

## The Relevance of Enterprise Risk Management Methodologies to European Project Funding Calls: The Case of Grant "Performance and Excellence in the Field of Environment and Renewable Energy through Modern Cluster Entities"

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**Abstract:** Capital providers, such as shareholders on capital markets or European funding providers, are interested in the net present value of discounted cash flow and the risks or opportunities that may contribute to financial planning in a negative or positive way. Since the Sarbanes Oxley act, corporations listed on US capital markets are demanded to practice enterprise risk management. There are several methodologies in place: the COSO framework, ISO 31 0000, RIMs Risk Maturity. These are holistic approaches to risk management in all business aspects, with a designated methodology. This methodology will be the scholarly literature review in this article, whose goal to elaborate the reference enterprise risk management methodologies and their relevance in empirical data analysis, European project funding calls. European projects demand risk management and mitigation, but do not offer a reference framework to do this. The article purposes to make European funds easy to understand as their requirements are explained and the most suitable scientific solution is sought. The methodology is a descriptive case study, with instrumental value. Findings are that funding authorities, be they capital markets or public funds, benefit highly in their decisions by the integration of opportunities and risks. The research concerns the suitability of enterprise risk management with European funds, and the conclusion of a perfect match confirms theory, brings it new scope, and may be of high practical use as for the coherent and timely documentation of European project funding calls.

**Keywords:** Certain Environment, High Risk Environment, Uncertain Environment, Net Present Value of Discounted Cash Flow, Real Options Valuation, Enterprise Risk Management, Coso, Rims, Positive or Negative Impact on Cash Flow, Risk Mitigation, Sustainability

### 1. Introduction

This article analyzes alternatives to valuation in a certain environment via equity and debt, which enterprise risk management, real options valuation and venture capital are. As the Industrial Economy transforms into the New Economy, the certain environment moves towards risk or uncertainty. In an environment of high risk, management literature asserts that several courses of actions and their probabilities are foreseeable. By the end of the millennium, authors such as Mc Grath and Luehram (Mc Grath, 1997a, 1997b; Mc Grath and Leuhrman, 2003, 2004) have noted the stable environment may hold more scenarios to consider. Risk has been managed by real options valuation to these main courses of action. Later on, US based capital markets have required enterprise risk management as a report of risks and opportunities that may impact valuation. Enterprise risk management uses several accepted frameworks. They use the predicted future and add negative or positive impacts. The current business environment is not always foreseeable, though. Recent literature argues in favor of business models replacing business plans, and risk capital or venture capital replacing equity. Both options and venture capital are new types of capitals that complement equity and debt. They are valued differently and suitable in different situations, using different management approaches. The goal of this article is to provide an overview of the alternative valuation techniques to valuation in a certain environment. The methodology is an analytics and descriptive case study on European project requirements. The article is motivated by the importance to

know the techniques required by European projects, in order to implement them and finance them well. Findings show European projects use management techniques suitable for a certain environment: net present value of discounted cash flow, internal rate of return, industry structure analysis, Gantt charts, other elements of business plans. European funding is intended for a main course of action that considers risk management without a defined framework and showing a high level of risk aversion that demands measures to mitigate the risks. Knowing the theory and practice of investment appraisal in a high risk environment can benefit theory with important examples and aid practitioners in gaining the necessary skills to decide their businesses at the level to make them acceptable for European Union funding.

## 2. Literature Review

Valuation in a certain environment involves the following value indicators: the net present value of discounted cash flow, the internal rate of return, the payback period, economic value added, market value added, share value on stock markets. These are consistent with the Capital Asset Pricing Model, strongly challenged in the modern world (Dayala, 2012).

Suitable to shape financial figures is the business plan, which is typically used to compute the net present value of discounted cash flow in business cases, is the business plan. The business case uses multiple methods, which include strategic analysis of the external and internal business environment using industry structure, to shape a single scenario about a certain future. This matches the business practices in the Industrial Economy, when the business strategy and business planning were identical concepts. The business plan is used to forecast financial figures and all their drivers in a single scenario deemed certain.

In a highly rigid approach, the first generation of project management, the major decisions about future operations are made during the project phase and implemented during manufacturing execution as decided during projects. These decisions refer to the major part of future operations and tend to be: capacity; sales price; material design; material price; routing; conversion costs; logistics forecasting and logistics network. These decisions tend to be rigid, according to Kaplan and certified accounting bodies. They are made during the projects that precede operations and shape their key decisions. Techniques such as lifecycle costing may be used. An adjacent technique is target costing.

Some authors, like Mr Grath and Leuhrman (Mc Grath, 1997a, 1997b; Mc Grath and Leuhrman, 2003, 2004) have noted the certain future shifts to several scenarios. The certain future is replaced by the foreseeable future, when several scenarios exist about the probable future. A new tool in strategy, real options, are used to model the probable future. Real options are applied to capital budgeting. A real option itself, is the right—but not the obligation—to undertake certain business initiatives, such as deferring, abandoning, expanding, staging, or contracting a capital investment project. Real options are similar to financial options, but they are not traded as securities on capital markets. Real options valuation may apply to research and development projects. The most likely elements of projects to be impacted are: project size, project timing, and the operation of the project once established. Options relating to project size are: option to expand; option to contract; option to expand or to contract. Options relating to project life and timing are: initiation or deferment options; delay option with a product patent; option to abandon; sequencing options; option to prototype. Options relating to project operation are: output mix options; input mix options; operating scale options. This involves scenario planning and using options as capital tools. In this new technique, put or call options are used to model various predictable scenarios in several decision trees. The option's underlying is the project in question – it is modelled in terms of: spot price, volatility and dividends. As far as the spot price is concerned: the starting or current is concerned; the value of the project is required: this is usually based on management's "best guess" as to the gross value of the project's cash flows and resultant NPV. Volatility is a measure for uncertainty as to the change in value over time is required; it may be derived via Monte Carlo simulation or the first period's cash flows. Dividends generated by the underlying asset: as part of a project, the dividend equates to any income which could be derived from the real assets and paid to the owner. These reduce the appreciation of the asset. Real option valuation may use the Black Scholes formula, which assumes the value of real options comes on top of the value of net discounted cash flow. Another form of valuation is the Monte Carlo technique. Real options have become a valuation technique that is generally accepted by major valuation experts like Damodaran (2004, 2007a, 2007b, 2010, 2012a, 2012b, 2014a, 2014b). Management consultants Mc Kinsey (1990, 1994, 2000, 2005, 2010, 2010b, 2015) include this technique in their capital book valuation. It is mainstream in financial management books. In this technique, one scenario is the most probable one and value using value indicators suitable for a certain environment, such as the net present value of discounted cash flow. Compared to this scenario, real options are

used to finance versus probable decisions. In valuation, real options add to the value to net discounted value of cash flow, which is the intrinsic value of company equity and debt. Real options are valued separately according to the Black-Scholes formula.

Since the financial crisis in 2008, US capital markets have demanded all companies listed on the US stock exchange practice the Sarbanes-Oxley act. This means they need to mitigate all risks of every possible nature in order to make sure their business is compliant across the world. Enterprise risk management includes frameworks for risk management several of which are accepted. These frameworks are audited to be complaint with Sarbanes-Oxley across all legal entities in corporations. In charge for this act are compliance managers which are mandatory to be appointed in every legal entity of a corporation.

There is an accepted enterprise risk management methodology which may involve several techniques: Coso risk management; the RIMS framework. Risk management involves scientifically accredited techniques. There are quality standards for risk management, such as the ISO 31000: the new International Risk Management Standard. The RIMS framework includes the following types of risks: ad-hoc; initial; repeatable; managed; leadership.

Enterprise risk management (Hoyt and Liebenberg, 2011; Lintner, J., 1965; Luenberger, D., 1997; Olson and Dash, 2015) in business includes the methods and processes used by the corporations listed on the US Stock Exchange and other adepts to manage risks and seize opportunities related to the achievement of their objectives. The technique entails: identifying particular events or circumstances relevant to the organization's objectives (threats and opportunities), assessing them in terms of likelihood and magnitude of impact, determining a response strategy, and monitoring process. The risk and opportunity framework is used to protect and create value for their stakeholders, including owners, employees, customers, regulators, and society overall. Enterprise risk management may be an integrated strategy approach, which includes concepts of internal control, the Sarbanes–Oxley Act, data protection and strategic planning. In 2003, the Casualty Actuarial Society defined ERM as the discipline by which an organization in any industry assesses, controls, exploits, finances, and monitors risks from all sources for the purpose of increasing the organization's short- and long-term value to its stakeholders. The Casualty Actuarial Society conceptualizes Enterprise Risk Management as proceeding across the two dimensions of risk type and risk management processes. The risk types include several examples: hazard risk, liability torts, property damage, natural catastrophe; financial risk; pricing risk; asset risk; currency risk; liquidity risk; operational risk; customer satisfaction, product failure, integrity; reputational risk; internal poaching; knowledge drain; strategic risks; competition, social trend, capital availability. The risk management process involves: establishing context; identifying risks; analyzing/ quantifying risks; integrating risks; assessing/ prioritizing risks; treating/ exploiting risks; monitoring and reviewing.

The COSO "Enterprise Risk Management-Integrated Framework" published in 2004 defines ERM as a "...process, effected by an entity's board of directors, management, and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives." (Committee of Sponsoring Organizations of the Treadway Commission, 2017). The COSO ERM Framework has eight Components and four objectives categories: internal environment, objective setting, event identification, risk assessment, risk response, control activities, information and communication, monitoring. The four objectives categories - additional components highlighted - are: strategy - high-level goals, aligned with and supporting the organization's mission; operations - effective and efficient use of resources; financial reporting - reliability of operational and financial reporting; compliance - compliance with applicable laws and regulations.

The RIMS Risk Maturity Model (The Risk Management Society, 2022) for Enterprise Risk Management, published in 2006, is an umbrella framework of content and methodology that detail the requirements for sustainable and effective enterprise risk management. The RMM model consists of twenty-five competency drivers for seven attributes that create ERM's value and utility in an organization. The 7 attributes are: ERM-based approach, ERM process management, risk appetite management, root cause discipline, uncovering risks, performance management, business resiliency and sustainability. The Risk Maturity Model is based on the Capability Maturity Model, a methodology founded by the Carnegie Mellon University Software Engineering Institute (SEI) in the 1980s.

ISO 31000 (International Standards Organization, 2022) is the new International Risk Management Standard. This is an International Standard for Risk Management which was published on 13 November 2009. An accompanying standard, ISO 31010 - Risk Assessment techniques, soon followed publication together with the updated Risk Management vocabulary ISO Guide 73.

There are professional certifications like: Certified Risk Professional, on behalf of the Institute of Risk Management; Chartered Enterprise Risk Actuary, on behalf of the Institute and Faculty of Actuaries; the Chartered Enterprise Risk Analyst, on behalf of the Society of Actuaries.

### **3. Research Methodology - Materials and Methods**

A descriptive, analytical and instrumental case study is deployed on European project "Performance and excellence in the field of environment and renewable energy through modern cluster entities", SMIS number 138692, funded by the Romanian Ministry of Research, Innovation and Digitisation through the Operational Competitiveness Program (POC). The empirical data in the case study comes from this project. The case describes and analyzes the activities pertinent valuation in a high risk environment, as they have been subjected in the funding request. The focus of the case study are European project requirements, meaning the documents required by the European funding agency to approve the project. The instrumental nature of the case study comes from its utility to other European project calls and their documentation.

### **4. Empirical Results**

The financial sustainability of the entity is demonstrated by positive net cash flows during the entire reference period considered, demonstrating that the entity does not encounter the risk of a cash deficit (liquidity) that would endanger the realization or operation of the investment/entering into insolvency proceedings. When computing the net cash flow, all costs (eligible and non-eligible) and all sources of financing (both for investment and for operation and functioning), including the revenues generated by the project, will be taken into account. The difference between cash inflows and outflows represents the deficit or, as the case may be, the surplus of the respective period and is added to the previous result. The cash flow used in sustainability analysis is not updated. Inputs include all income from the capitalization of products/services as well as all cash inflows due to the management of financial resources (grant funds, public contribution, equity, bank loans). Operating income projections must be detailed, sufficiently justified, realistic, based on correct data, verifiable sources. Outputs represent investment costs, operating costs, loan repayments, interest payments and other expenses caused by obtaining credit, fees and taxes, other payments generated by the financial arrangements concluded to secure investment financing sources. Investment costs are substantiated, for example through price offers/catalogues/websites, any other verifiable sources. Projections of operating expenses must be detailed, sufficiently justified, realistic, based on correct data, verifiable sources. The financial model that allows financial independence will be presented (attracting and using, under the law, additional financial resources in the form of subsidies, subscriptions, donations, contributions, dues, sponsorships, the consideration of some services and the like).

As part of the strategy for sustainability, the net present value of cash flows must be predicted and the risks to these cash flows mitigated. The European Union allocates public funds via several types of programs that may be available on EU basis or on national basis.

One of these project calls is POC/62/1/3 Stimulating the enterprise demand for innovation via research, development and innovation projects or in partnership with research and development institutes and universities, to the goal of product or process innovation in the economic sectors with high growth potential. A project has been awarded, innovation and economic and functional optimization in the energy production for thermal energy materials.

The project has been financed using the net present value of discounted cash flow and internal rate of return. The European Union has offered a file to compute these indicators, based on operational, investment and financial cash flow. The file is matched to the accounts in the Romanian chart of accounts that follow IFRS rule and are classified by each type of activity. The file takes into account the major impacts in cash flow and checks that the cash and cash equivalents

balance matches the account movements reflected in the statement of cash flow. The goal of the file is to estimate the total cash and cash equivalents created for the company by the end of the period.

The project is a construction which will act as a start-up incubator in the field of renewable energy. The construction will host office space, conference rooms, other type of rooms designed to promote renewable energy and its vendors. Whereas the costs refer to the building itself and have several sources of financing, the income comes from using this space for business activities in several scenarios.

In order to have the construction, the first activity has been financing cash inflow, in the form of equity from the capital providers. This has created cash flow inflow from financing activities, the starting point of the construction project. Next, this income has been used for cash outflow from investing activities, mainly: tangible assets; intangible assets; experts and other services. The cash outflow from investment activities has been achieved at the beginning of the forecast period. Equity has been matched with the fixed assets invested in, meaning equity covers all investment in the first three years fully. Equity has been used to finance the fixed assets invested in. These activities should achieve the building in a timeframe of three years.

The following years offset income from rent, royalties and similar with expenses needed to operate the start-up incubator which the building will be. The building intends to be a start-up incubator for renewable energy, and will generate income from the following sources: income from royalty payments, as a result of technology transfer; income from consulting and specialty technical assistance; income from renting office space or conference rooms; income from renting technology equipment; income from transferring and exploiting intellectual property rights; other operational income. As the rooms to be rented or otherwise used will be rented on a repetitive basis involving identical or similar activities, renting the office space has been treated as ongoing operations. Expenses needed to operate the start-up incubator include: salaries, consulting and social insurance; expenditure on materials and tools; utility costs; maintenance; administrative expenses; other operational expenses. These sources of income and expenditure refer to operational income and give operational cash flow. The financial forecast assumes zero working capital and changes to working capital to be reflected in cash flow.

In summary, the start-up incubator begins with financing cash inflow, which is consumed by investment activities cash outflow. After three years this creates a building space for a start-up incubator for scientific research in renewable energy and related activities, which are repetitive and rated as operations. Whereas equity covers assets in full plus a safety margin, once operating activities begin, cash inflows for the duration of the project. This creates cash and cash equivalents at the end of each reporting period, and the positive nature of these cash and cash equivalents is measured by European funds.

European funds finance enterprises for free. This means the discount factor does not exist, as the cost of capital is zero. The Internal rate of return is not calculated. It makes little sense to compute economic value added or other value indicators of relevance to companies. One may consider the argument European funds may be compared in terms of return on investment. Whereas net present value of discounted cash flow is the only indicator for investment valuation, other strategic criteria are considered in the form of creating start-up ecosystems; incentivizing innovation and technological transfer; innovating in terms of renewable energy.

The first type of risk to be managed is the financial risk. This can be generated by the lack of liquidity in the key moments, the impossibility of repaying some loans and that of payment, debtors who delay payment, income inconsistent with estimates. This type of risk can be countered because the applicant has a very good financial situation as can be seen in the attached account statements (there are sufficient liquidity for the cash-flow necessary to implement the project). More than both, the project activities were built according to the offers and the works budgets that are attached. They were in the budget foreseen and expenses for unforeseen activities. All these lead to the reduction of financial risk. According to the standardized ANAF balance sheet form on 31.12.2018 SC TITUS SRL has total liquidation (deposits and current accounts banks) of 6,411,147 RON and on 01.05.2020 the amount of 6,926,121 RON. According to the standardized ANAF balance sheet form on 31.12.2018 FIS-UIS has total liquidation (bank deposits and current accounts) of 2,663,955 RON and on 01.05.2020 the amount of 2,973,012 RON.



The second type of risk is the human risk - It is generally embodied in the yield low of employees, lack of loyalty and/or attrition information, low professional capacity. This risk is countered in our case by the value exceptional human resources from the management team and implementation of the project. The project team at the applicant, as can be seen in the attached CVs demonstrates vast experience in project management, business management.

The third type of risk is market risk – this appears as an unfavorable response from the clients to the services launched by the project. This risk is countered by a adequate marketing strategy, to answer all questions and objections on that potential clients can address. The wide range of services the number of potential clients can be increased. Within MERWT cluster, selection methodologies will be carried out companies that will be incubated, and strategies for leaving the cluster. The support activities for the residents of the cluster that are provided to take place within the project also provide customer feedback questionnaires, methods of improvement of the services offered.

The fourth type of risk is marketing risk, which can be generated by the increase in costs promotion and image. This will be countered by the correct application of the data obtained by analyzing the market and by applying a strategy of marketing and promotion appropriate to the target group (customers potentials). After the completion of the construction of the cluster will be realized and a page of it, to promote the services offered by the MERWT cluster.

The fifth type of risk is legal risk - which may appear due to unexpected legislative changes. This risk is counteracted by the existence of action plans in unforeseen situations, but also some acceptance plans risk within the MERWT cluster. The project team will achieve a risk prevention procedure and action plans for each individual risk.

## 5. Discussion

The classic value indicators: net present value of discounted cash flow, internal rate of return, economic value added, market value added are suitable for a certain environment. These classic indicators match definitions in accounting standards, where assets, liabilities, income and expenses are defined in relations to cash flow and economic benefits. Economic profit is viewed as the result of competitive positioning using industry analysis, external and internal environment included. Classic management tools are added new ones to reflect the volatility, uncertainty, complexity and ambiguity of the business environment. One of these management tools is enterprise risk management, a framework for several methodologies to account for risks and opportunities that complement the business plan. Empirical data analysis shows enterprise risk management has been, since the Sarbanes-Oxley act, a framework in place at the companies listed on the New York stock exchange market. One of these companies is Siemens, where enterprise risk management has been in place for years to show the positive and negative deviations of a certain nature that may impact profit. The practice of enterprise risk management shows the need to adopt an accepted framework, such as Coso for Siemens. European projects require a business plans, where risks to the current business plans are reported along with mitigation plans. European funds do not refer to an acceptable risk management methodology, with all its generally accepted content.

## 6. Conclusion

Enterprise risk management is a scientific methodology which deserves to be researched in theory and used in practice. The framework covers all aspects of enterprise risk management and is useful to all stakeholders for sound decisions.

## References

- Committee of Sponsoring Organizations of the Treadway Commission (2017), Retrieved on August 20th, 2022, 2017 Enterprise Risk Management – Integrated Framework”, <https://www.coso.org/>
- Damodaran, A. (2004), Investment Fables: Exploring the Myths of 'Can't Miss' Investment Strategies, Financial Times Press, New York, USA
- Damodaran, A. (2007a), Strategic Risk Taking: a Framework for Strategic Management, Pearson Prentice Hall, New York, USA
- Damodaran, A. (2007b), Return on Capital (ROC), Return on Invested Capital (ROIC), and Return on Equity (ROE): Measurement and Implications, New York University Stern School of Business, New York, USA [CrossRef](#)

- Damodaran, A. (2010), *Applied Corporate Finance*, Wiley, New Jersey, USA
- Damodaran, A. (2011), *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance*, Wiley, New Jersey, USA [CrossRef](#)
- Damodaran, A. (2012a), *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, Wiley, New Jersey, USA
- Damodaran, A. (2012b), *Investment Philosophies: Successful Strategies and the Investors Who Make Them Work*, Wiley, New Jersey, USA
- Damodaran, A. (2014a), *Economic Value Added (EVA)*, Retrieved on August 20th, 2022, from [http://people.stern.nyu.edu/adamodar/New\\_Home\\_Page/lectures/eva.html](http://people.stern.nyu.edu/adamodar/New_Home_Page/lectures/eva.html)
- Damodaran, A. (2014b), *Value Enhancement: EVA and CFROI*, Retrieved on August 20th, 2022, from <http://people.stern.nyu.edu/adamodar/pdfiles/eqnotes/eva.pdf>
- Dayala, R., R., S. (2012). *The Capital Asset Pricing Model: A Fundamental Critique*, *Business Valuation Review*, 31 (1), pp. 23–34; doi:10.5791/BVR-D-12-00001.1 [CrossRef](#)
- Hoyt, R., E., and Liebenberg, A. P. (2011), *The Value of Enterprise Risk Management*, *Journal of Risk and Insurance*, Wiley Online Library, New Jersey, USA [CrossRef](#)
- International Standards Organization (2022), Retrieved on August 20th, 2022, from <https://www.iso.org/iso-31000-risk-management.html>
- Lintner, J. (1965), *The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets*, *Review of Economics and Statistics*, 47 (1), pp. 13–37; doi:10.2307/1924119. JSTOR 1924119
- Luenberger, D. (1997), *Investment Science*, Oxford University Press; ISBN 978-0-19-510809-5.
- Markowitz, H., M. (1999), *The Early History of Portfolio Theory: 1600–1960*, *Financial Analysts Journal*, 55 (4), pp. 5–16; doi:10.2469/faj.v55.n4.2281 [CrossRef](#)
- McGrath, R. (1997a), *A Real Options Logic for Initiating Technology Positioning Investments*, *Academy of Management Review*, 22, 4, pp. 974-996 [CrossRef](#)
- McGrath, R. (1997b), *Falling Forward: Real Options Reasoning and Entrepreneurial Failure*, *The Academy of Management Review*, 24, 1, pp. 13-30 [CrossRef](#)
- McGrath, R., and Nerkar, A. (2003), *Real Options Reasoning and a New Look at the R&D Investment Strategies of Pharmaceutical Firms*, *Strategic Management Journal*, 25, 1, pp. 1-21, <https://doi.org/10.1002/smj.358>
- McGrath, R., and Nekkar, A. (2004), *Real Options Reasoning and a New Look at the R&D Investment Strategies of Pharmaceutical Firms*, *Strategic Management Journal*, *Strategic Management Journal*, 25, pp. 1–21, DOI: 10.1002/smj.358 [CrossRef](#)
- Mc Kinsey (1990), *Valuation: Measuring and Managing the Value of Companies*, Wiley, New Jersey, USA
- Mc Kinsey (1994), *Valuation: Measuring and Managing the Value of Companies*, Wiley, New Jersey, USA
- Mc Kinsey (2000), *Valuation: Measuring and Managing the Value of Companies*, Wiley, New Jersey, USA
- Mc Kinsey (2005), *Valuation: Measuring and Managing the Value of Companies*, Wiley, New Jersey, USA
- Mc Kinsey (2010), *The Four Cornerstones of Corporate Finance*, Wiley, New Jersey, USA
- Mc Kinsey (2010b), *Valuation: Measuring and Managing the Value of Companies*, Wiley, New Jersey, USA
- Mc Kinsey (2015), *Valuation: Measuring and Managing the Value of Companies*, Wiley, New Jersey, USA
- Young, D., S., and O'Byrne, S., F. (2000), *EVA and Value-Based Management: a Practical Guide to Implementation*, Mc Graw Hill, New York, USA
- Olson, D., L., and Dash, Wu, D. (2015), *Enterprise Risk Management*, World Scientific [CrossRef](#)
- The Risk Management Society (2022), *RIMS Risk Management Maturity Model*, Retrieved on August 20th, 2022, from <https://www.rims.org/Tools/risk-maturity-model>