CLOBAL STEEL DOO

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SENSITIVITY ANALYSIS

OF THE FINANCIAL MODEL FOR INVESTMENT LOAN

(what if)

★

Project

PREFABRICATED HOUSES and HALLS

for investment in

Republic of Serbia

THEORY AND APPLICATION

East Electric Company Ltd., USA, with DBA name

International Investment Council

and outsourcing East Electric Company Ltd., Bulgaria

January 2022

BUSINESS PLAN

CLOBAL STEEL DOO

CAPITAL INVESTMENT IN SERBIA

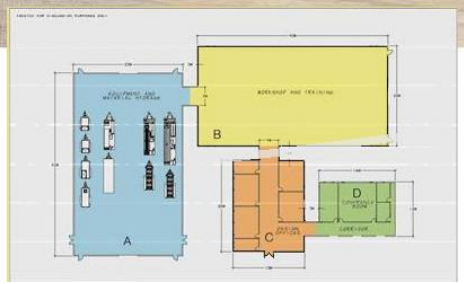
Section 2
DECISION ANALYSES

Profitability and Sensitivity Analysis

Project concept during the loan life to accelerate cash flow,

improve collections and control bad debts

CORPORATE PARTICIPANTS



This part of Section 2 is intended for use during the loan period by the management of the Project Company with the participation of consultants

Background Section 1 Cashflow Online Control System (COCS)

Cash flows are considered the lifeblood of every business, and how it is managed can mean whether the project company (PC) is succeeding or not. Controls over all cash inflows and outflows of the PC is for lender's protection. We use online billing application that has integrated accounting capabilities. It will give the ability easily to enter all invoices and payables, track your cash flow, monitor inventory, generate necessary reports, and manage information from our distributors, all from the website.

As far as the Investor, PC, rely on project finance where the Lender and Investor rely exclusively ("non-recourse" financing) on the cash flow generated by the Project to repay the loan and earn a return on the investment, the OCFCS, including the Risk Assessment and Management part of this Financial Model, appears to be one of the main functions, respectively qualities of this financial model. They are designed to optimize the costs of finance for the Project. In particular, the financial model ensures that financial and other risks are well managed within and between the sponsors and its financiers (if any). This gives comfort to the funder(s), are both incentivized and empowered to deal in a timely manner with problems that may occur in the Project, as shown in Section **SENSITIVITY ANALYSES**.

Managing cash flow is supposed full time of the loan life the lender, insurer and the shareholders to have online password access to the operational business plan. Twice a month (e.g. every two Friday} regularly accounting report data and graphic presentation of the cash flows will be appropriately available on the Project Developer's website. Thus it can raise red flags to potential problems before they grow too big to handle, reduce the reliance on credit, and indicate if a receivable is past due.

The management of OCFCS is assigned to International Investment Council, Washington, D.C., through its auxiliary local country East Electric Company Ltd., Bulgaria, in close cooperation with **Brothers Global Ltd**, 46A Queens Ave., London, N21 3JH, UK.

Event A**1**: part of QUANTITY for Agent A**1** →	**65%**	Percentage of prior probability for sale
Event A**2**: part of QUANTITY for Agent A**2** →	**35%**	Percentage supplied to A**2** ⇉
Event A**1**: QUALITY ***Good*** services for Agent A**1** →	**80%**	Percentage ***Good*** sales and payments (**G**)
Event A**2**: QUALITY ***Bad*** services for Agent A**2**	**28%**	Percentage ***Bad*** sales and payment (**B**)

At least two of the leading rewal estate agents (A**1** and A**2**) in the vegetable commercial sector are with a different professional culture and experience. They will distribute products from the PC in Serbia two very different markets—English (north London) and Sweden. In the pessimistic forecasts of pro-forma budgeting it is supposed on one hand different participation rate of factors (in the case of Agent) with different participation rates and on the other hand - with not sufficiently foreseeable impact of these events on the selected target. It is the product of various unforeseen events with different percentage of participation rate in the final result (***Good*** and ***Bad*** sales as prices and terms of deferred payments) of the different quantities supplied to them.

MATHEMATICAL MODELIN

QUANTITATIVE APPROACH TO DECISION MAKING

In modeling terminology phisical replicans are repsented to as icons models. It is an attempt of physical conditional appearance as the idea of the object being analogicaly modeled. It represents a problem by a system of symbols and mathematical relationship or expressions - called "mathematical models". The purpose is that both models enable us to draw conclusion about the real situation.

This computer **Quantitative Model** involves volume variables - such as production volume or sales volume— and cost, revenue or profit to help .

In this financial modeling are developed and involved a software package containing one model, herein presented, and one program for financial risk assessment, **8R-PROGRAM**. Both interprete the output information make it possible to control the operational deceision making and risk management through **O**nline **C**ash-**F**low **C**ontrol **S**ystem.

Our approach is to describe deceision making situation in which quantitative methods have been successfully applied. It shows how the appropriate methods can be used to help the auditor and manager make better decision. Problem solving can be defined as the process of identifying a difference between some actual and some desired stake of affairs herein this Project and then taking actions to resolve the difference making the "best" or optimal solution.

Back to BUDGET ←

To the extent that the assessment of the Project is critical to the creditor and the insurer for its financing as well as subsequently for the development of the Project Company's business, this mathematical model for analysis and manage-ment provides accurate objective informa-tion about sales and profits after repay-ment of credit contributions. Given the particular emphasis on this part of the entire software package, we have used for its operational management specific icons, not typical of computer practice but memorized by the operator, including a brief description of QUANTITATIVE APPROACH TO DECISION MAKING.

Management of the business through these already predictable events of interest (the feedback) results in potential changes to costs. One of all obvious examples is presented on [**Row** 66, Worksheet [BUDGET] is in Cell B70. There is a fixed percentage of sales determining the mar-keting expenses for each period. Through feedback from *Level.4* with the changes for improvement of the selling, including the quantity of pro-ducts for real estate to the Agent A**1** (percentage of the ***Good*** sales) these costs will be reduced. This model calculates lower value of the evaluation in [Worksheet Bayes] Cell P21 selling agent.

Monitoring of accounts receivables allows to identify quickly trends in payment behavior. If a salesman routinely pays on time but has had from time to time months of late payments (possible ***Bad*** events), this increases Risk Receivables Factor and could be a red flag. In this decision-making situation for Sensitivity Analyses we use a single feedback model to examine and control several alternatives of changing input values of the model from *Level.4*. They are due to the impact of two unpredictable events of interest identified on *Level 2* through Bayes theorem and show the degree of impact to the cash inflows. During this period of time the ordinary yields of Products are not achieved. This section is developed for operational purposes on Worksheet Bayes and subsequent risk management which efficiently manage the cash flows not to be significantly affected.

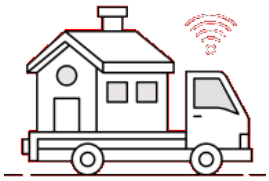
The program algorithm for analyses of decisions (Bayes Theorem) in the Excel-based financial model [Worksheet Bayes] is an alternative of the accepted market decisions, following this option in definite cash-flow parameters during the loan(s) life. Then (an option) in this case in compliance with the results of risk assessment it is recommendable diversification of the distribution to another prospective market. In the Project this is the only alternative, developed in capacity of so called “pessimistic forecast”, obligatory in the financial modeling for project financing application and conditional – in the business management and operational control of the financial risk during the credit(s) pay-off period.

Section 2 Debt Service Reserve Accounts (DSRA)

Sales and **Costs** data for each six-month period of one calendar year, separately and total, are presented on the top of Worksheet BUDGET [Row 15 *and* Row 20] as budgeting. In addition to the Financial Project there are sections adding functions of a business management model and the associated withit financial risk.

One option to manage quantitative financial risk is funding DSRA. It takes great shape and it is fully recorded within the project financing documentation and is developed from Project cashflows throughout procedure in this Section in addition to the functions of OCFCS.

There are sixt Rows (39 to 44), which do not contain budgeting data but are designed for managing the business within the debt term. They are created DSRA which can really a cash reserve for several months. Below it [Row 63] is computed the repayment with 4.19% annual interest. Purposes: (i) PC has inadequate funds or CADS11F* to pay debt service, (ii) implementation of some innovation, or (iii) refinement of some part of the technology lines (our case) building an additional systems.



* Cash Available for Debt Service (CADS) - Investopedia

Section 3 RISK ASSESSMENT AND MANAGEMENT *Level5*

◈ DRAFT ◈

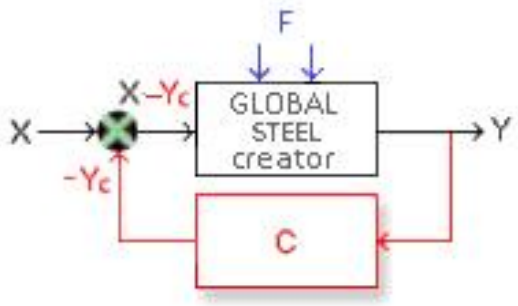
by way of example only

INTRODUCTION. Quantitative financial risk assessment (see description below) is the main priority for the final version of the cash flow proforma (Pessimistic Forecast), which is the basis for assessment and acceptance of the application for project financing of the industrial investment project. The assessments are presented graphically on Page "File" of the **7+1 Program** here ↓

The following provides more information for experts and auditors regarding the application of the software productused in this financial project

Brief Description of Risk Assessment

It is done in Setting the parameters of anticipated events Section "SENSITIVITY ANALYSIS" on hierarchical *Level4* [Worksheet BUDGET] for control the whole system which computed two predictable prior probability SALES REVENUE EVENTS of interest through **Buyes' Theorem**. In other words, this information for prior probability of events on the basis of the principle of hierarchical structures (the first principle of Cybernetics) is transmitted to the upper *Level5* at the Input (**X**) of the **Object of control**. At this level will takes place the second principle of Cybernetics – the negative feedback. The information from the output of the Object (**Y**) is returned back ($-Y_c$) through the Control system [Worksheet Bayes] to a lower *Level4* as signal for management. So called "disturbance impact" (**F**) see the technology description below.



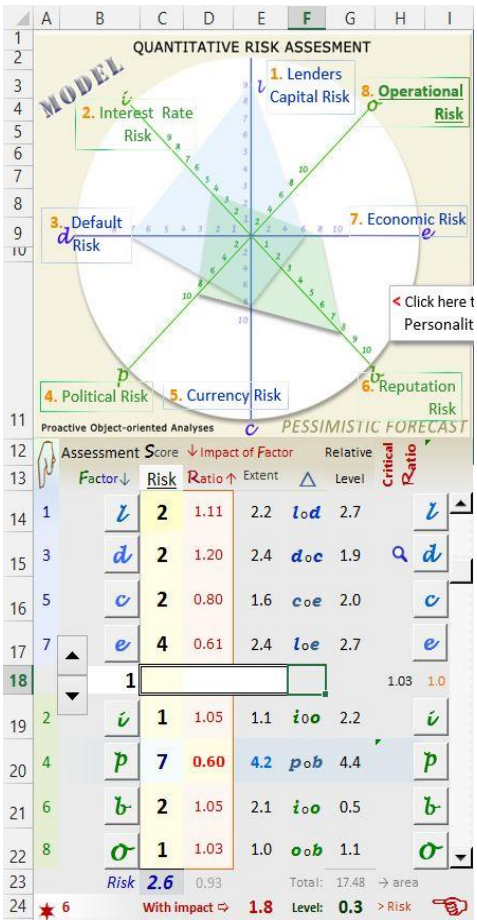
SENSITIVITY ANALYSIS

INTRODUCTION. We begin sensitivity analyses with prior probability estimates for specific events of interest – the QUANTITY of products A**1** supplied to Agent **1** for sale on the market. His percentage of the whole quantity of products is introduced in Cell M75 with SpinButton for Event A**1**. Respectively, the remaining part up to 100 percent is for Agent **2**. Both are indicated on Cell C7 and Cell C9 on Worksheet Bayes and in the tabular presentation below QUANTITY % from *A1*∩*A2* Sales. Then from sources such as special accounting reports, periodic values of cash in-flow indicated on the financial model, and so on we obtain additional information about the events. Given this new information we want to revise or update the above *prior probability* values by computing through specific algorithm and thus receive the *posterior probabilities* (tabular presentation in **POSTERIOR PROBABILITIES** below). The steps of probability revision process are shown in figures, and the final result is a ratio of cell P21, transferred for convenience in Cell M78. Worksheet BUDGET. The result, this ratio, forms Row 66 as a part of the Fixed Costs of the Business Plan for operational control of cash flows.*

This is a real feedback to the subject to automatic control of one and the same *Level 4.*

So far as this financial model is construed as pessimistic forecast for development of the project, the presentation of this Section "**SENSITIVITY ANALYSIS**" is limited to this application only.

There are other activities that are related to online cash management. Can be analyzed their prior probabilities and to revise or update the posterior probabilities of other events and their compliments with mathematical algorithm on Worksheet Bayes5. They will be used in developing a complete decision strategy.



Pre-project Assessment of Risk Factors

(Example) Assessment Rate Level 0-10 of impact of Factor

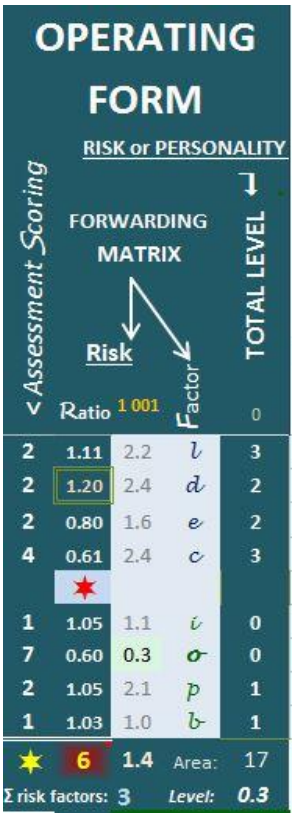
◄This graph of the main matrix is a model for visualization of the program only; the values of the axes are not the real value of the Valister's model.

Feasibility Assessment. Once the final parameters of the capital investments are available, a full version of the Program will be provided for management of the risk during the loan life.

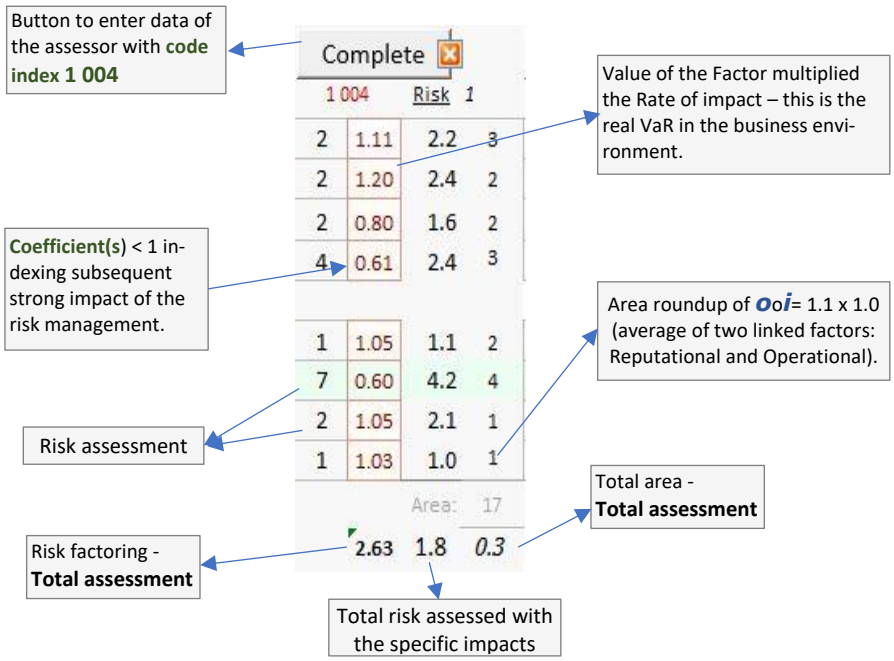
The assessor introduces in the Main Operational Matrix data based on information about general accepted criteria for quantitative assessment in relevant adequacy on the scale from 0 to 10, to be processed by the software product.

The Program is based on Excel-file of Microsoft Office 2017 package of Windows 10 with macros and algorithm of VBA-program language (see Enclosure 4 again). This Program is widely used on the East Coast of the United States after the failure of conventional products for **Risk Assessment** (**RA**) from before the mortgage financial meltdown in 2008. Sensitive analyzes are aimed mainly (but not only) to two risk factors, default *(d)* and operational *(o)* of special significance for financing and insurance institutions and, of course, to conceptually related Developer / Borrower.

* For more information about the applied software see application Risk Assessment and Management



←These figures on the left present the introductory segment of MOM of expertise in a mathematical model of geometric figures, proportional to the value at risk (VaR) factors and the extent of its impact on the field of their investment Project.



Three successive assessments have been made through feasibility study as follows:

1) Pre-design INSIDE EXPERTISE as former tenant of the Project construction plot land. Relative high level of risk on critical level ★;

2) EXTERNAL ASSESSORS made next quantitative assessment after adopted decisions: • registration in EU Project Company (PC) and subsidiary in Macedonia; • PC will contract and make export of the final products; • permanent online cashflow control, • operative risk management; and • final accounting reports. Result: Significant mitigation of the financial risk; *and*

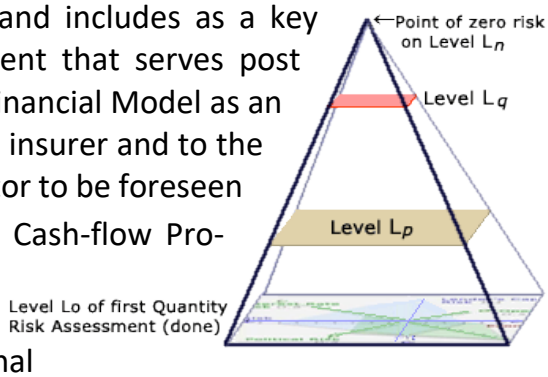
3) INDEPENDENT EVALUATION made by the project Developer after proposal / decision to divide the project into two parts each 5.1 ha with the lapse of time between the two stages of 6 up to 9 months to raise staff qualifications and training of new workers. Result: Completely acceptable financial risk level.

During the in-depth study of each risk factor and predictable events related to those risks emerged new unpredictable events of interest. They have evaluated in the current operative assessments. This is a kind of preliminary virtual management of the risk of unpredictable events. It is performed with quantitative methods in practice, and in this particular case of conditional probability of the quality indicators of salesman - only with Bayes' Theorem (see the next section below).

The computed results showed values of some factors with their impact on the Operational Risk (*o*) in critical value. The feedback from top *Level5* to the basic *Level0* indicated requirement of making exchange of organizational decision of the Project.

When in the financial model have been entered real figures of the value of capital investment, sales and costs, etc., a new RA has been made, including by INSIDE EXPERTISE only.

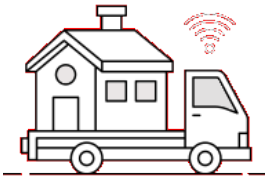
- Default Risk (*d*) = 2 in this pessimistic forecast covers an acceptable low level. It is a key factor for the positive resolution of a loan application. The system, called OCFCS (for short), that is recommended and includes as a key element successful control, is an instrument that serves post factum in the investment throughout the Financial Model as an provider current information to the lender, insurer and to the investor. It is more important for the *d*-Factor to be foreseen not only in the Sensitivity Analysis of the Cash-flow Pro-forma Budgeting of the business plan as an effect over the cash inflow, but its magnitude to be assessed prior to the final investment decision making and the approval of the loan application.



Many organizations suffer from a lack of standardization with regards to 'financial modelling language'. This affects the transparency, integrity, and operational efficiency of an organization's processes, resulting in incorrect analytical insights, poor business decisions and staff morale and frustrations within management. Analysis of different levels of the structure of business management facilitates making the right management decisions.

The software of quantitative RA based on Excel and Visual Basic for Applications is friendly for operation, increases likelihood and magnitude of events and their possible impact. It treats eight risk factors – seven financial and the operational risk.

Generally, three groups of experts make inside, external and, when the case so requires, independent evaluations. In case the level of the total risk and the Operational Risk (*o*) factor achieves preset critical values, the system automatically recommends making evaluation of Personal Traits of the decision makers or the top managing staff (not happened in this case).



SWOT Analyses

The SWAT table below summarizes the key external factors relevant to RIPING d.o.o.

Strengths	Weaknesses
• Developer owns all required Ultimate Building Machine. • The Project's site is located near the regional business cente from the capital Beograd. • Developer has nearby land for the construction of a solar panel power plant.	• Lack of equity capital of the Developer to finance the Project, which slows down its development and limits the size of its own equity shares. • Shortage of qualified technology and manufacturing staff, which increases financial risk and may lead to division of the Project into two stages.
Opportunities	**Threats**
• Developer can obtain refund of up to 50% of the invested amount in compliance with the Serbian investment promotion act. • Ability to diversification of the homes and halls with various constructions and pannels.	• The continued political and administrative support of local municipality is uncertain. On the other hand, its continuation and deepening are undesirable.

4. ORGANIZATIONAL AND MANAGEMENT PLAN

Legal Form

CLOBAL STEEL d.o.o. is newly established limited liability Project Company. It is borrower, purchaser of equipment and materials, principal and coordinator of all participants, and seller of the Products.

Personnel policy

Results of the feasibility study show the requirements for the corporate staff of total 56, es following.

The production staff will be 20 employs, and with the constructures (working in he city) – 20.

The management of the company consists of 8 peopele – **BOŠKO BEZBRADICA** as CEO, chair of the Managing Board, experts - service staff for design (architects and engineers) and book-keeper).

The staff is highly qualified; part of all company employees have higher education; the worker have longtime coalification. Year-round and long-term maintenance of permanent staff.

STAFF - Start Salaries

Structure and salaries of employees

POSITION

Nr.	ADMINISTRATION	$	$ p.Mo
1	CEO	3,000	3,000
1	Technical director	2,000	2,000
1	Secretary	1,000	1,000
2	Bookkeeper	2,000	4,000
3	Other administration	700	2,100
	SERVICE STAFF		
4	Designer (architects)	1,500	6,000
2	Engineers in production	1,500	3,000
2	Technological engineers	2,000	4,000
20	Production workers	800	16,000
20	Construction workers	1,000	20,000
56	TOTAL number of emploees		$61,100

End

5. Enclosures