1. Barbora

Structured Products Suitable for Sideways Trending Markets Barbora Chmelíková

Keywords:

Structured Products, Investment Certificates, Discount Certificates, Reverse Convertible Bonds, Sideways Trending Markets

ABSTRACT

This article examines more complex financial products which are referred to as structured products, such as instance investment certificates and reverse convertible bonds. The goal is to find an answer to the question of whether the structured financial products could be considered as suitable for sideways trending markets. A search for the answer has been conducted by thorough analysis of structured products, especially of discount certificates and reverse convertible bonds. These structured products were individually analyzed in terms of the principle of their behavior in the financial market and the elements of which the concrete structured product is composed. The composition of the product consequently determines its basic characteristic features. The concrete product was illustrated with a transparent graph. Due to this complex analysis was possible to decide whether a particular structured product is convenient for sideways trending or not. Finally is provided a summary, which recommends the structured products such as discount certificate and reverse convertible bonds that could earn added value in sideways trending or slightly increasing markets.

2. Jana

Abstract: Jana Hudcovska (UCO 409541)

Unlike in other conflict-affected countries, in Colombia a government institution is the only responsible entity to take care of demobilized children through its coalitions with different local institutions and non-governmental organizations. From the beginning of the Specialized Attention Programme (launched on November 1999) to September 2013, more than 5.300 ex-child soldiers under the age of 18 were attended in the two existing models of protection: the institutional, and the social and familiar environment. Based on thorough research of primary and secondary resources, this paper discusses the potential of the rehabilitation programme to be an effective tool for successful reintegration of former child soldiers into Colombian society. To compare theoretical functioning of the rehabilitation model with practical experience, semi-structured interviews with 6 programme participants (4 men and 2 women aged between 18 and 20 years) were conducted. The programme focuses on enhancing children's skills where the pillars are education, vocational training and psychological assistance. Nevertheless, we have identified four principal constraints in the process of reintegration: age limit of assisting in the rehabilitation programme without subsequent continuity, prevalence of institutional care in closed facilities, physical and territorial separation from native communities, and lack of monitoring and followup. The findings show that despite the comprehensive measures introduced on national and local level, the rehabilitation programme has had important shortcomings that should be addressed to increase its efficiency in terms of former child soldiers' reintegration.

3. Veronika

Implementation of the Operational Program Environment in Ostrava

Ing. Veronika Šranková

Abstract

Due to the high concentration of heavy industry Ostrava is one of the regions with significantly polluted environment in the Czech Republic. The air pollution is the most pressing environmental issue in Ostrava. Because the insufficient air quality implicates negative health effects, it is important to look for financial options to fund the improvement of the air quality in Ostrava. The article deals with the problem of air pollution in and the potential financing of the remediation from the Structural Funds. The aim is to evaluate the use of financial support from the "Operational Program Environment" on the projects focused on the improvement of the air quality and the reduction of emissions in Ostrava. The article analyzes data from Ministry of Environment of the Czech Republic that are published during the implementation of the Operational Program Environment in programming period 2007-2013. We also analyze the programs and the projects that Ostrava city realizes to improve the environmental condition in Ostrava. Based on the results, the allocation of the financial resources from the Structural Funds in Moravian Silesian region responds to the localization of the most polluted region in the Czech Republic.

Key words: evaluation, Operational Program Environment, Structural Funds, air pollution, Ostrava

JEL classification: Q53, R58

4. Dominika

Abstract

The Cost-of-illness study may be defined as a descriptive analysis measuring the cost of illness thus the economic burden of disease. It can be applied to various health problems and diverse geographical conditions. Based on the methodological literature and the expert studies the paper investigates and classifies the applicable approaches and methods of the Cost-of-Illness study. The aim of the paper is to determine the methodological framework of the study and to provide the critical evaluation related to the possibilities of application. The conducted analysis implies the traditional approach of classification including direct cost, indirect cost (losses in productivity) and the intangible cost including quality and length of life, pain and suffering.

Key words

Cost-of-illness, disease, direct cost, indirect cost, intangible cost

5. Petr

Wavelet features for recognition of first episode of schizophrenia from MRI brain images

Machine learning methods are increasingly used in various fields of medicine, contributing to early diagnosis and better quality of care. These outputs are particularly desirable in case of neuropsychiatric disorders, such as schizophrenia, due to the inherent potential for creating a new gold standard in the diagnosis and differentiation of particular disorders. This paper presents a scheme for automated classification from magnetic resonance images based on multiresolution representation in the wavelet domain. Implementation of the proposed algorithm, utilizing support vector machines classifier, is introduced and tested on a dataset containing 104 patients with first episode schizophrenia and healthy volunteers. Optimal parameters of different phases of the algorithm are sought and the quality of classification is estimated by robust cross validation techniques. Values of accuracy, sensitivity and specificity over 71% are achieved.

6. Eva

Genotyping *Klebsiella pneumoniae* strains by rep-PCR and mini-Multi Locus Sequence Typing (mini-MLST)

Introduction: The infections caused by gram-negative bacteria in immunocompromised patients are connected with high mortality. The patients are often colonized by resistant strains. The point of colonization for infection development isn't clear yet. This problem could be clarified by genotyping of colonisation and invasive strains. Bacteria genotyping by pulse field gel electrophoresis (PFGE) and determination of sequence type (ST) by Multi Locus Sequence Typing (MLST) is a gold standard. These traditional methods are labour intensive, hard to optimize and lengthy. The aim of this study was to find appropriate alternatives of these methods. Thanks of these methods we are able to compare the colonizing and invasive strains.

Methods: We were testing bacterial isolates of 52 patients by rep-PCR method, which is based on amplification of repetitive sequences in bacterial genome with subsequent analysis of gained products by DNA chips in BioAnalyzer machine (Agilent Technologies). The relation between particular profiles was established by BioNumerics software (Applied Maths). Also the mini-MLST method was used. This method comes out of 6 genes used for MLST Klebsiella analysis. The method is based on fluorescence measuring during PCR product melting with intercalated colouring. This method is dependent on tested gene sequence and is able to uncover single nucleotide polymorphism (SNP).

Results: In the scope of the study we tested 69 unique isolates of *Klebsiella pneumoniae* from 52 patients by rep-PCR and mini-MLST methods. The number of mini-MLST profiles was sharply lower than rep-PCR profiles.

Conclusion: Both methods are able to genotype *Klebsiella pneumoniae* strains. The rep-PCR method is most discriminating than mini-MLST as the different rep profiles were classified into the same MeIT-type. The mini-MLST method is quicker than rep-PCR method. That's why the mini-MLST is appropriate for the first classification of bigger amount of samples with subsequent rep-PCR testing.

7. Galina

Emerging stock markets are generally considered the highly profitable opportunity for global investors. However, their relative instability, especially disclosed in high volatility and lower trading volumes, makes the forecast of returns on these markets more difficult. In this paper, we test the forecast accuracy of classic asset pricing models, namely capital asset pricing model (CAPM), several specifications of multifactor asset pricing models and downside CAPM. The object of interest in our study is the Russian stock market represented by MICEX index and its counterparts. The Russian stock market is a particularly compelling case study for the examination of classic approaches in asset pricing, since it is highly prone to external shocks and political risks.

8. Martin

The Path to addiction and back

Abstract: The article presents selected findings of research of drug careers focused on the social consequences, which is currently being completed in the author's dissertation. The aim of the thesis research was to transcribe changes in the social environment of individual drug careers of those individuals whose process of addiction begins in adolescence and does not come from a socially marginalized environment. The particular aim was to extract relevant conclusions for the helping professions. The sample consists of eighteen informants, the sample design goal was to include cases of a comparable nature. The research uses a case study design and analytical procedures and the main and key data collection method is an indepth interviews with a script. Interviews had elements of a narrative interview and retrospectively identified drug career. Selected findings focus on the climate associated with the use of non-alcohol drugs in a school class team, recognising the identification with the anti-hero of the addicted individual as a surprising motive for drug use, and analysing the moment of balance as an opportunity for intervention of helping professions. The author tries to put the findings into a broader sociocultural context and reflects on the contemporary context of identity formation in adolescence and the question of normality/deviance in relation to illicit drug use.

Keywords: adolescence, case study, deviance, drug addiction, peer groups

9. Markéta

Abstract: Cultural policy, theatre related legislation and "quality of life"

This paper examines how an argument of "guality of life" is reflected in cultural policy concerning theatre and consequently in theatre legislation. It is becoming increasingly difficult to ignore increasing importance of cultural and creative industries to the world economy. Therefore, in recent years, there has been an increasing interest in cultural policy and its social, economic and legal effects. Based on studies of Florida (2002), Peck (2005) and Scott (2006), the aim is to identify intersections between "quality of life", positive theatre legislation and current macro-trends in cultural policies. Even the EU stresses the importance of state cultural function (Sassatelli, 2002) and proclaims its essential role in constituting coherent European community. Furthermore, creative and cultural industries gain crucial importance in global economy as a highly perspective field (with long-term social impact). It is argued (Nekolný, 2006) that nowadays social role of culture including strengthening social coherence is emphasized. Comparative analysis of theatre policies and legislation of several European countries is used as primary research method and also national, European and international legislation is analysed. This paper shows that nowadays, the argument concerning the "quality of life" is present and influential in creating theatre policies and theatre legislation - the same as in general in European cultural policy - in order to achieve harmony of "unity in diversity".

10. Petr

The presented paper deals with problem of pre-contractual liability *(culpa in contrahendo)* under new (Czech) civil code. The new regulation is compared with the concept of this institute from the standpoint of previous Czech civil law (i.e. legislation, case law, jurisprudence). The main aim of this paper is to provide a critical analysis of this problem and its new codification and prospects. Last part bring a several remarks on first experinece with a new practice which is into a force already.