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MODELING MULTIVARIATE NONSTATIONARY TIME SERIES OF ECONOMIC DYNAMICS BASED ON FOKKER-PLANCK EQUATION

The subject of economic dynamics is a simulation of behavior of economic systems under the influence of internal and external factors in order to analyze balance, control and prediction of the evolution of economic systems. Mathematical models of economic dynamics are the formal reflection of the many economic scenarios development. This is usually determined models which are based on some economic concepts. Under the economic dynamics also understand the dynamic series - series of numbers that characterize the change of the social or economic event that is economic time series (ETS) [1]. Really researched ETS - nonstationary and almost always multi sign nature, their reliable reflection in the economic - mathematical models is possible only on condition taking into account the complex inherent features of the most significant characteristics. Currently, the development of mathematical methods for the analysis of nonstationary multivariate processes has great practical importance and demand in the economy. This is due to the need to improve the accuracy of predictions and, in particular, the price indicators of financial and commodity markets.

Modern economics has in its arsenal a large number of methods for analyzing ETS and predicting socio - economic indicators: statistical [2], determined [3], econophysics methods, phase analysis, wavelet - analysis, spectral analysis [4-7], adaptive forecasting methods - neural networks, genetic algorithms, group method of data handling, method "caterpillar" [8,9]. Most of these approaches are used only for one-dimensional and stationary ETS. Constructing a statistically correct economic - mathematical models of multivariate nonstationary ETS and methods of analysis is an actual problem. The theoretical basis of these models is a multi-dimensional Fokker - Planck equation [10,11]. The purpose of this study is to develop mathematical models of nonstationary multi ETS for their analysis, forecasting and decision-making in financial and commodity markets on the basis of the author's concept of multivariate modeling of dynamic systems [12].

1. The relationship between the continuity equation and the Fokker - Planck equation, Dynamic System (DS) is characterized by state variables $\mathbf{x} = \{x_1, x_2, \dots, x_n\}$ - system of economic performance and function of the state $\phi(\mathbf{x}) = \phi(x_1, x_2, \dots, x_n)$ - probability density function (PDF), considered in the phase space Γ points \mathbf{x} . Measure $d\Gamma_n = \phi(x_1, x_2, \dots, x_n) \prod_{i=1}^n dx_i$ is the number of states ETS of specified intervals dx_i .

State variables are standardize:

Modelling Nonstationary Economic Time Series A Multivariate Approach

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Modelling Nonstationary Economic Time Series A Multivariate Approach:

Decoding **Modelling Nonstationary Economic Time Series A Multivariate Approach**: Revealing the Captivating Potential of Verbal Expression

In a time characterized by interconnectedness and an insatiable thirst for knowledge, the captivating potential of verbal expression has emerged as a formidable force. Its ability to evoke sentiments, stimulate introspection, and incite profound transformations is genuinely awe-inspiring. Within the pages of "**Modelling Nonstationary Economic Time Series A Multivariate Approach**," a mesmerizing literary creation penned by a celebrated wordsmith, readers set about an enlightening odyssey, unraveling the intricate significance of language and its enduring effect on our lives. In this appraisal, we shall explore the book's central themes, evaluate its distinctive writing style, and gauge its pervasive influence on the hearts and minds of its readership.

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the way tim burton uses sound particularly in edward scissorhands is unique as he has great capability of using eerie and dark music meanwhile incorporating playful and childlike music throughout his films for example when burton uses eerie music as the audience views peg drive up the hill to the dark mansion this is just one of the

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one of the best techniques a director can use to create a mood and tone would be lighting in edward scissorhands tim burton uses low key lighting to create a suspenseful and scary mood for example when peg is walking into edward s house the lighting is dark which makes the audience curious as to what is going to happen

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lighting color plays a significant role in his films because it expresses the mood of the scene in one of his films called edward scissorhands the scene is mixed between low key and high key lighting where high key lighting indicates cheerfulness and happiness and low key lighting expresses dark and sinister settings

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679 words 3 pages tim burton uses lighting to convey his unique gothic cinematic style in his films in some of his past movies such as edward scissorhands and charlie and the chocolate factory burton uses a variety of lighting techniques to indicate the mood of his movies

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jul 22 1991 cinematic techniques tim burton uses different cinematic techniques in edward scissorhands and charlie and the chocolate factory to convey mood and tone cinematic techniques are the methods a director uses to communicate meaning and to evoke particular emotional responses in viewers

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edward scissorhands is a key example of tim burton s ability to utilize close up shots to add to the overall theme of individuality whenever edward is using his scissor hands whether it s to cut hair or chop lettuce the scissors are consistently shown in a close up

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comprehending as well as pact even more than further will pay for each success bordering to the broadcast as capably as sharpness of this tone and mood of edward scissorhands can be taken as skillfully as picked to act tone and mood of edward scissorhands downloaded from support old xes inc com by guest hadassah werner

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when peg meets edward is shot in a basic tone of black much like edward s clothing this symbolises the way in which edward is perceived by the judgmental society as the first impression of him is designed to be evil and menacing

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tim burton has more opportunities as a director than an author to convey mood and tone in one of his most popular movies edward scissorhands he creates a sinister mood by creating a character with scissor hands this gives us a feeling that this character is

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96 words 1 pages in tim burton s movie edward scissors hands shots and framing is unique it s going to be about edward scissor hands and the different shots and framing tim burton used the long shots were mostly on like when edward kept on leaving and when peg found out where edward lived

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dec 16 2015 edward scissorhands resonates with angsty teens because it was dreamt up by one edward scissorhands began as a cry from the heart a drawing from burton s teenage years that expressed the inner torment he felt at being unable to communicate with those around him especially his family wrote mark salisbury in the book burton on

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dec 17 2013 edward scissorhands analysis download as a pdf or view online for free crime genre mood board this sudden change in tone represents burtons appeal to attract a younger audience as well as appeal to adults and teenagers the horror conventions would entice teenagers to watch the film however the reflections on christmas and using

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for example in charlie and the chocolate factory when the oompa loompas make their presence known the music that follows them changes the mood to a buoyant and mischievous tone whereas in edward scissorhands during the opening credits and the battle death of jim the music was ominous tense and melancholy

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edward scissorhands is a 1990 american fantasy gothic romance film directed by tim burton it was produced by burton and denise di novi written by caroline thompson from a story by her and burton and starring johnny depp winona ryder dianne wiest anthony michael hall kathy baker vincent price and alan arkin