensation. Besides the main infrastructure needed for the mining (transportation lines, communication system, power lines), mining itself consists of complex construction 'mini-projects': constructions for crushing of minerals, infrastructure that facilitates the screening of minerals, building of complex conveying system, which guarantees the mass flow of minerals to the destination, positioning the grinding hardware that reduces minerals into particles for further processing, separation structures that remove unnecessary minerals from valuable products.³² Thus, construction of a functioning mining structure is an expensive and highly responsible project by itself, which is in need of special attention from the point of securing interests of both project and construction company. There must be detailed arrangements with contractors, where contracts are very clear in language as to the intended objects of construction and essential deadlines set for the constructor.³³ Special security devices have to be accommodated in order to ensure that parties have incentive to fully implement their contractual obligations, since this phase of project. All of these risks that are essential to construction have to be dealt with adequate mechanisms.

2.6. Insurance companies

Insurance companies play an important role in project finance. They provide safe net against risks which are otherwise very difficult to manage. Although different insurance products exist, project finance can use some of them in a very effective way. "Lenders want to have a number of risks covered by insurance: confiscation (including expropriation, nationalization and denial of access); loss of profits/business interruption; contract frustration, repudiation and embargo; strikes, defaults of payment and etc."³⁴ Priority of lenders' claim to compensation in case of project failure is achieved through several security devices: loss payee clauses, assignment of policies, warranty waivers, and etc.³⁵ Loss payee clause in the

³² Metso Corporation. Accessed March 7, 2012, http://goo.gl/sgqDP

³³ Slivker, 11.

³⁴ T.H. Donaldson, *Project Lending*, (London; Edinburgh: Butterworths, 1992), 167, quoted in Camille Chengwing. "What is the role of insurance in the project finance matrix?". Accessed March 8, 2012, http://goo.gl/Y1W5F

³⁵ Camille Chengwing. "What is the role of insurance in the project finance matrix?". Accessed March 8, 2012, http://goo.gl/Y1W5F

insurance contract is a provision upon which the insurance company agrees to pay the insurance payment to a lender instead of the project company. One problem with having such clause is that such supreme priority of the lender is superseded by the statutory creditors. Lenders can also have the project company to insure construction related risks. Project company insures the construction related risks through owner controlled insurance program.³⁶ Owner controlled insurance program is an insurance which is arranged by the project owner rather than the contractors and subcontractors. By having one insurance company cover the whole project construction, owner controlled insurance program provides cheaper and more convenient construction coverage for the project company.

Government's interest in insurance can be the case where local law requires certain forms of compulsory insurance cover for workmen's compensation or employer's liability, automobile liability or pollution and environmental liability.³⁷

2.7. Product purchasing entity

Mining projects sell their products mainly to commodity trading companies and alloy manufacturers. Commodity traders are interested in the security of timely and complete execution of product supply. As soon as the mining company prepares relevant documents proving sufficient reserves, commodity trading companies can be contacted for the negotiation of sales contract - usually termed an offtake contract. Product purchasing entities can also enter into additional security agreements with lenders, where it could accept certain liabilities in case it does not fulfill its contractual obligations.

³⁶ Ibid.

³⁷ Ibid.

Chapter 3. Risks in mining project finance

Completion of any mining project is challenged by many risks, thus making risk allocation a good promise of successful project performance.³⁸ "The rule of effective risk allocation in project finance is that risk is mostly allocated to the participants whose risk tolerance is high."³⁹ However, effective risk allocation also requires careful analysis and identification of all the risks that the project may encounter during its life.⁴⁰

3.1. Political risks

"Political and regulatory risks are inherent in doing business. They affect all aspects of a project, from site selection and construction through completion, operations and marketing. They are difficult to evaluate."⁴¹ Usually the nature of the project determines the degree of political risk, where projects of particular social importance could be less exposed to political intrusion, and projects that have significant relation to national security or basic infrastructure – could be in more danger of expropriation by the government.⁴² This is especially true for mining projects, for which expropriation is number one risk for year 2012.⁴³ Nevertheless "political risk in the host country is an important factor that influences the probability that a

³⁸ Wu Shen-fa, and Wei Xiao-ping. "The rule and method of risk allocation in project finance," *Procedia Earth and Planetary Science* 1.1. (2009): 1757. Accessed March 12, 2012, http://www.sciencedirect.com/science/article/pii/S1878522009002707

³⁹ Ibid.

⁴⁰ Gatti, 31.

⁴¹ Peter K. Nevitt and Frank Fabozzi, *Project Financing*, 7th ed. (London: Euromoney Books, 2000), 44.

⁴² Thomas W. Waelde & George Ndi. "Stabilizing International Investment Commitments: International Law Versus Contract Interpretation," *Texas international Law Journal* 36 (1996): 216, 231-235, quoted in Scott L. Hoffman. *The Law and Business of International Project Finance*, 3rd ed. (Cambridge: Cambridge University Press, 2008), 71.

⁴³ Ernst & Young. "Business risks facing mining and metals 2011 - 2012". Accessed December 12, 2012, at http://goo.gl/vM7jD

loan will be serviced as scheduled. In general, political risk can be divided into three broad categories: traditional political risk, regulatory risk, and quasi-commercial risk."44

"The traditional political risk category addresses risks related to expropriation, to the convertibility and transferability of currency, and to political violence. The regulatory risk category covers risks arising from unanticipated regulatory changes, such as changes in taxation or foreign investment laws. The quasi-commercial risk category encompasses the risks that arise if a project contends with state-owned suppliers or customers whose abilities or willingness to fulfill their contractual obligations towards the project may become questionable. This definition shows that political risk comprises a broad range of different risks. Some of these risks, such as restrictions on transferability, are easy to identify ex post, whereas others, such as changes in the tax law that may lead to creeping expropriation, are not. Moreover, risks such as expropriation or regulatory changes can be closely related to the corporate sector and even to individual firms. Other risks (e.g., corruption) apply to the entire society but can negatively impact an individual firm's performance."45

Extensive data study by Christa Hainz and Stefanie Kleimeier on the correlation of political risk and the extensive use of development banks as lenders tend to show, and recommend, that "if the political risk level (e.g., risks related to expropriation or profit repatriation) is high, then the parties can utilize a project finance structure or invite development banks to participate in the loan syndicate to compensate for the high risk level."⁴⁶ With the

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⁴⁴ Warrick Smith. "Covering political and regulatory risks: issues and options for private infrastructure arrangements." in Irwin, T.(Ed.), Dealing with Pubic Risk in Private Infrastructure. International Bank for Reconstruction and Development, (Washington, DC), 45-8. Accessed March 14, 2012, http://rru.worldbank.org/documents/toolkits/highways/pdf/04.pdf

Christa Hainz & Stefanie Kleimeier. "Political risk, project finance, and the participation of development banks in syndicated lending," Journal of Financial Intermediation 22.2 (2012). Accessed March 16, 2012, http://www.sciencedirect.com/science/article/pii/S1042957311000416 ⁴⁶ Ibid.

participation of influential international lending entities, mining participants can reduce the risk of political expropriation and gross violation of its contractual obligations.⁴⁷

To cope with political risks, there are certain insurance coverages available for a project company. For example, "The Multilateral Investment Guarantee Agency (MIGA) can provide political risk insurance cover for direct investments in mining projects if the host economy is a signatory to the MIGA Convention"⁴⁸ (whereas most of the world countries are signatories). MIGA's political risk insurance policies are available to address four main risk categories: expropriation or nationalization, currency inconvertibility and transfer restrictions, war and civil disturbance, breach of contract.⁴⁹ Although these insurance products are expensive to obtain, they provide relatively a safe security against political risks that are otherwise difficult to address by secured transactions instruments. Detailed examination of MIGA's insurance is provided in the last chapter.

3.2. Legal risks

Often when the lenders of the project are foreign entities, their major concern becomes the legal environment within which they plan to do business. Whether it is contractual rules, or particularities of enforcement, they should address the main laws that will potentially affect their security concerns. Investors in mining industry have the basic expectations from the local legal regime, and they mainly are: security over ownership of mining titles, and the right to pledge them, stability of taxation, government's approval to continue when the project has economic feasibility, ability to procure equipment both from local and overseas manufacturers, access to all infrastructure, and approval to construct them, currency and trade

⁴⁷ Ibid.

⁴⁸ Robert Pritchard. "Safeguards for foreign investment in mining," 17, *International and Comparative Mineral Law and Policy* (2005). Accessed March 25, 2012, <u>http://goo.gl/ulvav</u>

⁴⁹ Ibid.

freedom, and the ability to repatriate the profits.⁵⁰ Although all of these risks require special elaboration, only a part of it which relates to secured transactions law will be covered below.

One of the issues the investors need to clarify is the secured transactions laws within the country of investment. For example, it may be that a host country's law does not allow floating charge, or the repossession of real estate cannot take place because of limited ownership rights of foreign entities. Problems may also arise concerning the issue of priority. In some countries, for example, priority over secured property is fixed through possession. This may create problems for securing project company's mining equipment. Lenders should also consider the particularities of bankruptcy law and rules concerning statutory creditors in case the project company may have to be liquidated. Thus, lenders should keep many legal details in mind when designing the economic part of the project.

Another aspect of security that is in need of consideration is enforcement of arbitration awards in case of dispute settlement. As some countries are not signatories to Convention on the Recognition and Enforcement of Foreign Arbitral Awards, their limited remedy for dispute resolution is the local court. If the state is the signatory, dispute resolution costs may be efficiently controlled by streaming the case to arbitration, reducing both the expenses and time resources. Although it will depend on the legal culture of arbitration within a specific jurisdiction, assurance should be taken with regard to commitment by the courts to the enforcement of foreign and domestic arbitration decisions. If the state is the member to New York Convention, legal risks related to lien can be to a certain extent managed through agreement to resolve disputes in a foreign, reputable, and agreed arbitration institution. Besides procedural rules that should be thoroughly understood, there are certain expenses

⁵⁰ Ibid, 3.

connected with enforcement – court fees, legal expenses – that should also be taken into account when calculating the security enforcement potential costs.

3.3. Corruption risks

Following section will discuss the risks related with corruption of project company officials in countries of investment. It will also focus on reasons behind corruption, while security steps to counter these risks are elaborated in Chapter 5.

As mining competition pushes companies to search for opportunities in developing countries, more and more of them become vulnerable to the risk of corruption.⁵¹ "The Transparency International Bribe Payers Index 2011confirms that the mining sector is perceived to be the most likely to pay bribes, after oil and gas, real estate, utilities and public works and construction."⁵² Following factors, among others, may predispose miners to corruption risks: dependency on local community, environmental impact, large royalty and tax takes, the requirement for large capital investments.⁵³ Other factors such as slow reaction of law enforcement agencies, loose oversight of the management, weak anti-corruption policy of the company, also contribute to the occurrence of the corruption. "Fraud and corruption are typically covert events that can go undetected for years, or altogether."⁵⁴ Some of the assets that the company may put into jeopardy are the social license to operate, ability to acquire new projects, the return of value to shareholders, and the reputation of the organization.⁵⁵ Moreover, it may affect the lenders if the host country or the project company's country of origin decides to impose criminal sanctions, which may impact the return of the loan or its timely return.

⁵¹ Ernst & Young. "Fraud and Corruption in Mining and Metals". Accessed December 12, 2012, at <u>http://goo.gl/jVBmb</u>

⁵² Transparency International. "Bribe Payers Index Report 2011". Accessed December 10, 2012, at http://bpi.transparency.org/bpi2011/results/

⁵³ Ernst & Young, 1

⁵⁴ Ibid.

⁵⁵ Ibid.

Understanding why corruption is prevalent is a key in taking effective measures against it. Below key drivers to corruption are discussed. These reasons are not separate and whole, but are intimately interconnected and interacting.

a) Shift of mining to 'unsafe' countries⁵⁶

Competition is now pushing businesses to explore opportunities in relatively less safe countries, thus increasing the instances of fraud and corruption⁵⁷. In countries with immature system of rule of law and law enforcement, and without a capacity to improve it, mining companies find it part of their business risk to surrender to corrupt practices to find their niche in the market. Although corruption occurs more often in countries where corruption laws are enforced weakly, these crimes are not limited only to underdeveloped countries.

b) High level of government regulation⁵⁸

Although high level of governmental regulation should be associated by suppressed corruption, this has the contrary effect on corruption.⁵⁹ With the government responsible for licensing exploration, development, and sale of mining products, overseeing environmental, health and safety standards, assigning land rights and assuring compliance with many other branches of law, the governmental officials happen to be in a position of power where their decision may impact the interruption or cessation of the mining project⁶⁰. This power of officials, coupled with corruptness of their superiors, usually results in misuse of their official influence in soliciting bribe.⁶¹

c) Procurement⁶²

⁶¹ Ibid.

⁵⁶ Paul D. McEwen. "Fraud and Corruption in the Mining and Metals Industry" (Vancouver: 2008), 1.1.2. Accessed December 9, 2012, at http://www.cle.bc.ca/PracticePoints/NAT/11-FraudandCorruption.pdf ⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶² McEwen, 1.1.4.

"In mining projects, a significant proportion of total expenditure goes through a formal procurement channel^{,63}. Individuals charged with the responsibility for the procurement function can misuse the money to profit illegally, usually through a sophisticated criminal scheme. Where procurement is done through a tender process, authorized company officials may use different techniques for unlawful earning (e.g. tailoring tender requirements to specific entities and increasing tender cost after the contracts are awarded).⁶⁴

d) Reliance on an 'intermediary'⁶⁵

Sometimes companies can find themselves in the midst of bureaucratic blockade or under time pressure to file documents or finalize a certain part of the project, where only bribe could save their further ability to function. Reliance in such situations to the assistance of 'intermediaries', instead of to the rule of law, where such reliance promises 'fast and effective' solution to a problem, could be a very tempting decision which can only be labeled as a corrupt transaction.⁶⁶

3.4. Commercial risks

Commercial risks can be categorized into nine groups: delay in the completion of the project and the resultant delay in of cash flow, an increase in the capital needed to complete construction, and the insolvency, technology failure, changes in law, uninsured losses, increase of price of materials, change of demand for the product, and negligence in the project operation.⁶⁷ All of these risks at the end have a direct effect to project company's ability to repay the lenders.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ McEwen, 1.1.3.

⁶⁶ Ibid.

⁶⁷ Scott L. Hoffman. *The Law and Business of International Project Finance*, 3rd ed. (Cambridge: Cambridge University Press, 2008), 59.

If there are certain delays in the completion of the project, the project company cannot extract minerals that can be sold to cover the loan debts. Since resources are lent with specific projections in time, any delay can be an additional burden to the project company. Technology failure, for example, can occur when new machinery or industrial devices, or even new methods used either for extraction or for processing of minerals fail to achieve their set objectives. It is especially risky when technological introductions have not earned credit by prior usage or have not received proper guarantees by developers. Thus, in project finance it is much safer to treat technological gadgets with prudence.

Certain market prices can also affect the feasibility of the project and debt repayment plans. If the mining is related to gold, any drop of the price in the market can affect projected profits and debt compensation scheme. Thus, these market changes have to be carefully analyzed and certain predictions as to the future condition of the market should be calculated to the extent possible. Such analysis basically brings one of the best securities. It is also possible to use futures contracts in order to circumvent any price changes, thus providing a safe haven against these market risks.

Commercial risks are an important class of risks that have to be duly dealt with by project sponsors, and effective commercial and legal devices employed to face these risks can significantly change their security standing.

Chapter 4. Stages of mining and mining project finance.

Mining projects are protracted activities which run through different and gradual stages of development. This chapter is set to explore the path that mining project goes through as it starts from eexploration until the full liquidation of the project company. The importance of understanding the phases of mining cannot be understated as it gives the reader, besides the general idea on how project finance revolutionizes within mining, also specific understanding as to where the lender stands relative to the mining project finance at its different stages of development. As various contracts emerge at different stages, comprehension of their chronological order could also allow the reader to better grasp the complex nature of mining project finance – shedding logic and rationality to the comprehension of security measures undertaken by the lenders.

The first part of the chapter will analyze the exploration stage and possible funding for the first steps of mining project. Risks associated with exploration explain why financing at an early stage is basically limited to equity funds. The second part of the chapter will explore the evaluation stage and financial possibilities of the project at this stage of mining. At the stage of evaluation project finance is constituted to draw loan funding for the development of the mine. The chapter then goes into discussing the pros and cons of using different types of special purpose vehicle – the project company, since its various forms has different legal consequences to the rights of the parties. As mining is separate industry with its own specific needs, assessing the type of project company seems to be an important, if not essential, step in instituting mining project finance. The last part of this chapter introduces an example of project finance through De Grussa copper and gold mining development project.

4.1. First stage of mining – exploration

"[Mining projects first]... begin with the exploration and evaluation of an area of interest."⁶⁸

⁶⁸ Pricewaterhousecoopers, "Financial reporting in the mining industry", (Pricewaterhousecoopers, 2007),8. Accessed December 13, 2012, at https://www.pwc.com/gx/en/energy-utilities-mining/pdf/ifrs-mining.pdf

Activities undertaken in exploration stage may involve researching and analyzing an area's historic exploration data, conducting topographical, geological, geochemical and geophysical studies, and conducting exploratory drilling, trenching and sampling.⁶⁹ These activities are costly both finance and time wise, thus requiring investment and commitment of the sponsors before project finance can be architected through a special purpose vehicle to invite lenders to develop the mine on the basis confirmed research.⁷⁰ At this early stage, funding through loans remains largely unavailable or prohibitive.⁷¹ Moreover, exploration business is now experiencing increasing costs, complexity, and geo-political risks.⁷² Early stage finance for mining projects is mainly accumulated through pre-IPO funding (investment into the private company to arbitrate on the "potential value accretion that...typically occurs once a company transforms from private to public status"⁷³), private equity funds, hedge funds, private investors, investment by sponsors who "skin in the game", and investment by "grubstakers".^{74,75} Exploration is mainly undertaken at a certain jurisdiction through acquisition of license – permit issued by the government through a settled procedure. At the stage of exploration, license is usually owned by the sponsor⁷⁶ - party undertaking the exploration, and is issued typically for a specific period of time and limited to a particular territory. In some jurisdictions the license may even be limited for the exploration of named and sought minerals or metals. License acquisition should be carried out with prudence, since not all states permit the transfer of such permits to third parties, or are limited to the permission by the government. This may be an obstacle when special purpose vehicle is

⁶⁹ Ibid.

⁷⁰ David Russel, "Exploration funding - trends across the Mining & Metals industry", (Global Mining Finance Spring Conference, 2012), 2. Accessed December 10, 2012, at http://www.mineafrica.com/documents/7%20-%20Ernst%20&%20Young.pdf

⁷¹ David Russel, 8

⁷² Ibid.

⁷³ Keating Capital, front cover page of the company. Accessed September 10, 2012, at

http://keatingcapital.com/about-us/

⁷⁴ Simmons & Simmons, "The changing face of project Finance" (Mining Masterclass, 2012), 5. Accessed September 9, 2012, at http://www.ama.org.uk/site/assets/files/7845/mining_masterclass.pdf

⁷⁵ David Russel, 12

⁷⁶ Simmons & Simmons, 6

created, where exploration licenses could be deposited to the ownership of the project company for security purposes and to strengthen the credibility for loan sponsorship from lenders.

4.2. Second stage of mining – evaluation

After discovery of the sought mineral has been made, evaluation is conducted "to determine the technical feasibility and commercial viability of a mineral resource."⁷⁷ At this stage the volume and grade of deposits are determined, extraction methods are examined, transportation and infrastructure is surveyed, market and finance studies are conducted.⁷⁸ Evaluations may also involve on-site geologists and several large drill rig operators, with a camp set up to support staff and perhaps a community relations team.⁷⁹ Financing for evaluation activities is also limited to the options mentioned for the stage of exploration, with equity being the main funding source.⁸⁰ If mining deposits have promising perspective and have been credibly verified, chances of attracting wider spectrum of investors could increase.

As a result of evaluation, feasibility studies reveal whether it is worth advancing to mining development or not. If the mining is economically feasible to develop, the project finance stage is constituted. At this stage, special purpose vehicle is created which takes over the licensing agreement and other relevant documents. Lenders investing into the project company could pay special attention to the nature of liabilities the project company will overtake from the previous license holder. Assessing all the possible risks with regard to the license is necessary to exclude any possible claims against the project company.

4.3. Creating special purpose vehicle

The need and rationale for creating project finance as a separate entity to deal with the mining development has been properly justified and defended. This part of the chapter will look in

⁷⁷ Pricewaterhousecoopers, 8

⁷⁸ Ibid.

⁷⁹ Teck, "How We Explore, Plan, Develop, Operate and Close – the 5 stages of". Accessed September 8, 2012, at <u>http://goo.gl/OUJGm</u>

⁸⁰ David Russel, 12
more detail as to what type of special purpose vehicle could better serve the need of mining project.

"[Overall] the appropriate legal structure for a project depends on a variety of business, legal, accounting, tax, and regulatory factors, including: (1) the number of participants and the business objectives of each; (2) the project's capital cost and the anticipated earnings pattern of the project; (3) the requirements of regulatory bodies; (4) the existing debts instruments and the tax positions of the participants; and (5) the political jurisdiction(s) in which the project will operate.¹⁸¹

Usually, project companies can be structured in the form of corporation, partnership, or limited liability company.⁸² They all have their advantages and disadvantages. Moreover, conditions for the creation of each may have different establishment rules which vary with the jurisdiction of the host country. For example, corporations in some jurisdictions require minimum quantity of shareholders before it can be legally registered. These and such considerations may undermine the freedom of sponsors to create the project company to satisfy all their requirements.

One of the important considerations that sponsors pay attention to is the liability of equity owners for the obligations of the company.⁸³ In corporations, "equity owners have no direct liability for project obligations except as specifically defined in contractual undertakings"⁸⁴. As for the partnerships, it is usually the rule that "general partners are jointly and severally liable for all obligations of the partnership as well as for certain liabilities incurred by any general partner"⁸⁵. Such conditions may not be attractive for drawing in investors into the partnership either for exploration financing or for funding the development of the mine.

⁸¹ John D. Finnerty, *Asset-Based Financial Engineering* (John Wiley & Sons, Inc., Hoboken, New jersey: 2007), 103

⁸² Finnerty, 104-105

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ Ibid.

Mining exploration entails many risks, starting from the injury of its employees and ending with environmental spill-off disasters. These risks are likely to push sponsors to resort to options which expose investors, current and future, to less danger as to the immunity of their personal assets. In corporations and limited liability companies, exposure to liability of the project is limited to the equity invested, if not agreed otherwise.⁸⁶

Management of the project company is also an important issue that should be considered when choosing special purpose vehicle type. In the corporation, usually the board of directors is vested with the main rights with regard to the management. The equity owners are represented on the project corporation's board of directors, which grants them supervisory leverage to control how the funds are distributed.⁸⁷ Convenient governing body mechanism also provides the possibility to have the lenders participate in the board of directors, and such option can allow lenders to retain control over spending. Such option is possible for lenders, but not without consequences. Having representatives participate in the board of directors, lenders run the risk of taking responsibility if the project company goes in trouble. As for the partnerships, the management is vested onto one of the partners.⁸⁸ In project finance where partnership owns the project, the lender does not have a proper influence on the decision making.

Diversity of company types illustrate here that project company can be set up in various ways, and local company law has to be consulted to avoid risks associated with imperative norms of the host country.

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⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Ibid.

4.4. Construction

After the project company has been initiated, funding granted, and all the permits have been obtained, construction phase is initiated.⁸⁹ At the pre-construction phase, mine site is prepared: removal of old buildings, developing infrastructure for the access of deposits, and building camps for the workers is carried out.⁹⁰ Depending on the mine location, the size of development, and the complexity of national regulations, construction can take several years to accomplish.⁹¹ If the mine is located in remote areas, construction phase may be a more challenging task. Infrastructure that of a small city may need to be developed which includes housing for employees, schools for their children, medical facilities as well as recreational facilities.⁹²

Construction phase may be a period where much risk is involved (e.g. violation of national safety or construction regulations which can lead to temporary discontinuation of the project, or a simple discontent of local community may turn into a strike and impel the government to interrupt the construction until settlement is reached with the community). At this stage lenders should be especially vigilant to the managerial decisions, monitoring activities related with risks. As construction finalizes, the mining project moves to the stage of development.

4.5. Development and production

At this stage, the project company establishes access to the mineral reserve and commences production.⁹³ At this stage the project company undertakes excavation and other activities needed to reach the deposits. As soon as the access has been established, raw mined material is then extracted for further processing. This may involve the transportation of the raw

⁸⁹ Leia Toovey, "The Life Cycle of a Gold Mine: Mine Construction", (Gold Investing News: 2011). Accessed December 2, 2012, at http://goldinvestingnews.com/17862/the-lifecycle-of-a-gold-mine-mine-construction.html ⁹⁰ Ibid.

⁹¹ Ibid.

⁹² Ibid.

⁹³ Pricewaterhousecoopers, 8

material to processing plants where it undergoes purification using mechanical and chemical application.

4.6. Closure

As the mine reserve depletes, the closure period commences. At this stage the project company undertakes works related to clearing the mining site from construction materials and waste generated during production. Special care is taken for the proper disposal of waste to conform to environmental regulations. The company then files for liquidation of the project company.

4.7. De Grussa copper-gold mining project

This short description of a project financing developed for De Grussa mining is presented for illustrating how mining stages develop.

In April 2009, Sandfire Resources NL discovered the high-grade De Grussa copper-gold deposit in the West Australia.⁹⁴ In 2011, the project sponsor initiated the project following the findings of a pre-feasibility report, planning to address the potential lenders as soon as the definitive feasibility studies were over.⁹⁵ Total project cost was estimated to be USD 456,000,000.⁹⁶ Capital for the development of the mine was estimated at around USD 403,000,000, comprising USD 280,000,000 for the plant and equipment, USD 46,000,000 for open-pit mining, USD 59,000,000 for underground mining and USD 18,000,000 of other pre-production capital.⁹⁷ Financing for the development of De Grussa copper-gold mine came from Australia and New Zealand Banking Group Limited, Commonwealth Bank of Australia, Goldman Sachs and National Australia Bank.⁹⁸ ANZ advanced as a sole bookrunner, whereas

⁹⁴ Sandfire Resources NL, "Doolgunna Project – DeGrussa". Accessed December 8, 2012, at http://www.sandfire.com.au/doolgunna-project/degrussa

⁹⁵ Thomson Reuters, Project Finance International: Deals Data (2012). Accessed December 4, 2012, at http://deals.pfie.com/pfideal.asp?dealnumber=2707339158

⁹⁶ Ibid.

⁹⁷ Thomson Reuters, Project Finance International: Deals Data (2012). Accessed December 4, 2012, at http://deals.pfie.com/pfideal.asp?dealnumber=2707339158

⁹⁸ Thomson Reuters, Project Finance International Issue 476 (March, 2012). Accessed December 3, 2012, at http://www.pfie.com/sandfire-completes-syndication/21004185.article

National Australia Bank and Commonwealth Bank of Australia came to be the lead arrangers and Goldman Sachs -- the co-arranger.⁹⁹ The deal was structured as a construction facility that converts to a term loan on completion¹⁰⁰. Sandfire had secured its first offtake agreement with commodity trading firm MRI Trading for 50% of the copper ore for one year starting March 2012.¹⁰¹ The finance facilities were secured by a fixed and floating charge over the assets of the company, including the De Grussa Project and the broader Doolgunna Project, and a mining mortgage over the project tenements.¹⁰² Sandfire's DeGrussa mining operation commenced production in February 2012, and is currently ramping up to production levels of 70-80,000tpa of copper and 36,000ozpa of gold by the end of 2012.¹⁰³ The operation is set to become Western Australia's biggest copper mine with total resources of 652,000t of contained copper and 742,000oz of gold.¹⁰⁴

⁹⁹ Thomson Reuters, Project Finance International: Deals Data (2012). Accessed December 4, 2012, at http://deals.pfie.com/pfideal.asp?dealnumber=2707339158

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Sandfire Resources NL, "Doolgunna Project - Mining Operations". Accessed December 8, 2012, at http://www.sandfire.com.au/doolgunna-project/degrussa/mining-operations1

¹⁰⁴Sandfire Resources NL, "Doolgunna Project - Overview". Accessed December 8, 2012, at http://www.sandfire.com.au/doolgunna-project/overview

Chapter 5. Securing lenders in mining project finance.

The concept of security is vast and versatile, especially in project finance. Every participant of mining operation enters the project with a certain expectation of security for its investment: the host government expects the project to start off to generate revenue through tax or profit sharing, the lenders want the repayment of their money, contractors expect the compensation for their construction works, etc. At the same time, each participant is a carrier of risk of non-performance. Thus, mining project finance is, in a sense, an entanglement of risks, and security measures taken to counter them. There is no full and perfect security for any player at any stage of mining, though careful steps taken by the project finance participants can serve them as cushions in cases the risk actualizes. Discussing the security issues of all participants in mining sector would require a wider forum. This thesis is aimed at examining the payment and performance security issues faced by the lenders.

Before going into separate agreements of mining project finance that are of security interest for lenders, it is necessary to note that lenders – as financing entities – dispose of a leverage to affect the project company's organization and action. Based on the freedom of contract principle, lenders can impose certain contractual policies to the borrowing entity. This power allows them to conclude security agreements besides classical security measures such as fixed and floating liens over project company's assets. Based on this ability, lenders can, in order to cover certain risks, *require* the project company to conclude with its contractors and third parties in terms and conditions that are suitable for the interests of lenders.

5.1. Loan agreement between the project company and lender

Although mining project finance can utilize various financial instruments to fund its activities, one of the popular sources of capital is still loans lent to it by commercial banks.

This is mainly why the loan agreement becomes the backbone of contractual skeleton of the mining project finance, because it regulates the massive portion of the capital involved in the project. And since more and most of the projects that involve project financing depend on this type of finance accumulation for its existence, security issues becomes a paramount question that needs to be answered by the parties to the financial deal. Below are some security options to which parties can resort to secure the loan agreement.

5.1.1. Pledge of ownership interests

This form of security allows for lenders to lock the project company ownership interests under pledge: if it is a stock company – its shares, if it is a partnership – its partnership interest. The advantage of securing interest over the ownership, if compared to over collateral, the former allows for a more rapid reaction, where control over the management provides the lenders with the immediate ability to make decisions about the project.¹⁰⁵ The material benefit to the lender, which may not be obvious from the first view, of having security over ownership interest is the possibility for them to nominate directors, who can prevent additional indebtedness,¹⁰⁶ prevent voluntary bankruptcy filing,¹⁰⁷ help monitor the project company's accounts and books, and to check the compliance with the covenants.¹⁰⁸ An important element of this security device that the lenders have to outline is the step-in triggering event. Also called the moment of default, it is the circumstances which give rise to the right of lenders to gain the ownership of secured interest. It is best for lenders to give such a definition which may be interpreted broadly.

¹⁰⁵ Scott L. Hoffman. *The Law and Business of International Project Finance*, 3rd ed. (Cambridge: Cambridge University Press, 2008), 367.

 ¹⁰⁶ James Penrose. "Project finance and debt rating criteria," (2001), 223, quoted in Gergely Szaloki "Securing performance in Power projects", Central European University Library, Legal Department Thesis Collection.
¹⁰⁷ Ibid, 227.

¹⁰⁸ Katherine C. Baragona: Symposium: Markets in Transition: Reconstruction and development, part two – Building up to a drawdown: International project finance and privatization – Expert presentations on lessons to be learned, Transnational lawyer, 2004, quoted in Gergely Szaloki "Securing performance in Power projects", CEU Thesis collection.

How does the lender repossess of the ownership interest of the project company? One fast judicial method is provided by Article 24 of civil procedure code of Kyrgyz Republic. The article provides for an 'order execution' – a type of 'express' court ruling where a judge satisfies a monetary or property claim without conducting the trial.¹⁰⁹ The claim has to be based on a written document, and there should be no dispute with regard to the law. The ruling of the court is automatically considered an order for execution.

Thus, in jurisdictions where self-help is not possible, fast-track judicial execution could be a practical way of possessing the ownership interests of the project company. One important aspect with such process is the arrangement of easily verifiable event of default upon which the ownership interest passes to the lender.

Risks associated with the pledge of shares

Different issues may arise with this device when foreign elements are present, in particular if the lender is a foreign bank, it should consider the local law with regard to right of foreigners of full ownership of a company. Usually some jurisdictions, in order to accommodate this security device, allow for the full ownership of shares, which then have to be sold to domestic partners.

Another issue that lawyers have to keep in mind is the perfection of title. In one civil case, a person who pledged shares as a security of payment, later redeemed the shares from the company as 'lost', and had resold them to a third party.¹¹⁰ Although the secured person could retrieve the payment through legal litigation and certain costs, much cheaper and risk free alternative in this regard would be to perfect the pledged interest according to local law.

¹⁰⁹ Civil Procedure Code of Kyrgyz Republic, Article 246. Accessed December 3, 2012, at http://goo.gl/hxZ9q

¹¹⁰ Craige M. Clarke, "Perfecting Security Interests in shares of a Corporation" (Siskinds LLP). Accessed April 1, 2012, at <u>http://goo.gl/RctPB</u>

One more concern that lenders have to consider is mobile nature of corporate shares. Depending on the nature of shares, its power and dividend properties, shares may hold differing ownership and economic value in relation to the company. Although lenders may secure pledge on shares, they should also secure pledge to the future shares of the company, as new shares may shift the power of control to the newly issued shares. But control rights of the company can shift not only by 'outnumbering' of existing shares, but also by issuing class of shares with 'super voting' rights, which can totally undermine the worth of security.

Lenders should also take precautions in cases when shares are owned not by separate persons, but through a joint tenancy. This can be the case when several persons agree to common ownership of shares, either through law or through contract. Some jurisdictions require¹¹¹ that property which is held under common joint tenancy can only be pledged after all owners give consent to such pledge. This requirement is trivial, but can cost heavy litigation risks if not complied with, especially in jurisdictions with unsettled precedents.

Although sale of shares and the change of company ownership may be a normal course in business, the possibility to transfer shares in project finance that leaves an open door for the project sponsor to leave the project any time may not be advantageous. This may be unfavorable in the face of imminent but far-anticipated default, where project sponsor may act recklessly against the interests of the project, relying on the safe 'back door' to abandon it. To avoid this, lender may require an obligation on the part of project sponsor not to transfer the shares to other persons, thus fixing the fate of sponsor into the project, and discouraging him of taking actions that may conflict with the interest of the lender.

¹¹¹Law of Turkmenistan "on Pledge", Article 8. Accessed April 1, 2012, at <u>http://turkmeniya.tripod.com/turkmenistanlaws/id9.html</u>

These minor but crucial concerns are factors to be dealt with when constructing security documents.

5.1.2. Voting trust

In case project company interests are not transferrable for security purposes, voting trust mechanism can be employed to secure ownership interests. "Under this structure, the ownership interests are placed in a voting trust."¹¹² "Upon the occurrence of a specified set of defaults, the project lenders could exercise the right to vote the ownership interests in a way to modify project management."¹¹³ It is important to design the voting trust agreement in a way that does not allow the shareholders to redeem their voting rights from the trust.

Voting trust could also be used by the lenders to acquire only specific portions of voting rights such as with regard to the sales of share or the liquidation of the company, if such arrangement is not prohibited by imperative norms of the host jurisdiction. This arrangement offers more room to the shareholders but also vests lenders with permanent rights as to the fundamental activities of the project company.

5.1.3. Negative pledge

In cases where the national law does not allow the issuance of security against future collateral or intangible objects of the project company, a negative pledge agreement can be utilized. "A negative pledge is an agreement between the lender and the project company that the project company will not create, directly or indirectly, any security interest, lien, or encumbrance in its assets for the benefit of any other entity."¹¹⁴ This is a convenient device, but its deficiencies should not be underestimated when it comes to enforcement. In essence,

¹¹² Scott L. Hoffman. *The Law and Business of International Project Finance*, 3rd ed. (Cambridge: Cambridge University Press, 2008), 369.

¹¹³ Ibid.

¹¹⁴ Ibid.

this contract policy requires of the other party to withhold from entering into security contracts with regard to specific collateral.

But negative pledge as a stand-alone clause is of little use for security purposes. First, this contract binds the project company, and not the collateral itself. The obligation of the project company in the negative pledge is abstention from entering into contracts that would impose security interest over the property, but it is free in its action as to transferring of the ownership itself. Another problem that negative pledge poses is its enforcement aspect. First, it is difficult to monitor by the lender of all the agreements that the project company enters, from practical and economic point. Secondly, if the project company is in default, the first persons in priority for the assets of the company will be the parties who have perfected their interests, and not party who have secured the negative pledge. Thus, negative pledge would probably play a secondary role among project finance security devices.

5.1.4. Security on the project company's receivables and assets

This is the security that can be imposed on receivables deriving from contracts entered into by the project company, typically for payment and/or fees from the sale of goods or provision of services.¹¹⁵ "If the cash flow generated from project operations is the source that provides the project company funds to repay the loan, security on the project company's credits toward third parties is the closest lenders will come to securing this flow."¹¹⁶ The receivables can be either present or future, and usually derive from contracts entered into by the project company, typically for payment and/or fees from the sale of goods or provision of services. But the use of pledge over receivables provides only a partial security to the lender, and should only be utilized as a part of 'blanket lien'.

¹¹⁵ Gatti, 270. ¹¹⁶ Ibid.

As for the assets, use of "floating lien enables the project finance lender to take security interest in all of the project company's assets then existing or thereafter acquired, without the need for new documentation whenever an asset is sold or acquired."¹¹⁷ This option may not be possible in certain jurisdictions, in which case combination of other devices can help the lender secure its interests. In any case, security over company's assets and receivables should consider special local requirements for perfection.

5.2. Host government concession

The two most widely used legal methods in securing permission to extract and develop minerals are license and product sharing agreement. Sometimes terms such as concessions, license, and development agreement are used interchangeably.¹¹⁸ Although license and product sharing agreement have the same end result, they nevertheless are different in their substance, and in the consequences they can have on the developers.

"The major differences between them are the levels of control granted to the investor, levels of involvement by the state, and compensation and the reward sharing schemes."¹¹⁹ In licensing, the developer gets a license to own and sell the mineral, for which the state receives profit through taxation and royalties, whereas in product sharing agreement the mineral belongs to the state, whereas the investor services for extraction for a return of the product's share.¹²⁰ This arrangement has a major implication to the possibilities of security devices that can be used in such projects. Although in both options it is important to define

¹¹⁷Scott L. Hoffman. The Law and Business of International Project Finance, 3rd ed. (Cambridge: Cambridge University Press, 2008), 369.

¹¹⁸ Scott L. Hoffman. The Law and Business of International Project Finance, 3rd ed. (Cambridge: Cambridge University Press, 2008), 145.

¹¹⁹ Pongsiri, Nutavoot. "Partnerships in oil and gas production-sharing contracts" (Centre on Regulation and Competition (CRC), University of Manchester, UK, 2002), 432 quoted in Mohammad Farhan, S.H. "Production Sharing Contract: A Comparison with Concessionary System from the Political, Financial and Functional Point of View". Accessed March 25, 2012, http://myenergylaw.blogspot.com/2008/12/production-sharing-contractcomparison.html#_ftn2 ¹²⁰ Ibid, 432.

the title transfer moment, it is clear that in product sharing contract ownership of the minerals passes after they have been extracted. Also, product sharing agreements are more likely to be party specific, which limits the rights of the contractor to transfer the obligations to other companies, whereas licenses are more flexible, although in some jurisdictions the approval of the government is necessary. But the main difference between license system and product sharing agreement, according to Klubnichkin, is that product sharing agreement provides far more advantageous investment conditions than concessions.¹²¹ He reasons that since concessions transfer profit to the government through taxes, they are more vulnerable to tax change regulations, whereas in product sharing investor does not depend on the fluctuation of tax regime.¹²² This stability may be the main reason why some investors prefer product sharing agreements over concessions.

Lenders have a direct interest in the license or product sharing agreement between the project company and the host country, since they establish the foundation of security package that lenders will wish to have a lien on. Depending on the jurisdiction, license and product sharing agreement rights are either transferrable to a third person or transferrable on restrictive basis (upon permission of the government). If these rights are non-transferrable, the best way for the lender to take control of these rights is through a step-in mechanism. Additionally, the lenders could secure rights to the minerals through co-signing the product sharing agreement, according to which the lender would have a priority to adopt the contractual privileges if the project company defaults. This would guarantee that mineral rights are not transferred to the third parties putting lender's position in jeopardy.

 ¹²¹ Klubnichkin, M.K. "Concession agreements or product sharing agreements?" *Mineral Resources of Russia 6* (1994). Accessed March 27, 2012, <u>http://www.yabloko.ru/Themes/SRP/srp-88.html</u>
¹²² Ibid.

5.3. Offtake purchase agreement

In mining project finance, an offtake agreement is a sales contract between the project company and purchaser according to which the purchaser agrees to buy the mined product. By defining a purchase price in the contract, this agreement provides security to the project company and the lenders from the future price fluctuations in the commodity market.¹²³ Depending on the nature of the offtake agreement, this instrument provides a different level of security to the lender. Below some types of offtake agreements are considered:

a) Take-it-offered contract¹²⁴

"A take-it-offered contract obligates the purchaser of the project's output or services to accept delivery and pay for the output and services that the project is able to deliver".¹²⁵ This option allows the project company to sell its product, and in case it cannot deliver it, it does not bear any consequences. One disadvantage of this contract is that there is still a lingering risk of non-payment by the purchaser due to impossibility or any other defense for non-compliance with the contract.

b) Take-or-pay contracts

Take-or-pay contract obligates the purchaser of the project's output or services to pay for the output or services whether or not the purchaser takes delivery. In this scenario of offtake contract, the purchaser will have to pay the agreed sum even if the product has not been delivered. This option provides the lenders an indirect guarantee¹²⁶. To provide the purchaser more leverage to agree to the terms, the agreement may be modified to say that "the payment will be made even in case of non-delivery, whereas non-delivery has occurred only due to inability of the project company to develop the mine". This arrangement could exclude non-delivery which could occur due to other reasons, thus making the potential purchasing entity

¹²³ Jeffrey Delmon, Project Finance, BOT Projects and Risk, (Netherlands: 2005), 260

¹²⁴ Different sources provide different definition to the term "take-or-pay contract"

¹²⁵ Finnerty, 94-95

¹²⁶ Nevitt. 323

more willing to isolate its risk of non-receipt of the product, and thus more willing to conclude the contract and give the lenders additional security.

c) Hell-or-High-Water Contract

This type of contract is similar to take-or-pay contracts, but excludes any excuse on the part of the purchaser to pay for the product, whether received or not.¹²⁷ Thus, with this clause included, the purchaser may not refer to force majeure situation for non-performance, and thus offtake contract with this option is graded as the higher form of security for the lender¹²⁸. One major risk that this arrangement may still bear, though, is that the purchasing entity may not have enough resources to pay for its dues in case of default.

d) Prepayment contract

According to the terms of prepayment contract, the offtake agreement may stipulate that the purchaser pays for the to-be-delivered product in advance. This clause may serve as even higher form of security to the lending entity, which could receive the payment for an extended loan way before the developed mine yields any mineral.

5.3.1. Trilateral offtake agreement

Classical offtake agreement stipulates the payment by the purchaser to the project company. This arrangement also has a rim of risk to the lending entity. Depending on the sum transferred, the project company temporarily serves as a transit point where the money is then transferred to the lender. The period – from the time the money reaches the balance sheet of the project company (and, thus, becomes its property) and the time when it leaves it represents a risk line for the lender, which could be attached by statutory creditors. The reasons for attachment may vary: it could be criminal sanctions against the company for fraud or corruption or for environmental damage. The law enforcement authorities may, with an

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¹²⁷ Finnerty, 95 ¹²⁸ Ibid.

aim to secure the claim of the state, await until the money reaches the project company's account, and successfully force the serving bank to freeze it, seizing the property of the project company and having the foremost claim to it.

In order to avoid this risk, the lender, the project company, and the purchasing agent may conclude a trilateral agreement, according to which the payment due by the purchasing entity becomes the property of the lender. The agreement may also include the payment to be made directly into the account of the lender, circumventing the transit through the project company. Through such arrangement the bank automatically gains the title to the money paid by the purchaser and gains the immediate control of the money.

5.3.2. Obstacle to an offtake agreement

One of the problems posing to offtake agreements – and to the mining project overall – is the national norm which sets the host state as a priority buyer for the mined product. The law of Republic of Kazahstan "On subsoil and subsoil use", for example, sets Republic of Kazahstan as an entity which has the primary right to buy the minerals among other candidates.¹²⁹ However, it also clarifies that the price of purchase should not be higher than the one used by the miner to sell the product.

Although this policy creates a guarantee for the government to retain the minerals inside the country, it undermines the security options of the project company in case it has concluded an offtake contract with the purchasing agent. If the purchasing company has paid the money upfront, the project company would always find the risk of default in this contract if the government's preferential right to buy the minerals has no proper procedure. To alleviate this risk, the project company can include in its agreement with the government a norm where the government would promise to give an advance notice on its intention to buy the minerals, and in the offtake agreement the project company can reserve a clause according to which the

¹²⁹ Law of Kazahstan "on Subsoil and Subsoil use", June 24, 2010, Article 12. Accessed December 5, 2012, at http://ru.government.kz/docs/z100000291_20120622.htm

project company would retain a right to cancel the delivery with an advance notice. This method could grant a compromise against a default in relation to a partner in the offtake contract.

5.4. Agreement between the lender and other participants of mining project

In some jurisdictions, a legal action cannot be filed by party who does not possess the right of claim against the to-be defendant. In countries which do not recognize judicial precedents, and which do not have settled rules of claim filing procedure, this norm could be a stumbling block for lenders to bring project finance delinquents to the court of law. For example, according to civil procedure of Turkmenistan, the civil action brought by an irrelevant party is discontinued, and such claimant is engaged as a third party as soon as a relevant claimant is constituted¹³⁰. It is, however, unclear whether a right of claim would be in force if the relevant party chooses to drop its claim against the defendant. One notable case which later went to ICSID arbitration could illustrate the problem: a foreign national sold a certain equipment to a company in state A and the latter concluded a lease agreement with the host government. When the government defaulted on its lease agreement, the company A filed a civil suit. The foreign national wanted to interfere into the process, because it still had a payment claim against the company. The court rejected its right to join the process as a third party, stating that a foreign national had no legal interest in the case. Whether the court was wrong in interpreting the its national law narrowly or not is a matter of conjecture, but the fact is that without securing the right of claim for the default of project company's contractors the lenders risk the access to court in case of non-performance.

One of the solutions to this problem would be signing a contract between the lender and a project company according to which the lender retains the right of claim against the contractual and tort liabilities of the third party. In essence, the scheme would be a bilateral

¹³⁰ Civil Procedure Code of Turkmenistan of December 29, 1963, Article 102. Accessed December 10, 2012, at http://goo.gl/38yLQ

agreement between the lender and the project company, where the latter ceases its rights of claim. This agreement does not affect the project company's contractors, but would trigger certain consequences in case the latter does not hold up to its obligations. This is especially useful when the lender has better resources to handle such claims in the court, making its right to bring the delinquent to the court right away. Another point in this regard is the accrual of court fees, which would have to be handled by the party addressing the court. A special provision in the agreement could be a redemption clause according to which the project company promises to compensate to the lender for the dispute expenses in the process of loan repayment.

Another option for granting the lender a right of claim against project company's debtors would be to sign a trilateral contract among the lender, project company, and its contractors, where the latter acknowledges the right of lender to demand any contractual performance by it. Direct recognition by the project company's contractors, be it a government or the construction company, of the right of the lender to sue against them would be a more secure guarantee to access the court in case of non-performance by the contractors. One more instrument which can be employed through this trilateral contract would also be the right to receive either the performance or the payment by the lender. This option would be specifically useful if the project company undergoes certain insolvency and statutory creditors would reach for the project company's property.

5.5. Direct agreements

Sometimes the project company may default on its obligations towards its contractors, and when these defaults are severe, a condition may arise where contractors may wish to terminate the agreement, putting the whole project in jeopardy. One of the mechanisms to avoid such contract termination situations is to use direct agreement. "One of the main objectives of a direct agreement is to suspend the exercise by the contracting party of a termination right that has arisen so as to allow the lenders the opportunity to take remedial action and to ensure that the contract continues.¹³¹ Under direct agreement "lenders reserve the right to replace the project company with a different party in the project contracts.¹³² Usually, "the parties to a typical direct agreement will be the lenders, the contracting party and the SPV"¹³³

Direct agreements are useful security instruments, because they allows lenders to control not only the assets of the project company, but also its contractual valuables, which can be very significant if the project lenders plan to shift the rights and obligations of contracts to a different entity, or in case they want to step in to take the control themselves.

5.6. Securing lender's mining project interest against nationalization

According to Ernst & Young, risks facing by mining companies have shifted since 2008. Four years ago, investors had to be primarily precautious about risks associated with skills shortage, industry consolidation, infrastructure access, and climate change concerns. Today, on the other hand, the number one risk is resource nationalism, followed by skills shortage, cost inflation, price volatility, and corruption risks. Of course, market and jurisdictional location can change the picture of risks, but the list remains true for the most miners that head to underdeveloped territories. In this part accent will be made on security issues related to nationalization, since certain legal and business strategies can help alleviate this risk.

Governments as parties to the mining project take different roles depending on a local jurisdiction and national politics. They may be merely licensing the activities of foreign companies or taking direct participation in mining production. Governments also execute the

¹³¹ Denton Wilde Sapte LLP, *Public Private Partnerships: BOT Techniques and Project Finance*, 2nd ed. (London: Euromoney Institutional Investor Plc, 2006), 210. Accessed April 2nd, 2012, http://goo.gl/Jeorv

¹³² Gatti, 305 http://goo.gl/Q61Ig

¹³³ Ibid.

national laws relating to investment, mining, land use, labor relations, environmental issues, and many others. Interest of the governments in mining profits coupled with their executive power, governments around the world have been notorious to have been one of the main risks the mining sector faces, especially in the last few years. Ernst & Young's conclusion had the following wording: "Resource nationalism retains the number one risk ranking with many governments around the world going beyond taxation in seeking a greater take from the sector..."¹³⁴ Despite this risk being high, mining companies still cooperate with unreliable governments. This could be partly explained by the high competition among investors to integrate the markets and take the risk where others decide to retreat. Another explanation could be that mining companies are taking better and more effective security measures against nationalization. Currently there is no full and effective security against the right of state to nationalize property. What mining project participants can do is to mitigate these risks by employing legal instruments. This part will be dedicated to devices available for the lenders in order to offset actions of the government in nationalizing the mining project.

a) Arbitration

At this moment one of the effective post-expropriation measures against illegal nationalization is international arbitration procedure. If the host state is a party to New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards or the Convention on the Settlement of Investment Disputes between States and Nationals of Other States, and if the host state has given a proper consent for arbitration, illegal nationalization could be effectively challenged through a relevant arbitration institution. One of the main problems of bringing the case to the arbitration is the absence of jurisdiction of the arbitration due to the absence of state consent. It is a case, for example, that consent for ICSID's jurisdiction can be effectively given either through a consent in the state legislation, bilateral

¹³⁴ Ernst and Young. "Resource nationalism remains number one risk for miners". Accessed December 11, 2012, at http://goo.gl/bFpUx

agreement, or in the agreement between the parties (considering the parties are both ICSID members). In a situation where lending party is not from an ICSID state, or when the lending party has not made sure proper consent to ICSID jurisdiction exists in a state where it plans to invest, an option would be for the lending entity to establish a legal personality in a state which has a bilateral agreement that includes an ICSID clause with the state where the lender plans to invest. Lender would have to consider tax and investment regulation in order to find an economically feasible and legally convenient jurisdiction to establish its presence in. This method of securing lender's interest could be only undermined if a state which loses the case fails to compensate for the nationalized property – a scenario which is less likely each day as states try to retain investment attractiveness.

If the lending entity finds the registration in an ICSID member state to be unfeasible, more convenient access to ICSID could be acquired through credit syndication contract.

b) Multilateral Investment Guarantee Agency Insurance

One of the insurance options available against nationalism is the Multilateral Investment Guarantee Agency (MIGA) insurance. "MIGA insures cross-border investments made by investors in any MIGA member country into a developing member country."¹³⁵ The MIGA list of developing countries includes 152 members, which encompasses almost all of the countries where mining is concentrated and which have the high risk of politically motivated nationalization. The coverage premium is calculated on case-by-case basis, with the coverage itself ranging up to two hundred million USD.¹³⁶ MIGA's coverage extends, among others, to the following risks: losses arising from certain governmental actions that may reduce or eliminate ownership of, control over, or rights to the insured investment.¹³⁷ In addition to

¹³⁵ Multilateral Investment Guarantee Agency, website. Accessed December 10, 2012, at http://www.miga.org/whoweare/index.cfm?stid=1789

¹³⁶ Ibid. ¹³⁷ Ibid

outright nationalization and confiscation MIGA also covers "creeping" expropriation—a series of acts that, over time, have an expropriatory effect.¹³⁸

What is important for lenders in mining project finance is that MIGA also insures loans and loan guarantees, covering outstanding principal and any accrued unpaid interest.¹³⁹ In countries where governmental policy regarding mining industry is uncertain, safeguarding the loan's interest through MIGA's instrument seems to be a reasonable move, especially taking into account the change of political forces over the time when the mining project is being undertaken. MIGA's approximate fee of one percent per year of the insured amount can, on the other hand, play down the enthusiasm of lenders if the mining is planned to take longer time. The alternative that MIGA offers is the possibility of canceling the insurance contract after the first three years.¹⁴⁰ This provides the lender a discretion to put the insurance out if the host government has secured better political credibility against expropriation. On the other hand, if the lender decides to go for the commercial journey without any insurance, it is best to secure the access to the ICSID's jurisdiction for reclaim of the expropriated property. As to the compensation, in case of total expropriation MIGA reimburses the net book value of the insured investment.¹⁴¹ If the expropriation is concerns the funds, the insured portion of the blocked fund is repaid.¹⁴² As for the loans, the coverage extends to accrued and unpaid interest besides the outstanding principal.¹⁴³ Compensation policy of MIGA is also based on the assignment of the insured party's interest in the expropriated investment to MIGA.¹⁴⁴

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Multilateral Investment Guarantee Agency, website. Accessed December 12, 2012, at http://www.miga.org/whoweare/index.cfm?stid=1792&pv=s

¹⁴¹ Multilateral Investment Guarantee Agency, website. Accessed December 12, 2012, at http://www.miga.org/investmentguarantees/index.cfm?stid=1797

¹⁴² Ibid.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

5.7. Security against corruption risks

Chapter 3 provided that corruption risks pose quite huge economic and business consequences to the project and associated companies. Besides governmental sanctions against convicted individuals and the affiliated companies, corruption can also damage the company's reputation and its ability to build healthy business partnership. How can lenders make sure the project company does not incur any corruption related liability?

At the moment several jurisdictions have corruption related criminal statutes which have extraterritorial effect (e.g. U.S. Foreign Corrupt Practices Act, U.K. Bribery Act). These laws signal that international arena is taking a firmer step against corruption in international business. Lenders, thus, have to keep these regulations and relevant consequences in mind when instructing their project company to carry corrupt-free practices. As for the legal security devices, lenders can conclude with the main shareholders of the project company an agreement which could hold all of the shareholders jointly liable for the loss incurred for the violation of corruption laws.

Such agreement could motivate the shareholders of the project company to take management measures to eliminate any possibility of corruption and secure the interests of the lender. Shareholders and executive officials, in turn, could conclude an agreement among themselves stipulating that a person responsible for the committed crime would remedy the damage with all of its personal property.

5.8. Security against other risks

Dealing with legal risks in civil law system

Two major problems of civil law system, among others, are that legal concepts have wide interpretations which courts can utilize differently in two similar cases, and that laws have many gaps which cannot be filled with precedent cases. This problem of interpretation and gap allows for the manipulation of courts by political forces in countries where the independence of judicial bodies has not taken firm ground. Although this may not be a widespread practice, the risk still remains. Legal ambiguity and inconstancy can be employed by the governments and their judicial bodies to exert unfair influence.

One of the examples which may be illustrated with this problem is the grounds for liquidation of a legal entity according to the law of Russian Federation. Article 61 of the civil code states that the liquidation of a legal entity may be undertaken by a court, if such legal entity is guilty of gross and irreparable violation of law.¹⁴⁵ There is no case law that could support the interpretation of terms "grossness" and "irreparability". Even if there were precedents with the interpretation of the terms, they could not be applied for future cases. Of course, role of political motivation would be surely suspected if such article would be invoked against a mining company where sanction to liquidate the project company is not proportionate with the violation of the law.

The mining project company cannot receive a guarantee from the judicial authorities or ask the government to amend its laws. However, what the project company can do is to compile the legal norms which pose risk to its interests and conclude a prospective interpretation risk sharing agreement with the government, according to which the parties define which party bears which risk in case the court interprets the law in a certain way. Such agreement is legally enforceable from the point of freedom of contracts and could provide clarity and predictability to the mining project.

Dealing with shortcomings of national secured transactions law

Mexico recently launched an online collateral filing system. Now anyone can enter a person's or company's identification and find whether they own any property which is duly pledged to a creditor. What this means to a mining sector is that a project company cannot now secretly

¹⁴⁵ Civil Code of Russian Federation of January 1, 2011, Article 61. Accessed December 12, 2012, at http://base.garant.ru/10164072/4/#1004

pledge any part of its property to a third party for a loan. Lenders who now wish to extend loan facilities to Mexican mining companies can be assured that their loans are secured with collateral that are not burdened by any claim and that their claim has a priority against claims of other creditors.

Countries which have not adopted the system of registration of collaterals and public notice have a relatively low attractiveness to lending investors. Commercial banks, for example, wish to be assured that no entity has secured claims against the property which they plan to secure a lien on. Without proper public notice system of secured immovable and the possibility of securing movable property through registration, and even possibly, public notice, lenders will not be able to build properly secured project finance for a mining project. One of the solutions to deal with inefficient secured transactions legal system for extending loan is employing other security instruments. The lenders do not have to extend loan, and secure it with a lien over the mining equipment. They can buy the equipment and extend the equipment on a lease basis, or provide the equipment to the project company retaining the title to the property. In cases where lenders wish to sponsor projects where equipment is already in possession of the mining company, perfection can be achieved by transferring the title to the lenders and leasing it back to the mining company. The lease agreement could specify that physical repossession by the lender will be limited only to the condition of loan default, thus securing the integrity of the mining company's project.

Dealing with challenges of conflicts of law

Conflicts of law is another aspect of mining project finance that should be in the agenda of lawyers when drafting legal documents. Since private international law is comprised of differing jurisdictions and with personal conflicts-of-law regimes, host country's approach to litigation with foreign element has to be considered.

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It would be surprising to not to exclude national court in favor of arbitration facility as a forum for resolving the dispute in the project, but still the local rules prevail as to any question of law. Turkmenistan, for example, has a very scanty law on arbitration, and, probably, the only norm in the law "On arbitration"¹⁴⁶, which states that parties can resort to arbitration through an agreement. It is not clear, for example, whether dispute resolution in the national courts is excluded if the parties choose arbitration. The law also does not define any rules for concluding the arbitration agreement, nor the legal position in enforcing the arbitration awards. Thus, lenders should be prepared to litigate the dispute in national courts if should there be such a need.

Choice of law norms usually give the parties the freedom to choose the laws that govern separate aspects of their relationship. Lenders could require the project company to include in their contracts a conditional provision that would state that although parties' intention is to resolve the dispute in arbitration, governing laws are also considered in case national court is to hear the dispute. The wording could be as: "without prejudice to the intention of the parties to resort to arbitration and exclude national court as a forum for resolving the dispute arising from this contract, they agree to the following laws to govern their relationship should the national court be the place of litigation...". Such norm could allow to reserve arbitration forum for dispute resolution, but still guarantee favorable choice-of-law norms should the arbitration alternative fail.

Dealing with changes in the law

Changes in law present a serious problem to the project company and the security of lenders. Since law is introduced through the will of lawmaking body of the state, it is quite impossible to receive full and effective guarantee against it. Since laws differ in their aim and effect, different scenarios may develop if a law is passed that infringes the integrity of the mining

¹⁴⁶ In Turkmenistan, arbitration courts are the national judicial bodies authorized to settle economic disputes. Arbitration courts as understood by international community in Turkmenistan are called "treteyskie sudy".

project. A legal norm may be far from regulating the mining sector, but still have certain effect on the interest of the lenders. Since mining projects span over many years, change of legal climate, even of constitutional, should be in serious consideration of lenders. Kyrgyz Republic, for example, underwent two revolutions in the period from 2005 and 2010. During this period many amendments to the constitutional regime was introduced. Tax law, law on subsoil and subsoil use, and other norms regulating mining industry also underwent changes. The changes affected many mining companies doing business in this small Central Asian country.

This situation could be mitigated through a risk sharing contractual agreement between the project company and the government. Parties could agree to bear the financial consequences of any change to law that would hinder the interest of the mining company. As regards the nature of the legal norm, the agreement should embrace the wide spectrum of norms. The contract could also mention that any change in business climate through executive regulations that could affect the project's financial integrity are to be compensated by the government.

Dealing with access to project company information

An important element of security is taking preventive measures. Lenders are always in need of constant flow of information as to how the project develops and what the short-term plans of the mining company are. To make the awareness of lenders more effective, participation of their representatives at the project site and in the heart of project company's administrative center is vital. How does the lender integrate its representatives into the project action? If the lending entity does not have an equity participation in the project company, it may not appoint its associates as a decision maker. Instead, the lender can sign with the project company an agreement according to which the project company agrees to cooperate by allowing a lender's representative to inspect the activities of the project company. Inspectors

could be delegated with the rights of participation at the shareholders and board meetings,

access to confidential information, site checks and interview with the contractors of the project company for any sign of potential problems.

Conclusion

This paper sought to explore and analyze security devices available in mining project finance. It shows that different definitions of project finance exist in the academic and professional field, and no unanimous agreement is present as to what elements project finance contains and which features it possesses. It has also been recognized that this definitional vacuum, if filled, could help legislature in promoting regulation in the sphere of project finance and the academic world in forming the uniform understanding of the subject. Further, the paper notes of the important features of project finance which motivates investors to choose this method of financing. As a highly leveraged, non-recourse or limited recourse option, project finance provides a risk shared venture which, through use of security devices, can help in realizing capital intensive projects.

The paper also discussed on different project finance participants. Understanding their interests and function within project finance is important in the context of study about security devices. As more regulation will be introduced into the sphere of project finance, more consideration for each of its various participants will have to be afforded, since only in their combination they make risk sharing and other financial structures possible.

This study also encompassed risks that the project finance may face, and has covered three main classes of risks: political, legal, corruption, commercial, and environmental risks. Since risks are the main preoccupation of project finance's participants, better understanding about them can allow parties to structure the project and its contractual body in a way that best distributes the risks. Analyzing risks also provides parties more profound knowledge of potential threats, their nature, which can aid them in devising financial and legal instruments that can best counter those risks.

Since this study concentrated on security issues in mining projects, detailed insight into the mining activity was also given with the aim of showing the position of lenders in different stages of mining. Relevant activities were that are carried out in different stages of mining were studied to show how security devices integrate into the project as mining progresses from exploration until development and production stage.

With the main aim of exploring security devices for lenders, this paper also illustrated available instruments within mining project finance. Although any choice of security option depends on the legal climate of the host country, there are still certain universal devices which can immensely enhance security position of the lenders. Since lenders carry the most risk of default, use of different pledges, negative covenants, as well direct agreement, can substantially strengthen its position in mining project finance. It has been shown that although pledge of shares provides an easy mechanism to step in in case of default, it can conflict with certain imperative norms and has loopholes that are difficult to control. It has also been mentioned that lenders can utilize floating lien and security over company's receivables, which can be useful, in combination with other options, in cases where project company has ample credits extended to third parties. Together with these security devices, direct agreement is also an option that has to be given special attention. As the debtor defaults, sometimes it is important to save the project by assigning contracts to a third entity, and lender can do so only by securing a direct agreement with the project company's counterparties. This option, coupled with other security agreements, can best protect the position of the lender in project finance.

Moreover, with nationalization being number one risk for mining projects around the world, certain security devices against political intrusion were also examined. Besides political risk insurance available through international organizations, post-nationalization measures such as

effective arbitration forum also provide lenders with additional security to protect their interest in mining projects. Different legal strategies in securing arbitration forum for the post-nationalization dispute were also examined.

Overall, security issues for lenders remain number one concern, besides commercial feasibility, when investing in mining projects. Different measures studied in this work, together with thorough consideration of host country's laws, could provide lenders with maximum security in mining project finance.

Bibliography

Books

- Anthony Merna, Yang Chu and Faisal Al-Thani. Project finance in Construction: A Structured Guide to Assessment. Chichester: Wiley-Blackwell, 2010. Accessed March 2, 2012, http://www.scribd.com/doc/37249860/Project-Finance-in-Construction
- Bank for International Settlement, *BIS Working Papers No 159*, "The term structure of credit spreads in project finance",1, (Basel: Bank for International Settlements, 2004), accessed March 3, 2012, <u>http://www.bis.org/publ/work159.pdf</u>.

Delmon, Jeffrey. Project Finance, BOT Projects and Risk. Netherlands: 2005

- Denton Wilde Sapte LLP. *Public Private Partnerships: BOT Techniques and Project Finance*, 2nd ed. London: Euromoney Institutional Investor Plc, 2006. Accessed April 2nd, 2012, http://goo.gl/Jeorv
- Donaldson, T.H. *Project Lending*. London; Edinburgh: Butterworths, 1992 quoted in Camille Chengwing. "What is the role of insurance in the project finance matrix?" Accessed March 8, 2012, <u>http://www.dundee.ac.uk/cepmlp/gateway/files.php?file=CAR-11_10_410326780.pdf</u>
- Esty, Benjamin C. Modern Project Finance. U.S.A.: John Wiley & Sons, Inc., 2004 quoted in Anthony Merna, Yang Chu and Faisal Al-Thani. Project finance in Construction: A Structured Guide to Assessment. Chichester: Wiley-Blackwell, 2010. Accessed March 2, 2012, <u>http://www.scribd.com/doc/37249860/Project-Finance-in-Construction</u>

Finnerty, John D. Asset-Based Financial Engineering. New Jersey: John Wiley & Sons, Inc., 2007.

Gatti, Stefano. Project Finance in Theory and Practice. Burlington: Academic Press, 2008.

- Hoffman, Scott L. *The Law and Business of International Project Finance*. 3rd ed. Cambridge: Cambridge University Press, 2008.
- Nevitt, Peter K., Fabozzi, Frank. *Project Financing*, 7th ed. London: Euromoney Books, 2000.
- Vinter, Graham D. *Project finance*, 3rd ed. London: Sweet and Maxwell Ltd., 2006. Accessed March 1, 2012, <u>http://goo.gl/3B3A8</u>

Articles

- Clarke, Craige M. "Perfecting Security Interests inshares of a Corporation." Siskinds LLP. Accessed April 1, 2012, <u>http://www.siskinds.com/getattachment/b3e43c76-acd6-4a0c-8b8e-aea15b4ada7e/Perfecting-Security-Interests-in-Shares-of-a-Corpo.aspx</u>
- Elias, John M. "Raising Mining Debt Capital". Toronto: Canadian Executive Forums Conference (2008). Accessed December 2, 2012, <u>http://goo.gl/JCcGV</u>
- Ernst & Young. "Business risks facing mining and metals 2011 2012". Accessed December 12, 2012, at <u>http://goo.gl/vM7jD</u>
- Ernst & Young. "Fraud and Corruption in Mining and Metals". Accessed December 12, 2012, at http://goo.gl/jVBmb
- Hainz, Christa., and Kleimeier, Stefanie. "Political risk, project finance, and the participation of development banks in syndicated lending." *Journal of Financial Intermediation* 22.2 (2012). Accessed March 16, 2012,

http://www.sciencedirect.com/science/article/pii/S1042957311000416

Hoffman, Scott L. "A Practical Guide to Transactional Project Finance: Basic Concepts, Risk Identification, and Contractual Considerations", *45 Bus. Law.* n.1 (1989): 181 quoted in

Hoffman, Scott L. *The Law and Business of International Project Finance*. 3rd ed. Cambridge: Cambridge University Press, 2008.

- Ioannis Glinavos. "An Introduction to International Factoring & Project Finance," MPRA Paper No. 854 (2007), 23. Accessed April 2nd, 2012, <u>http://mpra.ub.uni-</u> muenchen.de/854/1/MPRA_paper_854.pdf
- Kensinger, J.W., and Martin, J.D. "Project Finance: Raising Money the Old-fashioned Way." *Journal of Applied Corporate Finance* (1988): 69-81, quoted in Esty, Benjamin and Christov, Irina. "An Overview of Project Finance." Accessed March 3, 2012, <u>http://faculty.fuqua.duke.edu/~charvey/Teaching/BA456_2004/Esty_Overview_project_finance.pdf</u>
- Klubnichkin, M.K. "Concession agreements or product sharing agreements?"*Mineral Resources of Russia 6 (1994).* Accessed March 27, 2012, <u>http://www.yabloko.ru/Themes/SRP/srp-88.html</u>
- McEwen, Paul D. "Fraud and Corruption in the Mining and Metals Industry". Vancouver (2008). Accessed December 9, 2012, at http://www.cle.bc.ca/PracticePoints/NAT/11-FraudandCorruption.pdf

- Nutavoot, Pongsiri. "Partnerships in oil and gas production-sharing contracts" (*Centre on Regulation and Competition (CRC), University of Manchester, UK, 2002*), quoted in Mohammad Farhan, S.H. "Production Sharing Contract: A Comparison with Concessionary System from the Political, Financial and Functional Point of View". Accessed March 25, 2012, http://myenergylaw.blogspot.com/2008/12/production-sharing-contract-comparison.html#_ftn2
- Penrose, James. "Project finance and debt rating criteria," (2001) quoted in Gergely Szaloki "Securing performance in Power projects", Central European University Library, Legal Department Thesis Collection.
- Pricewaterhousecoopers. "Financial reporting in the mining industry". (2007). Accessed December 13, 2012, at https://www.pwc.com/gx/en/energy-utilities-mining/pdf/ifrsmining.pdf
- Procedia Earth and Planetary Science 1.1. (2009): 1757. Accessed March 12, 2012, http://www.sciencedirect.com/science/article/pii/S1878522009002707
- Robert Pritchard. "Safeguards for foreign investment in mining." *International and Comparative Mineral Law and Policy* (2005). Accessed March 25, 2012, <u>http://www.resourceslaw.net/documents/SafeguardsForeignInvestmentinMining.pdf</u>
- Russel, David. "Exploration funding trends across the Mining & Metals industry". (2012). Accessed December 10, 2012, http://www.mineafrica.com/documents/7%20-%20Ernst%20&%20Young.pdf
- Shen-fa, Wu, and Xiao-ping, Wei. "The rule and method of risk allocation in project finance."

- Simmons & Simmons. "The changing face of project Finance" (2012). Accessed September 9, 2012, http://www.ama.org.uk/site/assets/files/7845/mining_masterclass.pdf
- Slivker, Anastasia. "What is project finance and how does it work?". Accessed March 4th, 2012, <u>http://ebook.law.uiowa.edu/ebook/sites/default/files/Anastasia%20FAQ.pdf</u>
- Smith, Warrick. "Covering political and regulatory risks: issues and options for private infrastructure arrangements." in Irwin, T.(Ed.), *Dealing with Pubic Risk in Private Infrastructure. International Bank for Reconstruction and Development*, Washington, DC, pp. 45–8. Accessed March 14, 2012, http://rru.worldbank.org/documents/toolkits/highways/pdf/04.pdf
- Teck. "How We Explore, Plan, Develop, Operate and Close the 5 stages of". Accessed September 8, 2012, <u>http://goo.gl/OUJGm</u>
- Toovey, Leia. "The Life Cycle of a Gold Mine: Mine Construction". *Gold Investing News* (2011). Accessed December 2, 2012, http://goldinvestingnews.com/17862/the-lifecycle-of-a-gold-mine-mine-construction.html
- Waelde, Thomas W. & Ndi, George. "Stabilizing International Investment Commitments: International Law Versus Contract Interpretation." *Texas international Law Journal* 36 (1996): 216, 231-235, quoted in Scott L. Hoffman. *The Law and Business of International Project Finance*, 3rd ed. (Cambridge: Cambridge University Press, 2008), 71.
- Watson, Farley & Williams. "Mining Project Financing". Accessed March 1, 2012, <u>http://www.wfw.com/Publications/Publication476/\$FILE/WFW%20Mining%20Project%</u> <u>20Financing%20Mini%20Brochure%2004.08.pdf</u>
Websites

Civil Code of Russian Federation of January 1, 2011. Accessed December 12, 2012, http://base.garant.ru/10164072/4/#1004

Civil Procedure Code of Kyrgyz Republic. Accessed December 3, 2012, http://goo.gl/hxZ9q

Civil Procedure Code of Turkmenistan of December 29, 1963. Accessed December 10, 2012, http://goo.gl/38yLQ

Law of Kazahstan "on Subsoil and Subsoil use" of June 24, 2010. Accessed December 5, 2012, http://ru.government.kz/docs/z100000291_20120622.htm

Law of Turkmenistan "on Pledge". Accessed April 1, 2012,

http://turkmeniya.tripod.com/turkmenistanlaws/id9.html

Metso Corporation. Accessed March 7, 2012, <u>http://www.metso.com/corporation/home_eng.nsf/WebWID/WTB-090508-2256F-</u> F9794?OpenDocument

Multilateral Investment Guarantee Agency. Accessed December 10, 2012, www.miga.org

Sandfire Resources NL. Accessed December 8, 2012,

http://www.sandfire.com.au/doolgunna-project/degrussa

Thomson Reuters. Project Finance International: Deals Data (2012). Accessed December 4,

2012, http://deals.pfie.com/pfideal.asp?dealnumber=2707339158

Thomson Reuters, Project Finance International Issue 476 (March, 2012). Accessed December 3, 2012, http://www.pfie.com/sandfire-completes-syndication/21004185.article

Others

Baragona, Katherine C. Symposium: Markets in Transition: Reconstruction and development,
part two – Building up to a drawdown: International project finance and privatization –
Expert presentations on lessons to be learned. Transnational lawyer (2004) quoted in
Gergely Szaloki "Securing performance in Power projects", CEU Thesis collection.