

## INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS AND MANAGEMENT

### **CONTENTS**

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.	
1.	INTERNATIONAL FINANCIAL REPORTING STANDARD ADOPTION, IMPLICATION ON MANAGEMENT ACCOUNTING AND TAXATION IN NIGERIAN ECONOMY FOLAJIMI FESTUS ADEGBIE		
<b>2</b> .	MODERN PORTFIOLIO THEORY (MPT) AND FINANCIAL ECONOMICS: A THEORY OF LESSER TURF? DR. ANDREY I. ARTEMENKOV		
<b>3</b> .	THE IMPACT OF STOCK MARKET OPERATIONS ON THE NIGERIA ECONOMY:A TIME SERIES ANALYSIS (1981-2008) DR. OFURUM CLIFFORD OBIYO & TORBIRA, LEZAASI LENEE		
4.	PERFORMANCE APPRAISAL SYSTEM ON COMPANY PAY ROLL EMPLOY, SENIOR, MIDDLE & LOWER MANAGEMENT (A STUDY WITH REFERENCE TO INTERNATIONAL TOBACO COMPANY LTD., GHAZIABAD) DR. RAGHVENDRA DWIVEDI & KUSH KUMAR		
5.	CREDIT POLICY AND ITS EFFECT ON LIQUIDITY: A STUDY OF SELECTED MANUFACTURING COMPANIES IN NIGERIA STEPHEN A. OJEKA		
6.	CREDIT RISK MANAGEMENT IN STATE BANK OF INDIA - A STUDY ON PERCEPTION OF SBI MANAGER'S IN VISAKHAPATNAM ZONE		
7.	THE ARCHAEOLOGY OF RECESSION: DILEMMA BETWEEN CIVILIZATION AND CULTURE – TWO DIFFERENT APPROACHES OF WEST AND EAST WHILE COMBATING GREAT DEPRESSION DR. V. L. DHARURKAR & DR. MEENA CHANDAVARKAR		
8.	TRANSFORMING A RETAIL CENTRE INTO A BRAND THROUGH PROFESSIONAL MALL MANAGEMENT DR. N. H. MULLICK & DR. M. ALTAF KHAN		
9.	IMPACT OF EXCHANGE RATE VOLATILITY ON REVENUES: A CASE STUDY OF SELECTED IT COMPANIES FROM 2005 -2009 K. B. NALINA & DR. B. SHIVARAJ		
<b>10</b> .	DETERMINING WORKING CAPITAL SOLVENCY LEVEL AND ITS EFFECT ON PROFITABILITY IN SELECTED INDIAN MANUFACTURING FIRMS KARAMJEET SINGH & FIREW CHEKOL ASRESS		
11.	FUTURE NUTRITION & FOOD OF INDIA – THE AQUA-CULTURE: AN ENVIRONMENTAL MANAGEMENT & CULINARY PARADIGM PERSPECTIVE STUDY FOR A SUSTAINABLE NATIONAL STRATEGY DR. S. P. RATH, PROF. BISWAJIT DAS, PROF. SATISH JAYARAM & CHEF SUPRANA SAHA		
12.	A STUDY OF NON-FUND BASED ACTIVITES OF MPFC - WITH SPECIAL REFRENCE TO CAUSES OF FAILURE AND PROBLEMS DR. UTTAM JAGTAP & MANOHAR KAPSE		
13.	CRM IN BANKING: PERSPECTIVES AND INSIGHTS FROM INDIAN RURAL CUSTOMERS ARUN KUMAR, DEEPALI SINGH & P. ACHARYA	69	
<b>14</b> .	DETERMINANTS OF INCOME GENERATION OF WOMEN ENTREPRENEURS THROUGH SHGS REVATHI PANDIAN		
<b>15</b> .	AGRICULTURAL CREDIT: IMPACT ASSESSMENT DR. RAMESH. O. OLEKAR		
<b>16</b> .	MICRO FINANCE AND SELF- HELP GROUPS – AN EXPLORATORY STUDY OF SHIVAMOGA DISTRICT MAHESHA. V & DR. S. B. AKASH		
<b>17</b> .	INFORMAL SMALL SCALE BRICK-KILN ENTERPRISES IN GULBARGA URBAN AREA – AN ECONOMIC ANALYSIS		
<b>18</b> .	SHARANAPPA SAIDAPUR EXTENT OF UNEMPLOYMENT AMONG THE TRIBAL AND NON-TRIBAL HOUSEHOLDS IN THE RURAL AREAS OF HIMACHAL PRADESH: A MULTI-DIMENSIONAL APPROACH DR. SARBJEET SINGH		
<b>19</b> .	WOMEN SELF HELP GROUPS IN THE UPLIFTMENT OF TSUNAMI VICTIMS IN KANYAKUMARI DISTRICT DR. C. SIVA MURUGAN & S. SHAKESPEARE ISREAL	106	
20.	FOREIGN BANKS IN INDIA – EMERGING LEADER IN BANKING SECTOR DR. C. PARAMASIVAN	110	
<b>21</b> .	AN EMPIRICAL EVALUATION OF FINANCIAL HEALTH OF FERTILIZER INDUSTRY IN INDIA SARBAPRIYA RAY	114	
22.	A STUDY ON EMPLOYEE ABSENTEEISM IN INDIAN INDUSTRY: AN OVERVIEW R. SURESH BABU & DR. D. VENKATRAMARAJU	119	
23.	LONG MEMORY MODELLING OF RUPEE-DOLLAR EXCHANGE RATE RETURNS: A ROBUST ANALYSIS PUNEET KUMAR	124	
24.	THE US ECONOMY IN THE POST CRISIS SCENARIO – HOLDING LITTLE CAUSE FOR CHEER C. BARATHI & S. PRAVEEN KUMAR	131	
25.	C. BARATHI & S. PRAVEEN KUMAR IMPLEMENTATION OF 5 S IN BANKS YADUVEER YADAV, GAURAV YADAV & SWATI CHAUHAN	135	
	REQUEST FOR FEEDBACK	149	

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory®, ProQuest, U.S.A., The American Economic Association's electronic bibliography, EconLit, U.S.A. as well as in Cabell's Directories of Publishing Opportunities, U.S.A. Circulated all over the world & Google has verified that scholars of more than sixty-six countries/territories are visiting our journal on regular basis. Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

## <u>CHIEF PATRON</u>

PROF. K. K. AGGARWAL Chancellor, Lingaya's University, Delhi Founder Vice-Chancellor, Guru Gobind Singh Indraprastha University, Delhi Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

## <u>PATRON</u>

SH. RAM BHAJAN AGGARWAL Ex. State Minister for Home & Tourism, Government of Haryana Vice-President, Dadri Education Society, Charkhi Dadri President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

## CO-ORDINATOR

DR. BHAVET Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana, Ambala, Haryana

## ADVISORS

PROF. M. S. SENAM RAJU Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi PROF. M. N. SHARMA Chairman, M.B.A., Haryana College of Technology & Management, Kaithal PROF. S. L. MAHANDRU Principal (Retd.), Maharaja Agrasen College, Jagadhri

## EDITOR

**PROF. R. K. SHARMA** Dean (Academics), Tecnia Institute of Advanced Studies, Delhi

## CO-EDITOR

**DR. SAMBHAV GARG** 

Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana, Ambala, Haryana

## EDITORIAL ADVISORY BOARD

DR. AMBIKA ZUTSHI Faculty, School of Management & Marketing, Deakin University, Australia

DR. VIVEK NATRAJAN Faculty, Lomar University, U.S.A. DR. RAJESH MODI Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

PROF. SIKANDER KUMAR

Chairman, Department of Economics, Himachal Pradesh University, Shimla, Himachal Pradesh

#### **PROF. SANJIV MITTAL**

University School of Management Studies, Guru Gobind Singh I. P. University, Delhi

### PROF. RAJENDER GUPTA

Convener, Board of Studies in Economics, University of Jammu, Jammu

#### **PROF. NAWAB ALI KHAN**

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

**PROF. S. P. TIWARI** 

Department of Economics & Rural Development, Dr. Ram Manohar Lohia Avadh University, Faizabad

**DR. ASHOK KUMAR CHAUHAN** 

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**DR. SAMBHAVNA** 

Faculty, I.I.T.M., Delhi

**DR. MOHENDER KUMAR GUPTA** 

Associate Professor, P. J. L. N. Government College, Faridabad

**DR. VIVEK CHAWLA** Associate Professor, Kurukshetra University, Kurukshetra **DR. SHIVAKUMAR DEENE** 

Asst. Professor, Government F. G. College Chitguppa, Bidar, Karnataka

## ASSOCIATE EDITORS

**PROF. ABHAY BANSAL** Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida **PARVEEN KHURANA** Associate Professor, Mukand Lal National College, Yamuna Nagar **SHASHI KHURANA** Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala **SUNIL KUMAR KARWASRA** Vice-Principal, Defence College of Education, Tohana, Fatehabad **DR. VIKAS CHOUDHARY** Asst. Professor, N.I.T. (University), Kurukshetra

## TECHNICAL ADVISORS

AMITA Faculty, E.C.C., Safidon, Jind **MOHITA** Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadhola, Yamunanagar

## FINANCIAL ADVISORS

**DICKIN GOYAL** Advocate & Tax Adviser, Panchkula **NEENA** 

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

## LEGAL ADVISORS

**JITENDER S. CHAHAL** Advocate, Punjab & Haryana High Court, Chandigarh U.T. **CHANDER BHUSHAN SHARMA** Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

## SUPERINTENDENT

SURENDER KUMAR POONIA

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT iii A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

1.

# **CALL FOR MANUSCRIP**

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email addresses, info@ijrcm.org.in or infoijrcm@gmail.com.

## **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

		Dated:		
The Editor				
IJRCM				
Subject: Submission of Manuscript in	n the Area of			
<u>(e.g. C</u>	Computer/Finance/Marketing/HRM/G	Seneral Management/other, please specify).		
Dear Sir/Madam,				
Please find my submission of manuso	cript titled '	' for possible publication in your journal.		
I hereby affirm that the contents of t nor is it under review for publication		ore it has neither been published elsewhere in any language fully or partly,		
I affirm that all author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).				
Also, if our/my manuscript is accept contribution to any of your journals.	ed, I/We agree to comply with the fo	ormalities as given on the website of journal & you are free to publish our		
Name of Corresponding Author:				
Designation:		5 · · · · · · · · · · · · · · · · · · ·		
Affiliation:				
Mailing address:				
Mobile & Landline Number (s):				
E-mail Address (s):				
INTRODUCTION: Manuscript must be in British English prepared on a standard A4 size paper setting. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 12 point Calibri Font with page numbers at the bottom and centre of the every page.				
MANUSCRIPT TITLE: The title of the I	NUSCRIPT TITLE: The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.			
	UTHOR NAME(S) & AFFILIATIONS: The author (s) full name, designation, affiliation (s), address, mobile/landline numbers, and email/alternate email ddress should be in 12-point Calibri Font. It must be centered underneath the title.			
ABSTRACT: Abstract should be in function methods, results and conclusion.	ully italicized text, not exceeding 250	) words. The abstract must be informative and explain background, aims,		

- 6. **KEYWORDS**: Abstract must be followed by list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.
- 7. **HEADINGS**: All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
- 8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.
- 9. MAIN TEXT: The main text should be in a 8 point Calibri Font, single spaced and justified.
- 10. **FIGURES &TABLES:** These should be simple, centered, separately numbered & self explained, and titles must be above the tables/figures. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.
- 11. **EQUATIONS:** These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.
- 12. **REFERENCES**: The list of all references should be alphabetically arranged. It must be single spaced, and at the end of the manuscript. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per following:
- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (ed.) for one editor, and (ed.s) for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- Use endnotes rather than footnotes.
- The location of endnotes within the text should be indicated by superscript numbers.

#### PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

#### **Books**

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio," Ohio State University.

#### Contributions to books

 Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

#### Journal and other articles

• Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

#### Conference papers

• Chandel K.S. (2009): "Ethics in Commerce Education." Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

#### Unpublished dissertations and theses

Kumar S. (2006): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

#### Online resource

Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

#### Website

 Kelkar V. (2009): Towards a New Natural Gas Policy, Economic and Political Weekly, Viewed on February 17, 2011 http://epw.in/epw/user/viewabstract.jsp

Henry Miller

#### MODERN PORTFIOLIO THEORY (MPT) AND FINANCIAL ECONOMICS: A THEORY OF LESSER TURF?

#### **DR. ANDREY I. ARTEMENKOV**

#### SENIOR ECONOMIST, THE RUSSIAN SOCIETY OF APPRAISERS MEMBER, THE NATIONAL STANDARDS AND METHODOLOGY COMMITTEE AT THE NATIONAL VALUATION COUNCIL LECTURER, THE DEPARTMENT OF ECONOMIC MEASUREMENTS THE STATE UNIVERSITY OF MANAGEMENT

## 99, RUZYANSKI PROSPECT

MOSCOW 123 060

#### RUSSIA

#### ABSTRACT

This Paper attempts to explore the building blocks of the Modern Portfolio Theory (MPT) and show their immediate relation to the neoclassical 'more heat than light' paradigm. By treating the investment and valuation aspects and consequences of MPT, it raises concerns over the self-fulfillment (performativity) of MPT. MPT regards socially-driven pricing processes occurring on capital markets as if those were sterling naturally occurring stochastic processes. Thus instead of substantive economic description it concentrates on their numerical representation and proceeds to provide normative implications from this one-sided view. While such research paradigm has a rightful degree of validity and (perhaps buoyed by its performativity effects) has proven itself fruitful in the context of liquid capital markets, past decades have witnessed its over-extension to other investment fields where its mechanistic-laden statisics-intensive world-view is clearly inapplicable (particularly in respect of illiquid assets). This resulted in gross mispricings of such assets with direct ramifications of it contributing to the recent toxic assets and mispricings debacle it is a much-overlooked contributant and the contention is made that MPT-based valuation and investment theory should not hold the monopoly over pricing processes in the markets other than immediate liquid capital market (For example, it is not appropriate for valuing illiquid (private) business equity, finding enterprise (as opposed to liquid equity) value etc). Since many investment researchers are in the mode of thinking that MPT is the only available investment and valuation perspective, this Paper also briefly describes attempts to develop and institutionally implement other valuation paradigms stemming from neoclassical and Keynesian Economics, It urges their continuation and real world applications as a promising remedy against recent breakdown in capital pricing processes.

#### **KEYWORDS**

MPT, Finance, Economics, MPT, Investment analysis.

#### INTRODUCTION

n this age, which believes that there is a short cut to everything, the greatest lesson to be learned is that the most difficult way is, in the long run the easiest."

#### **GENERAL ASSESSMENT OF MPT FRAMEWORK**

Drawing inspiration from the pointers of the famous economic measurements policy pronouncement of recent times, delivered by Mr. Vladimir Putin, the Prime Minister of Russia, at the Davos World Economic Forum<sup>1</sup>, this Paper analyzes the pre-analytical foundations and macro-economic impact of the Modern Portfolio Theory<sup>2</sup> (MPT) tenets, on which much of the present Western investment theory and financial economics is erected. Our general inference is that while the former are tautological at their core and treat capital investment pricing processes as if those relate to an impersonal network of natural oscillators, the latter are perceivably dangerous in spite of the belief in the strong 'performativity' (self-fulfillment) of MPT (McKenzie, 2006). Performative the MPT may be, but this performativity comes it a cost: as year by year it only removes the universe of traded securities further away from the sustainable investment patterns which can only be grounded in a long-term commitment to socially-useful investment and in a long-term vision of the performance of real (non-financial) economy. Disregarding this, and with the wide application of MPT now the norm well beyond the initial universe of liquid securities for which it was originally conceived, the principal macroeconomic consequence of all that is to usher in real economic projects not on the merits of their social benefit but on clearly subordinate terms: this is the unavoidable corollary of computing their efficiency with reference to only the liquid security markets (just from them can we glean data needed for applying the MPT view). Thus, opaque social processes that go on the trading floor, accompanied by the huge scale of speculation and liquidity effects (Plantin, Sapra & Shin (2008)), set the pace for the development of real economy and involve it into unnecessary competition with the whirlwind of 'paper wealth'. Moreover, by focusing on the inherently short-term 'single-period' view and static solutions (as in CAPM model), MPT fosters or espouses the preference for short-term (and even ex-post!) anchoring of expectations. Since there is a fundamental mismatch between the long-term orientation of real investment projects within the productive economy and forceful short term drives within the universe of liquid securities, this effect of MPT is a very formidable and generally overlooked effect: namely, wide recognition of the MPT-based investment theory outside of the immediate province of stock trading activities explicitly presupposes the trust in securities markets as efficient regulators of all real economic activity. Therefore, the universal pricing (and feasibility analysis) linkage stretches unidirectionally from the universe of 'paper wealth' to the real economic undertakings, whereas the effects of this laissez-faire worldview have been widely explored in Keynesian economics, not least in the famed Chapter 12 of The General Theory written by J.M. Keynes himself<sup>3</sup>. However, should not the linkage run in exactly the opposite direction if economic and investment processes are to be made efficient for the general public? At long last the evidence gradually emerges that indiscriminate use of MPT can also be 'counter-performative'. Indeed, the recent securitization debacle proves that pricing of illiquid assets can't be done on the principles on which liquid securities are priced and invested into.

That MPT fails to see the public and social dimension of the processes it describes and equates/confuses them with the bona fide natural stochastic processes can be posted as the major methodological shortcoming of this worldview. At this point some might object on the grounds that a mere critique of a theory works no purpose, that a theory is defeated not by playing the role of devil's advocate, but by proposing a better and more useful theory, and, when no rigorous alternative theory is forthcoming, it is better to keep mum.

From the Address of Vladimir Putin, Prime Minister of Russia, at the Davos Economic Forum (February, 2009)

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

#### www.ijrcm.org.in

<sup>&</sup>lt;sup>1</sup> "[These are colossal] disproportions that have accumulated over the last few years. This primarily concerns disproportions between the scale of financial operations and the fundamental value of assets, as well as those between the increased burden on international loans and the sources of their collateral. ...

In effect, our proposal implies that the audit, accounting and ratings system reform must be based on a reversion to the fundamental asset value concept. In other words, assessments of each individual business must be based on its ability to generate added value, rather than on subjective concepts. In our opinion, the economy of the future must become an economy of real values. How to achieve this is not so clear-cut. Let us think about it together."

<sup>2</sup> This body of knowledge to which we refer as 'MPT' is well synthesized in such works as Rubinstein (1973) and Rubinstein (2006). 3 And we hardly need to belabor his conclusion about the lack of "evidence from experience that the investment policy which is socially advantageous coincides with that which is most profitable."

#### VOLUME NO: 1 (2011), ISSUE NO. 2 (JUNE)

Except that there are serious academic alternatives, which may prove worthy for the investment analysis in the context of real productive economy (while confining MPT to work in the context of liquid securities markets, where it still seems to perform well). The reason they have been ignored in the past has much to do with the accidents of time, geography and language. Few serious economists of today, even if they are fluent in Russian, would consider it a reputable pastime to read anything that came from academics of the Soviet era. Fusty Marxists -- you would think! Well, not all of it; and we beg to reserve an exception from this sweeping indictment for economists associated with the school of 'Mathematical economics,' a label which attaches to research published in Economica and Mathematical methods (est. by the Russian Academy of Sciences in 1965) – a periodical which was then boldly exploited for smuggling anti-Marxist ideas into general economic discourse. This school of thought was under development since 1950 and its scope of interests paralleled those which now go under the name of 'investment theory' and 'assets pricing' -- subjects whose serious exploration began with V. Novozhilov and L. Kantorovich<sup>4</sup>, who are widely regarded as tutelary figures by proponents of the 'Mathematical Economics'. Though the works of L. Kantorovich have enjoyed a substantial measure of recognition in their own time -- with the Nobel Prize in 1975 (jointly with T. Koopmans, whose insights into linear programming helped H. Markovitz shape MPT) -- the output of the investment analysis & valuation school of thought that he pioneered slips from the field of vision of most international Financial Economics researchers - to the point that they are virtually unknown outside of the former Eastern block countries. Two circumstances have conflated with the result of driving those ideas down into the limbo where they presently repose (with occasional airings in Russian language): Firstly, the investment ideas of 'Mathematical Economists' have never been put to good use in practice. Although their theoretical development has been encouraged by the central planning authorities, the latter have never seriously contemplated their full-scale deployment: for example, while the Russian Academy of Sciences had been commissioned to prepare a far-reaching blueprint for implementation of integral efficiency-based investment analysis and valuation programs which appeared in 1983 under the name of "The Complex Technique", practical rolling-out of these proposals stalled and never reached the stage of approval by the community of business decisionmakers on the ground whose ingrained 'socialist' interests of doing things the way they are done militated against any investment efficiency considerations and threatened their status quo. This contrasts with belated but enthusiastic reception of MPT by the institutional investment industry in the U.S. after the mid-1970s, where profit-seeking motives were natural allies to any efficiency-based schemes promising either greater returns or cost-cutting (Bernstein, 1992). Secondly, the dissolution of USSR with the attendant period of hyperinflation and switch-over of the economic modus operandi towards the despondent slough of short-term goals and the colonial raw-resource-extraction-based development model, coupled with the breakdown of funding for academia, all proceeded to deal a final blow to finding the nexus of the investment theory research along the lines of 'Mathematical economists' with business investment practice. Yet, some expertise in the area remains and renewed engagement with the subject is likely to be kindled anew considering that last year's collapse of the national securities markets has made it apparent that those can't be used along the lines advocated by MPT to support any investment analysis for projects related to real economy. (E. Neumann (2009))

Nay, one occasionally comes across attempts to marry the MPT paradigm with the 'Mathematical Economists' investment view. This is, of course, as realistic as trying to merge Christianity with the Muslim religion. (What is meat for the securities market is sometimes poisoning for the real economy, and vice versa). But nothing indicates that these paradigms cannot peaceably coexist side by side in normal times. To reiterate the point, MPT can exist as the viable investment paradigm within the confines of liquid securities markets. Yet, it also should leave the quarters of its counterpart's methodology undisturbed and refrain itself from spilling over into the real economic activity fabric which its tenets are poorly equipped to handle. To draw the notional divide between the powers and paradigms of liquid securities markets and the same for illiquid real economic projects – seems to be a sound research perspective.

And then a mischievous question arises: whose turf is bigger? I. Velez-Pereja (2008) reports that nearly 100% of all economic projects and entities in the world are not traded in any public securities markets. The exact proportion for the U.S. stands at 99.87%. So, why should those 99% of all economic activities take their cue from the paradigm entertained in the liquid minority lead<sup>5</sup>? Features of the liquid world that MPT paradigm describes (such as "sigmas", "betas", daily observed prices) are patently not the fixtures on their illiquid landscape.

A counter-objection to this dualistic view for the investment theories is that it will create arbitrage opportunities between the worlds. Yes, it may have so. But in the present day instability context, in what direction? -- one is tempted to ask. Going public or going private? One hopes, though, that the arbitrage traffic will be in both directions. Diversity is the name of the game – as MPT proponents are often known to think. So, in the current environment, denying diversity and snubbing alternative investment & valuation theories that may re-emerge in the preponderant world of illiquid real capital– is hopefully not in their cards if they choose to play the game fairly.

Our bet is that, if these real-capital investment theories evolve, they will have more than passing resemblance to the Investment theory of the "Mathematical Economists". But needless to say, given the prestige in which MPT is still held due to its past track record of efficiency, there are few signs of challenge to the global intellectual monopoly of MPT as yet.

#### ANALYSIS OF PARTICULAR ELEMENTS IN THE MPT FRAMEWORK

Below follows a list of comments on specific jarring points and methodological non sequiturs which proponents of the 'bigger turf' investment theory wish to highlight within the MPT paradigm, without any intent of compromising the formal elegance or logical coherence of its edifice, and mostly confining their comments to the irrelevance of its pre-analytical vision for the wider investment world connected with the real economy:

#### **RISK AND RETURN CONCEPTUALIZATIONS**

As Mr. W. Buffet once observed, the conceptualization of investment risks as a second-moment of distribution ("sigmas") is so ludicrous as to be largely removed from reality beyond the stock market (Galasyuk, 2007; Tzarichin, 2005). Indeed, if you make use of the first (expected returns) and the second (dispersion) moments of distribution, why not go whole hog and use the third and fourth moments as well? Is it because on paper and screen one can only fit two variables in two dimensions to produce beautiful doodles? Such doodles look convincing in the context of liquid securities markets with observed daily prices, but the further you go beyond this environment the greater the chance of discovery that such understanding of crucial variables misses the point. Risk is what can happen in the demand for production of real economic entities. And the extreme scenarios of what can happen (e.g. leading to the cessation of an entity as the going concern) are by far the largest contributors into the relevant picture of risk. The knowledge of "sigmas", even if (in rare cases) available from a past distribution sample of traded quotations, conveys no such information<sup>6</sup>. And how can such formal statistical information adumbrate a vision for the future?

There is some justice in thinking that portfolio optimization schemes a-la Markovitz is merely an exercise in mathematics based on the belief that price information and its distribution diagram is a 'sacred warehouse of vision' (cf. technical chartists are no different in this) and conveys a real blueprint for the future, not noise.

However, social processes of capital accumulation can't be made clearer and more secure by expressing them as random variables in a fashion after natural processes! (The belief that the approach for studying natural and social processes should be one and the same is called 'methodological monism'.) For once, the reflexivity theory of G. Soros is methodologically spot-on in its critique (though Soros can't be given credit for originating it; he is a mere vigorous exponent of similar views that existed long before him). It views such constricting research paradigm (MPT) as, at best, an exercise in computerized tautology which merely

<sup>4</sup> See his biography on http://www.geocities.com/econ\_545not/kantorovich-lecture.html

<sup>5</sup> This question is not novel: it was also posed in the works of Robert Slee (e.g. Private and public markets are no substitutes (2005), reprinted in the Voproci Ocenki Quarterly (2Q, 2007) published by the Russian Society of Appraisers).

<sup>6</sup> Because of the survivorship biases and self-reference within the statistical processes going on in the stock markets, statistical past is blind to what can really happen in the future. As to the 'implied volatilities' from the options trading side, those convey only the implications of supply and demand processes on the options markets coupled with the premise that a particular options pricing formula is right (self-fulfilling, performative) (David McKenzie (2007)). This is another example of methodological self-referral within the universe of 'paper wealth' betraying the lack of theoretical interest to think strategically about the processes in productive economy and conceive risks in real (non-statistical) terms.

serves to impose an ideological straight-jacket of statistical, not substantive, inquiry into the processes of capital accumulation dynamics. Suggestively, some proponents of MPT (e.g. W. Sharpe in his Nobel lecture) should be given credit for clearly opining that investment schemes based on MPT are plain 'normative'. One particular manifestation of this is in that they impute decision making variables (like expected returns) to an investment process based on considerations of some formal model (disregarding real [substantive] economic drivers of the investment process in question). Whether those then become self-fulfilled or not is another matter. The ultimate hedge to this problem is always that the end-result is a random variable.

On balance, such backward numerical –statistical orientation of MPT-style research and models has remarkable pro-cyclical qualities when it gets self-fulfilled. It results in the self-fulfilling chain of expectations, wherein chancy high past returns serve to ground expectations of high returns in the future, and those, in turn, convey the hope of yet higher expectations for the more distant future. And as the market walks on these airy circles of mechanically formed hopes, past reality and future expectations feeding and amplifying on each other, the boom/bust process visibly sets off. In particular, the Capital Assets Pricing Model (CAPM) has a potential to pump-prime this process for high beta stocks, whose accidental statistical feature of having higher relative correlations with 'the market' makes them recommendable as good growth investments. And so they grow self-fulfillingly on nothing more fundamental than a statistical quirk, if investors put enough trust in that model.

#### FINANCIALIZED STOCHASTIC ROOTS OF THE MPT PRICING MODELS (CAPITAL ASSETS PRICING MODELS -CAPM)

The development of MPT via CAPM-like models had, for example, an insalubrious practical import. To give a semblance of assurance about the sterling nature of their research, the developers of this paradigm conflated MPT- style research with the 'positive economics' and then propelled it into perennially high plateaus of real-life applications. W. Sharpe (1963) came up with a regression-based CAPM which tries to explain capital accumulation dynamics (rates of return) by mere correlation, not causation, with the general market index. At the heart such explanation is deeply circular and tautological (as admitted by Rubenstein, 2007): 'explaining' individual stock returns by the central lead of an index misses the broad picture that the index (in the first place) is nothing but an aggregation of individual stock returns<sup>7</sup>. Not being satisfied with such 'explanation' himself, W. Sharpe (1964) proposes a static-theoretical equilibrium based CAPM wherein the (normative) assumption about the fundamentalism and homogeneity of investor's expectations was taken to be so ludicrous as to have held up the publication of his manuscript by the editors of The Journal of Finance for a while (Bernstein, 1992). On such ideal capital markets as are assumed in the work no trading activity will ever take place in the first place! That much can be said in favor of the positive, or descriptive, implications of this model<sup>8</sup>. The only wide vision of a capital market that the CAPM model (both in its regressionary and theoretical embodiments) possesses is that of a self-contained inter-linked universe of stationary-stochastic random oscillators, which is how securities are conceptualized there. Not a word is said about the real economy on which this self-contained universe stands. For that reason, what seems to be explanation or prediction of the trends in separate streams of capital (stock prices) is in fact a veiled tautology. The rampant use of such models as CAPM or APT has the consequence that purveyors of statistical data inputs to these models acquire disproportionate influence and control over market behavior: it has been observed that making econometrics is no better than making sausages. Another sideeffect of this view results in investors losing awareness that capital markets is a serious business, not casino-sphere: Expected returns come from labor applied to real and socially useful economic ends within the context of vibrant real (not paper) economy, not from assuming some abstract statistical risks. Expected (sustainable) returns from the game of 'Snap and Musical chairs' are essentially zero (and less than zero after the transaction costs are taken account of). After all is said, it is pity that the gamblers' outlook has come to dominate the modern financial economics which, moreover, and by virtue of high esteem in which it is held, makes this outlook contagious for real investment processes in the wider economy lying beyond the oscillatory world of securities markets.

#### MISSION CREEP TO VALUATION OF REAL ASSETS

Another problem in the world of investment-financial valuation (IFV) arises from the marriage of convenience between the rates or return based on CAPM and discounting models rooted in the original Williams' Dividend Discounting Framework. It is said that such marriage experiments have come on stream due to attempts of one W. Fouse working with investment bank Wells Fargo in the 1970s (Bernstein, 1992). Subsequently, such technical approach to valuation of stocks and entities as was developed by him has become mainstream in the world of Investment financial valuation and its purity is now carefully policed in the majority of international consulting and accounting firms. But it is unclear how such an unwieldy marriage of opposites came to be seen viable in the first place. CAPM model is explicitly a single-period (i.e. short term) model of ideal equilibrium markets working under the assumption of homogeneity of expectations and similarity of holding strategies. It is rooted in the logic of speculative portfolio optimization such that its premises and results would seem reasonable only to diversified financial investors. DCF analysis, on the other hand, is explicitly a long-term analysis needed for those who assess the efficiency of real investment projects (businesses) over their entire lifetime. It regards businesses (projects) as real economic operating entities working to plan, not as random oscillators of returns. After all, long-term and short-term do not sit well together, as Keynes had ample opportunity to observe in his classical Chap. 12 of The General Theory which proves that short term 'animal spirits' of investors almost always bury long-term rationality under the fall-out from the game of 'musical chairs'. And adding further fuel to the fire, MPT goes a long way in making short-term terms of reference ascendant within DCF valuation framework, as it arbitrarily projects short-term ('single period') returns into the future, thereby enfolding the assessment of longer-term cash flows into the tyranny of short-term expectations. This can happen in no other way, unless the 'single period' analysis in CAPM coincides in its intervals with the length of the entire DCF forecast period (e.g. 10-year "betas")9. Developers of MPT models have at least been consistent in their logic, if limited in the proper scope of their economic vision (which stretches no further than liquid [paper] economy due to drawing equivalence between the social institution of capital markets and a grand casino of bona-fide oscillators) and less than clear-sighted about the social and macro-economic impact of the wider use of their theories. As to this wider use, in this mistaken endeavor to proselytize MPT into areas of economic measurement practice laying further afield than where the idea of random stock-oscillators may seem plausible, the Matchmakers of Marriages (like Fouse) really neglected the integrity of logic and overestimated the elasticity of initial assumptions. Thus, we are left with a gamut of illiquid un-traded assets valued after the fashion of those assets which circulate in the casino-sphere. Private equities, intangible assets, real property all are valued by analogy with liquid securities these days; and the case is not limited to mere quibbles about incorporating time-preference into DCF valuations: indeed, the entire universe of fuzzy assets such as 'real options' is drawn as rabbits from the hat of this MPT research program, and an attempt is invariably made to value all those 'as if' they are financial options etc. Fair to say, applying this valuation strait-jacket of the modern financial economics creates not only gross mis-pricings and stock market driven pro-cyclicality in the area of real economic assets, but also generates a semblance of the veritable cornucopia of new assets and capital, in line with the pro-rent orientation of the modern valuation practice<sup>10</sup>. And while taxpayers' pockets get lean in allowing governments to buttress and defend the value of those fictitious toxic assets, to an impartial observer this only seems bemusing to observe the vigor with which free markets -

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

<sup>7</sup> The idea of circularity is also found to be a pervasive feature not only of MPT by also of other 'modernist' approaches to social sciences, see Quinn (2007).

<sup>8</sup> Implications which no one, moreover, can check, since CAPM is empirically check-proof. As W. Sharpe avers: "We do not see expected returns ; we see realized returns. We don't see ex ante measures of beta; we see realized beta" (quoted in Bernstein , 2007, p. 172). – Ultimate sleight of hand for an answer, indeed.

<sup>9</sup> We beg not to be interpreted as proposing to throw the baby away with the bathwater, only that the baby sits in its proper cradle: the 'integral efficiency (or DCF) calculus' can be performed either in a liquid market or in a non-market setting. Moreover, any specific assumptions of MPT and of the broad ideal market of oscillators have nothing to do with the applicability or general-purpose credibility of this analysis. As a general-purpose calculus it is in itself value-neutral -- so long as we take care to ask: efficiency, but whose efficiency? (see, Wolff (2007)).

Essentially, such long term DCF analysis which was also integral to the vision in the Complex Technique developed by the 'Mathematical Economists' (1983), reflects individual investor–specific (or public policy) assumptions, expectations and preferences, and these are not necessarily identical to those expectations which, implicit in its observable prices, would prevail on the liquid securities market. In reality, there is no such think as homogeneity of expectations.

It is suggestive that, usually, investors undertaking DCF valuations are long-term productive-oriented, not financial, investors. They are not fully diversified and would consider diversification an inopportune strategy: if all were to follow the prescriptions of MPT, the investing world would be constituted entirely out of financial investors, and strategic investors would not get a chance under the sun. Essentially, the behavior of the latter group of 'anchored investors' is condemned as irrational under the MPT worldview, while pricing implications of the MPT models financially penalize the efficiency of their long-term strategies in favor of footloose financial investors. Notice what J.M. Keynes (1936) said on a similar account: "It is an inevitable result of an investment market organized along the lines described. For it is not sensible to pay 25 for an investment of which you believe the prospective yield to justify a value of 30, if you also believe that the market will value it at 20 three months hence." <sup>10</sup> Contrast it with anti–rent stance of classical economic systems, especially one by Henry George.

on the remaining un-manipulated pockets or freedom there-- struggle to unseat the ostensible ideology of 'free markets' supported in its practical applications by the loosening grip of the modern financial economics. It is a forceful demonstration of the power of ideas<sup>11</sup>!

#### THE EFFICIENT MARKET HYPOTHESIS (EMH)

P. Samuelson once observed that "you could have 98% of the money in the market that is irrational, and you could still have the Efficient Market Hypothesis" (Bernstein, 2007). Chance variations, liquidity effects (fall-out from speculative swings), plain noise masquerading as receipt of new information - all are here to daily throw their spanners into the works and investors only welcome them because they create profitable swings (trends, bubbles) in which the easy buck will be made. Thus, the business of sowing seeds to reap fruits from uncharitable nature (which is what the serious business of investment is all about) is temptingly superseded by the sweet poison of treacherous speculations. The figment of imagination that an empirical test is capable of vindicating the Efficient Market Hypothesis (EMH) has also contributed to assure us of the efficiency of whatever liquid capital markets do. A lulling worldview, and too easy to believe. But the letter "H" is not there by chance in the 'EMH': 'H' hedges it, when you skate on the thin ice of this belief. Ideologically, the implications of EMH for the capital markets' professional valuation (PV) mandate can hardly be more emasculating: values are becoming conceptually based on prices in both PV and Investment Financial Valuation (IFV) fraternities -- until widely shared conviction emerges that bubble is no bubble. Essentially, the belief in EMH puts paid against the relevance of the pro-active role played by the valuation professions (PV and IFV<sup>12</sup>). It is also responsible for the poor institutional regulation of the PV and IFV professions and for treating their functions as 'private business', not as a 'socially important infrastructure'. Left to no public control and having no sense of appreciation of their wider duty as defenders of public interest and macroeconomic stability, practitioners of such valuations (devoid of their true authority in the capital market pricing processes and having to depend on commercial contracts for livelihood) find it hard to buck against the price trend and proceed to swim with it: feeding recent prices into their statistical valuation models and consequently justifying values by prices, not basing prices on values. Such a tautologically 'innocent' valuation activity has brought about a deluge of mispricings with respect to complex derivatives (like credit default swaps- CDS), let alone estimations for non-traded assets. Understandably, taxpayers will pick up the tab for these mis-pricings to the tune of \$800 bln, yearly -- for CDS alone (A. Murphy, 2008). This is what happens when MPT ideas are applied in expansive fashion beyond their home base and cloud the vision of the professions.

Indeed, the boundaries of what constitutes efficient markets have grown exceedingly blurred so that MPT is now deemed to be applicable to virtually all markets: even property markets; even markets where no trades have been known to take place for a long time (like valuation of private businesses, and of government held entities) are not exempt.

F. Black in his presidential address to the American Finance Association (1985) had this to say: "However, we might define an efficient market as one in which price is within a factor of 2 of value, i.e., the price is more than half of value and less than twice value. The factor of 2 is arbitrary of course. Intuitively, though, it seems reasonable to me, in the light of sources of uncertainty about value and the strength of the forces tending to cause price to return to value. By this definition, I think almost all markets are efficient almost all of the time. "Almost all" means at least 90%"

(In terms of this eyebrow-raising admission, the 2008 drop in the Dow Jones Index from about 14000 to little below 7000 –can be taken as a prima-facie evidence of market macro-inefficiency). We have at least to be grateful to Fisher Black for clearly distinguishing between short-term price and long term sustainable value, and for being as frank as possible in articulating his vision of proportions with conceptual numbers in hand. But many market efficiency theorists refuse hypostasizing the concept of value at all. Some go as far as to say that price and value are explicitly one and the same concept (Lawson, 2005). And most of the investment-financial valuers (IFV analysts) have already bought into this blatantly positivist view, whereas Professional Valuers<sup>13</sup> and their standards (like the International Valuation Standards, European Valuation Standards etc.) maintain that value is the prediction of the most probable price likely to be obtained as at the date of valuation (IVS, 2007). Thus, the concept of value becomes secondary to their work and they are merely concerned with justifying prices by prices. In their hands, valuation degenerates into a purely tautological process in which 'what is' is right. The broad institution of various capital markets thus appears to be deprived of any legitimized 'steam governor' in the form of an anti-noise pro-value valuation infrastructure. Investors walk on short-term noise thinking that they digest true and relevant information and whoever controls this information flow controls the pulse of the markets. Belief in the efficiency of the markets makes things even worse. Unless a sustainable valuation infrastructure is developed for capital markets (for suggestions on it see, Artemenkov (2009)), the quotient of 2 from the above quotation from F. Black would appear to be a very optimistic one.

F. Black and other preeminent efficient markets theorists, like E. Fama, also make a point that we need noise traders, arbitrageurs and active portfolio managers to keep markets liquid and effective so that free-riding passive portfolio managers and index funds can take advantage of the resulting efficiency by buying into the market portfolio. But from where would this efficiency originate if those whom we think are exploiting inefficiencies are in reality trading on noise? It is said (Bernstein, 2007) that about 30% of institutional investors now commit themselves to versions of passive portfolio strategies, like index tracking. Here the words of J.M. Keynes might have a ring of one crying in the wilderness:

"I am in favor of having as large unit as market conditions will allow... To suppose that safety first consists in having a small gamble in a large number of different companies where I have no information to reach a good judgment, as compared with a substantial stake in a company where one's information is adequate, strikes me as a travesty of investment policy." (Keynes (1942), as quoted in Bernstein (1992)).

To modern investors' eyes trained in the wisdom of MPT and steeped in conventions to think on the micro-economic level, such a pronouncement might seem heretic. But, to invert the argument of EMH thinkers concerning the necessity for active traders, we need EMH proponents pursuing passive investments in order to make the sting of this travesty self-fulfilling. For surely, this EMH concept harnessed to 30% of institutional portfolios is not without its 'performativity': If liquidity is inflated at level speed into the deepest reaches of the stock markets far and wide on the globe, out it is sucked from those corners in equal proportion with the center. It is as if air-nozzles are directed at each stock-oscillator, and every nozzle is linked to a central compressor of liquidity regulated by the MPT software. For the oscillators, then, it is fair to say: together they stand, together they fall. In other words, amplification of pro-cyclicality (boom/bust patterns) due to the liquidity effects follows as a direct macro-economic consequence of wide practical application of the set of investing tools based on EMH & Tobin's Separation Theorem [the same arguments about liquidity effects are expressed but with reference to the fair value accounting concept in Plantin, Sapra & Shin (2008)].

#### DEBT NEUTRALITY OF FIRM FINANCING POLICIES

Appreciating the fragility of EMH, we can then say the markets may not be wise, but at least they can be clever. Surely. That is what the no-arbitrage argument is all about—when it works. Modigliani and Miller (1958) were the first to draw attention to its importance and based on it proceeded to set out their views about irrelevance of capital structure for the value of a firm. A dazzling and impeccable piece of logic, and not without its lesson for debt-takers. For some obscure reasons, however, they backtracked on the attitude to their arguments in Modigliani and Miller (1963), where they introduced "a correction" now explicitly lauding the benefits of debt finance. As the tax shield considerations from debt have not been missing in their first paper (Modigliani and Miller (1958)) such a change of heart seems mysterious. However, what is truly myopic and mysterious in this otherwise beautifully written, mathematically and logically impeccable

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 9

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

#### www.ijrcm.org.in

<sup>11</sup> Proponents of MPT often claim that following the landfall of MPT on the pricing processes starting in U.S. in the 1970s, there is no evidence that public capital markets have become more volatile (Bernstein, (1992), (2007)). From this they draw inference about MPT being a good noble thing in myriad new ways benefiting the world. Doubtful this. But it does benefit institutional investors... so long as the game of 'musical chairs' continues and governments proceed in force to throw billions of dollars into whimsically-priced chimeral assets and 'outright wagers' (as all currency derivates extant at the date of the Russian default in 1998 have been sweepingly held by one Russian judge, who in his binding ruling claimed that all derivatives –being essentially wagers – are outside of the legal protection, thus giving lease and release to many Russian banks then heavily indebted on them. And under the Russian Law they essentially remain as such to this day). But increasingly, as the music again nears its final crescendo, it dawns upon many that the MPT – an expensive product of elegant but hidebound rationale – will cost us dear. You may have self-fulfillment ("performativity") for 30-odd years – only coming home to roost with a single spectacular backwash of counter-performativity on a subsequent year. Not an argument against the theory based on the notion of random oscillators, of course.

<sup>12</sup> On the distinctions holding between the Professional Valuation (PV) and Investment financial Valuation (IFV) professions and their mental perspectives see Michaletz & Artemenkov (2007), Artemenkov & Mikerin (2008). 13 Who by virtue of their line of work are mostly concerned with valuing illiquid assets, such as intangible assets and private capital, on thin markets where there are no up-to-date prices.

line of research is a sweeping kind of generalization with which various institutional practices of lending are subsumed under the name of 'debt' and 'debt holding'. It is as if such debt holders share a unity of interests and claims – both between themselves and in relation to equity shareholders.

Holders of corporation debt may be widely dispersed and manifest themselves as holders of traded corporate bonds. On the other hand, such debt may come in the form of bank lending heavily concentrated in the hands of only one bank. On the ideal markets the difference may not matter, but suppose that a corporation becomes distressed so that the value of its assets exceeds the ongoing value of the firm – it is worth more dead than alive, that is. Supposing an appropriate covenant, it may then so happen that a heavily concentrated debt owner, like a banking institution, would reveal a preference to take over flesh from the company and engage in some assets-stripping, leaving its dead soul to equity holders. Dispersed bond holders, on the other hand, are more likely to be motivated to come to mutual agreement by revitalizing the ongoing operations of the entity and not winding up its business. Consequently, from the viewpoint of corporations, \$100 mln. of debt principal held in the hands of 1000 bond holders can't be placed on the same footing in terms of risk as the equal amount of debt owed to one debt-holder, much less on the same footing with the debt owed to an associated bank (i.e. one controlled by the borrower): different outcomes, different payoffs, different subdivision of payoffs. In this sense, interests of a particular small bond holder may harmonize with the interests of individual equity holders. There may even happen to be more antagonism within the group of debt holders then between a particular debt holder and an equity holder. The point is that separate interests within the debt structure are not naively aggregative, ditto between the groups. In the real world beyond liquid stock markets with the law of one price, each interest depending on its size is treated as a separate interest and bears a separate decision-making weight and priority. On how to reconcile these interests at a juncture after default eventuality, the future of a corporation may depend; and its present.

A vivid example of this conundrum is the tax debt always implicit in any corporate entity. Remember the fate of Yukos Oil, Inc.

So much about the harmony within the group of debt-holders. What may be beneficial for debt-holders as a group may not be beneficial for a particular debt holder who exercises most influence over the decision making process. In short, the relevance of M&M valuation paradigm only holds for entities traded on liquid security markets. Given its assumptions (and business practices of the real world), one day we hope it would be superfluous to explain that for unquoted (private) businesses (and investment projects) there is no such thing as 'the value of the firm'; only particular interests in it give rise to values contingent on expectations of particular interest-holders. Further to the point, these values are not aggregative, if only because interests and expectations of various stakeholders clash. As the first approximation we can, of course, conceive of a business identical with the firm which has only one commercial stakeholder, i.e. funded with 100% equity all in the hands of one 'representative businessman'. But it is unlikely there would be any demand for such valuation, except at the initial stages of investment project planning<sup>14</sup>. Of course, at the present these observations will fall on deaf ears among Professional Valuation practitioners who routinely apply WACC-based the-value-of-firm approach even to agricultural field valuations! No free lunch there? Perhaps, with the popularity of M&M valuation approach among valuers of private businesses we have another apparent overstretch of MPT.

#### RELEVANCE TO STOCK MARKETS: PRIMARY AND SECONDARY

Any finance model which promotes and lauds corporate dependence on debt without accounting for riskiness of its particular institutional forms if worst comes to worst (a riskiness which has nothing to do with the statistical risks) is an incomplete one. Indeed, as will be intimated shortly, it misses the whole point. Rather, it is against latent but very dangerous macroeconomic risks in corporate practice of being gouged out on debt (encouraged by the one-sided view of tax shields due to debt) that our attention should be directed.

Essentially, although trading in government bonds has a longer history in Britain, capital markets for corporate stock started to flourish following the necessity to raise large amounts of capital for canal building, railroad construction, etc. Raising these funds through the then conventional medium of regional banks was less convenient and more challenging given the huge amount of funds involved. Thus, corporate stock subscriptions took over as a popular form of funding and a viable network of capital providers alternative to the banks became a reality. Unlike banks, this was truly a network of dispersed contributors brought together at the central trading pit/broker that connected them with entities in need of funds. Also, unlike banks that have an ability to call back loans or contract their further supply of credit, such funding came in truly irrevocable form: stocks with declining prospects could be unloaded to another bidder without a bitter fight for the control or liquidation sale of underlying corporate collateral. Moreover, stock exchanges became conduits for quality funds: they acted as an intermediation mechanism transferring liquidity from savers to corporate borrowers. What was saved was lent, and no more. This comes in stark contrast with the banks that under the fractional reserve banking system have an ability to create the greater part of their loans out of thin air (as a double-entry on the accounts books). On the other hand, this doesn't mean that stock exchanges didn't encourage a greater amount of risk-taking for society: by widely dispersing ownership (or debt) of new ventures, the risks of those were also dispersed and willingness to 'give new things a try' was in consequence stimulated among savers (Bernstein, 1992).

What a spectacular transparent mechanism with the formal clearing house -- in many ways more efficient and sensible than the banks' one-on-one antagonism with borrowers! If nothing else, it was an independent new artery for capital raising processes. An uncontrollable new mechanism: a threat to established discretionary banking ways? But as a capitalist institution it was also not immune to the lure of profit. What if to effect its marriage with debt (at favorable interest rates) and subjugate its separate standing? With margin trading accounts and short-sales this was done in practice. Theoretically, it was done following the Tobin's Separation Theorem about the optimality of investing at the point of tangency to the market portfolio and turbo-charging the returns, if necessary, with the assumption of extra debt. Although such style of investing is represented to be efficient<sup>15</sup>, what is so efficient about being in hock and over the barrel to creditors, unless one can time a market perfectly? Thus, capital markets' function as an independent intermediator of savings ceased to be: one artery merged with the other. It is hardly a secret that a number of researchers of the Great Depression lay the blame for the onset of The Great Crush on the orchestrated tightening of margin trading requirements after keeping them lax for too long (M. Rothbard, 1983, 1994).

If the original design of public stock markets looks too good to be true in this narrative, it probably is. For look at its weaknesses. The entire stock market activity is divided between the primary market and the secondary market segments. Only the act of flotation on the primary market furnishes something to the economic development of entities concerned: it brings them funds needed for undertaking real investment projects. But, following their initial floatation (IPO), stocks essentially pass over into the realms of the secondary market where they continue their vast speculative journey from hands to hands unrestrained. Their subsequent timeless wanderings in those realms contribute not a penny of new funds to their issuers. No doubt there is lots of buzz about fluctuations in stock market capitalization, talk of barometers etc. But the fund-raising function of the stocks is over and by way of returns on the funds raised they pay back only dividends, if any. The wanderings within the casino-sphere of secondary markets need not be explained by any fundamental processes occurring within the corporations, so much as by the expectation of the future wanderings, future wanderings of the future wanderings, etc. ad infinitum, as Keynes described in his beauty contest metaphor (Keynes, 1936). The idea of 'the bigger fool' sometimes holds greater explanatory power than anything else. Surely, there is an expectation of receipt of an infinite (perpetual) stream of dividends arising from stocks, but the value of those is not infinite (cf. The St. Petersburg paradox) and no less than zero (limited liability).

Something more specific is harder to say without considering the institutionalized conventions of valuation methodology: unlike for physical capital, the value of which can be grounded in reproduction costs, the 'fictitious capital' costs noting to produce. The point is that under the present relations between primary and secondary markets, the latter become decoupled from fundamental processes going on in the corporations. Subsequent trading in their shares doesn't benefit the issuer, though liquid conditions of circulation on the secondary markets go a long way toward encouraging risk-taking and the primary investment by giving assurance that stocks can be 'unloaded' if their prospects turn sour.

However, governments benefit from secondary stock market activities (and bubbles) by levying capital gains tax on trades.

<sup>14</sup> Precisely such non-aggregative vision of corporate interests underpins "The Methodological Guidance for evaluation of the efficiency of investment projects claiming state support" developed in 1999 by the Russian Academy of Science (with the notable contribution from Profs. Smolyak, Livshitz & Vilensky) and approved by the joint decree of three federal ministries (available in Russian at www.labrate.ru). 15 Arguably, no lesser person than H. Markowitz himself comes against such view these days (see Bernstein, 2007; p.104).

One of the possible suggestions for bringing the secondary market in line with its orientation as an attractive fund-raising institution is that a part of the capital gain be redirected to its corporate source and accrue back to the issuer instead of being expropriated by governments. Although this measure may appear to be one-sided (no capital loss reimbursements from entities when their stocks go down) and as tending toward stock price inflation, it may be needed one day to transform national stock markets into a viable and alternative artery for long-term investment. For example, on par with the capital gains tax, it is possible to encourage long-term investment habits by managing the issuers' levy on capital gains in such a way as to make it regressive in proportion to the length of the investment period (during which the stock was in the account of its seller) and even set it at zero after the lapse of a certain investment horizon. That way the interests of short-term speculators can be aligned with the interests of corporate issuers. In the zero-sum game that goes on in short-term speculators vis-à-vis those players engaged in long-term strategic investment. The positive effects this measure will have on stock volatility may well offset the declining degrees of liquidity (demand from speculators) which can be envisioned as its likely side-effects. So the percentage of capital gains' levy should be made variable for various stocks, setting which at its specific amount can be advocated as a new tool among the powers of national governments which they can deploy for micro-managing the economy and redirecting capital-gains-from-trading toward development of socially-important industrial sectors. This can serve as a vision for true alignment of speculative investment interests with productive interests harnessing the secondary stock market in the service of real economy.

#### SOME LESSONS FROM THE PAST WHICH CAN BE FUTURE

The MPT paradigm and modern financial economics based on it represent an empirical-based research paradigm which believes there is a sacred content in observed prices and that, for all practical purposes, prices are values. Therefore, the oscillatory processes observed for the prices are also ascribed a hidden meaning and message, with suggestion that those can be exploited to minimize risks. Such vision tallies poorly with what market participants themselves think about their activities. For example, one investment banker was quoted as saying: "Couple of your and our DCFs, good PR management and few nifty brokers with good leverage, and the price of the stock will be anywhere we make it." (in E. Neumann, (2009)). Presumably, he was speaking from his experience and understanding that securities market is a vast social process with conflicting commercial and institutional interests. The process which, as in any social structure, has leaders who call the music and 'lower echelons' who dance to it. Some facets of the historic outcome of this process can be depicted on a price graph (with, perhaps, an indicator of volumes below it). What if this depiction resembles a random-oscillation process? Will you, then, impute a sacred meaning to this picture and confuse it with the reality itself? Or, will you regard the idea that social reality behind the liquid capital market processes can be meaningfully reduced to a two dimensional doodle as absurd?

From the attitude to this choice will depend one's opinion about the meaningfulness of MPT as a market research and investment paradigm.

Be it mentioned that MPT, as an outgrowth of the neoclassic economic theory, is vulnerable to the same charge of methodological monism which is usually levied against neoclassical economics research in general, i.e. 'it is more heat than light' (Mirowski, 1989) as it attempts to treat social processes as if they were on the same footing with naturally occurring phenomena. The gain in ostensible 'scientificity' comes at a heavy cost of ignoring the role of human consciousness and social organization. Thus, real drivers of processes are lost from sight, and only things with numerical representations are said to count toward formulating the problem. As a result, problems are formulated at second-hand, through their statistical representations and consequences. Moreover, the central problem of interest to MPT is how to secure the best returns possible (subject to controlling for losses), or whether an aspiration to beat the market pays off. So the MPT research paradigm becomes self-contained in its reference to the market to the point of tautology, while it also speaks in the language very appealing to its principal users: investors with their eyes turned toward the main chance. Its theoretical drive is to elude the consideration of real economy and underlying productive processes in their long-term orientation. At best, those are dismissed in 'what is - is right' fashion. Over the years, such ideological build of MPT has resulted in constructing investment superstructures (like derivatives, etc) over the existing buttresses of the capital market in an attempt to earn a bigger buck or hedge its earnings. Ultimately, a very baroque architecture developed over the bridge until few were able to trace it down to its foundations.

Can the river of real economic life bear those buttresses and elaborate bridges built over it, or are they too much for it? Can the pricing of financial assets be done only with reference to its own stratosphere (the market), without due regard to the long-term interests of real economy on the ground and its development plans? If something is not sustainable, it is hard to sustain it even with public money infusions and bailouts, which only serve to delay the inevitable inundation by the river of truth.

In our estimation, the 'performativity' of MPT has done much for steering financial markets away from properly navigating the river of real economic life.

The following words of J.M. Keynes (1936) ring even truer today, and MPT has done little to alleviate their sting, only to aggravate it: "Investment based on genuine long-term expectation is so difficult today as to be scarcely practicable. He who attempts it must surely lead much more laborious days and run greater risks than he who tries to guess better than the crowd how the crowd will behave; and, given equal intelligence, he may make more disastrous mistakes. There is no clear evidence from experience that the investment policy which is socially advantageous coincides with that which is most profitable. It needs more intelligence to defeat the forces of time and our ignorance of the future than to beat the gun." (J.M. Keynes)

We also perceive that the greater part of the problems with MPT stems not so much from its outright irrelevance (indeed, in the narrow context of liquid stock markets it initially proved to be a very fruitful research program that benefited many investors), as from its overstretched application to areas of investment lying beyond the realm of liquid financial assets (Michaletz & Artemenkov (2007), Artemenkov & Mikerin (2008)). What volatility, or "beta", for land or an illiquid investment project? This and other types of artificial and far-fetched questions are often asked by researchers, as if illiquid assets can be priced on the same principles as liquid assets. So the impression left is that the ratiocinative templates of MPT hold the widest-possible monopoly as the only available 'scientific' investment & valuation research program.

However, we see that the musical chairs on liquid capital markets have stopped. In a sense, this self-referential, self-contained fancy-dance that was going on in them has run, or will have run after a short illusory reprise, against hard wall of reality as an attempt was made by securitizers of various stripes to built a bridge between pieces of real economy and the liquid capital markets. It is not that the assets that flew over the bridge were toxic per se, but their consumption on the valuation terms dictated by the MPT –based pricing conventions prevailing on the liquid capital markets resulted in the indigestion. The wisdom of liquid capital market's participants' stomach for long nurtured on the emasculating diet of mechanistic-oriented MPT made them unable to distinguish between the conventional staple diet of known fruits on their markets and the new imports. For years eating their self-contained fruits raw, they have been unable to conceive that the new potatoes needed cooking and boiling in the first place<sup>16</sup>. Now those intoxicated players have galls to declare the potatoes toxic, not their cooking (valuation) methods inept. Not putting too fine points on it, another way of describing the same is saying that taking a real asset and converting it into financial asset doesn't change its essence and its original anchoring to a different type of market process, or even economic reality. Those who claim that it does are engaged in misrepresenting the essence<sup>17</sup>.

Maybe it's about time to ask economists to get back to their duties after enjoying their ease on the random walk to the tune of 'what is – is right' mantra, and consider formulating something which resembles socially-responsible economic guidance for the development and regulation of capital markets. Of course, this may be dangerous for their reputations, but as they themselves taught, returns only come from assuming risks. Our concern is that MPT, being under the present circumstances a 'degenerative research program' (as this technical term is defined in Blaug (1980)), will avail but little in this new project. Most economists currently pursuing their field of endeavor within MPT probably heard about T. Koopmans (whose courses H. Markovitz was taking at the time when he stumbled across the mean-variance optimization idea). It is less well known that Koopmans shared his 1975 Nobel Prize with L. Kantorovich, an academician who lived in Novosibirsk, Russia (and moved to Moscow about the time he received his Nobel Prize). The research of L. Kantorovich was a great encouragement

<sup>&</sup>lt;sup>16</sup> This consideration eluded them perhaps because they have been concentrated only on the wisdom of hot potato dropping before the music stopped.

<sup>&</sup>lt;sup>17</sup> Further to the point, Modern Financial Economics does all to convince that the essence is equivalent for either financial markets and markets of real economic capital or even that they co-exist in the same megaportfolio. A Keynesian would surely have pierced the absurdity of such claim – bearing in mind the Keynesian conceptual distinction between the rate of interest inherent in the capital markets and the rate represented by the marginal efficiency of capital in the markets of real economy. The importance of this distinction should not be lost on the corresponding plane of valuation drivers.

and inspiration behind a constellation of preeminent investment and valuation thinkers such as N. Fedorenko, A. Lurje, S. Shatalin, N. Petrakov, D. Lvov, B. Michalevski, V. Polterovich and S. Smolyak. Perhaps, casting a look at their investment theory works will help induce some new ideas for the guidance of investment and valuation practice.

An important theoretical novelty one is guaranteed to find in their approach is in aligning these issues of investment efficiency and valuation with the broad outlines of macroeconomic policy and development goals. Ideally, microeconomic investment advice would, then, harmonize in scope with the broader social picture and needs of economic development. Precisely because of this top-down view, such investment theory unlocks a capacity for integrative pricing & investment solutions across the universe of assets -both liquid securities and illiquid 'chunky' investments - with due heed given to sustainable long-term outlook. Thus, investment theory expands its vision and ceases to stand merely for an advice on how best to aggregate 'natural' stock-oscillators. Understandably, such a sea-change in investment theory, if it ever comes to fulfillment (which seems unlikely as yet), will have grand repercussions on the perception of the social functions of the valuation and investment professions, which even now, ostensibly, are considered as 'public interest' professions. Provided that these cues are taken, we hope that one day a Keynesian valuation theory and corresponding institutional practice will emerge as a full-fledged reality instead of mere vague desideratum, while the new classical MPT investment and valuation paradigm will diminish in its status to only its special case scaled down to agreeable proportions.

#### REFERENCES

Artemenkov A.I., Mikerin, G., Artemenkov I.L., (2008) 'Professional Valuation and Investment -financial valuation: Distinctions in valuation for public and private markets", The Appraisal Journal, Vol. LXXVI. 2008, p. 355-370.

Artemenkov A.I., 2009, "The Capital Markets Stabilization Proposal: valuation policy issues." Paper presented at the National Seminar on Indian Financial Sector: Concerns & Challenges ", held on 21 -- 22nd February, 2009. at I.T.S Management & I.T Institute, Ghaziabad, India

Bernstein Peter, (1992), "Capital Ideas", John Wiley and sons, NY. Bernstein Peter (2007), "Capital Ideas evolving", John Wiley and sons, NY. Black F. (1985) "Noise", in The Journal of Finance, Vol. 41 issue 3. (July 1986)

Blaug Mark, (1991), "Economic Theory in Retrospect", fifth edition 2006, Cambridge University Press

Galasyuk V., and Galasyuk V., Consideration of Economic Risks in a Valuation Practice: Journey from the Kingdom of Tradition to the Kingdom of Common Sense (September 7, 2007). Available at SSRN: http://ssrn.com/abstract=1012812, Viewed on February 7<sup>th</sup>, 2009

The International Valuation Standards Council, The International Valuation Standards 8th edition, 2007, London: The Real Estate Gazette.

Keynes John, (1936), The General Theory of Employment, Interest and Money. Reprinted in Keynes, Collected Writings. Vol. 7. (ch.12)

Lawson J., (2005), "The search for a Valuation theory" Stable URL: www.prres.net/Papers/Lawson\_The\_search\_for\_a\_valuation\_theory.pdf, Viewed on February 15<sup>th</sup>, 2009.

Michaletz, V., Artemenkov A., and Artemenkov I. (2007), "Income Approach and Discount Rates for Valuing Income-Producing Illiquid Assets - Outlines of New Framework." The ICFAI Journal of Applied Finance №12, 2007 p. 12-54 (Draft version also available here: http://papers.ssrn.com/sol3/ papers.cfm?abstract\_id=996016.)

Mirowski, Phillip, (1989), "More heat than light", Cambridge University Press, 1989

Modigliani, F., Miller, M.H. (1958), "The cost of capital, corporation finance and the theory of investment", The American Economic Review, v.48 (1958), pp. 267-297

Modigliani F., Miller, M.H., (1963), "Corporate income taxes and the cost of capital: A correction", The American Economic Review, v.53 (1963), pp. 433-443 Murphy A., (2008), "Analysis of the Financial crisis of 2008: Causes and Solutions, SSRN Working Paper. Electronic Copy available at: http://ssrn.com/abstract=1295344 , Viewed on February 5<sup>th</sup>, 2009

Neumann E., (2009), "The new architecture for economic measurements", in "The Property relations in The Russian Federation Magazine", #1 2009, pp. 54-79 (stable URL version available at: http://www.labrate.ru/articles/mikerin\_neiman\_antikrizis-2008.htm ).

Plantin G., Sapra H., & Shin H "Fair value accounting and financial stability", University of Chicago Graduate School of Business Research Paper # 08-15, Electronic copy available at http://ssrn.com/abstract=1275395

Quinn K., 2007, "Modernist and pre-modernist explanation in Economics" in the "Real world economics: A post-Autistic economics reader", Anthem Press (2007).

Rothbard, Murray, (1983), "The mystery of banking", Ludwig von Mises Institute (reprinted in 2008)

Rothbard Murray, (1994), "The case against the Fed", The Ludwig von Mises Institute,

McKenzie, Donald, (2006), "An Engine, Not A Camera: How financial models shape markets", Cambridge, MA: MIT Press.

Rubinstein, M., (1973), "A mean-Variance synthesis of Corporate Financial Theory", The Journal of Finance, vol.28, n.1 (Mar. 1973), p.167-181

Rubinstein Mark, (2006), "A History of the Theory of Investments: My annotated bibliography" John Wiley & Sons, 2006

Slee R., (2005) "Public and private markets are no substitutes", in "The Voproci Ocenki", 2Q, 2007 p. 3-18

Sharpe, W., 1963, "A Simplified Model for Portfolio Analysis", Management Science 9, No.2 (January 1963), p.277-293

Sharpe, W. (1964), "Capital assets prices: The theory of equilibrium under conditions of risk", The Journal of Finance, Vol. 19, No. 3. (Sep., 1964), pp. 425-442.

Tzarichin, K., (2005), "Deficiencies in the concept of risks involved in the conventional investment theory", in "Valutny Spekulant Magazine", 2005 (n. 1 and 2). Velez-Pareja, Ignacio, "Valuation of cash flows: market based approach", Elsevier Press, 2003

Wolff R., (2007), "Efficiency": whose efficiency? in the "Real world economics: A post-Autistic economics reader", Anthem Press (2007)

## **REQUEST FOR FEEDBACK**

#### Esteemed & Most Respected Reader,

At the very outset, International Journal of Research in Commerce and Management (IJRCM) appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to take this opportunity to request to your good self to supply your critical comments & suggestions about the material published in this issue as well as on the journal as a whole, on our E-mails i.e. **info@ijrcm.org.in** or **infoijrcm@gmail.com** for further improvements in the interest of research.

If your good-self have any queries please feel free to contact us on our E-mail infoijrcm@gmail.com.

