

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

I
J
R
C
M



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

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,

Open J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C)].

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 5555 Cities in 190 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

<http://ijrcm.org.in/>

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	MANAGEMENT EDUCATION: CURRENT SCENARIO IN HARYANA <i>DR. MARKANDAY AHUJA, DR. ANJU AHUJA & JASPREET DAHIYA</i>	1
2.	ROLE OF NATIONAL SECURITIES DEPOSITORIES LIMITED (NSDL) IN THE GROWTH OF DEPOSITORY SERVICES IN INDIA <i>DR. DEVINDER SHARMA & BHUSHAN AZAD</i>	7
3.	HERFINDAHL-HIRSCHMAN INDEX (HHI), VALUE CO-CREATORS AND COMPETITIVENESS OF THE INDUSTRY IN INDIA <i>BALAJI GOPALAN & DR. REVATHI IYER</i>	13
4.	PERCEPTION, TOURIST SATISFACTION AND DESTINATION LOYALTY TOWARDS SALALAH, SULTANATE OF OMAN <i>MAYA MADHAVAN & DR. A.P. GEORGE</i>	16
5.	DETERMINATION OF DIVIDEND POLICY OF PUBLIC LISTED COMPANIES <i>DR. D. UMAMAHESWARI & T. VALLI</i>	20
6.	A STUDY ON EMPLOYEE ATTITUDE TOWARDS PERFORMANCE APPRAISAL IN MIRA ALLOYS STEELS PVT. LTD. KURUMBAPALYAM COIMBATORE <i>DR. M. PRAKASH, S. SUGANYA & K. SINDUJA</i>	22
7.	THE IMPACT OF CRUDE PALM OIL SUPPORTING FUND POLICY ON FARMER'S LEVEL PRICE FOR FFB <i>SUNGGU SITUMORANG, AMZUL RIFIN & BUNGARAN SARAGIH</i>	26
8.	CORPORATE AND SELF HELP GROUP COLLABORATION: A PANACEA FOR RURAL MARKET DEVELOPMENT: A FOREWORD <i>DR. RAVINDRA KUMAR B & VENKATESH. R</i>	32
9.	CORPORATE GOVERNANCE PRACTICES OF LISTED COMPANIES IN INDIA – SPECIAL REFERENCE TO S&P BSE SENSEX COMPANIES <i>SANTHOSH T R & DR. REJI M A</i>	38
10.	A STUDY ON SPENDING AND SAVING PATTERN OF YOUNG GENERATION USING BEHAVIOUR ANALYTICS <i>DR. PAPPU RAJAN.A & DR. FELICITA.J</i>	44
11.	IMPACT OF WORK LIFE BALANCE ON WORKING WOMEN JOB SATISFACTION <i>GUDDATI ARCHANA</i>	49
12.	TO STUDY THE INTERRELATIONSHIP BETWEEN GOLD, US DOLLAR AND S&P SENSEX <i>DR. SULOCHNA & RAHUL BERRY</i>	54
13.	CASE STUDY ON AWARENESS OF OMBUDSMAN SCHEME IN INDIA <i>SUBHRO SEN GUPTA, NIDHI SRIVASTAVA & ABHINAV KATARIA</i>	57
14.	AN EMPIRICAL ANALYSIS ON ASSET QUALITY OF PUBLIC SECTOR BANKS IN INDIA: NON- PERFORMING ASSETS TO ADVANCES <i>DR. C. PARAMASIVAN & G. SRIVIDHYA</i>	64
15.	EVALUATION OF FINANCIAL SOUNDNESS INDICATORS OF INDIAN LIFE INSURANCE INDUSTRY: LIC OF INDIA Vs. PRIVATE LIFE INSURANCE COMPANIES <i>DR. JAYANT D. CHANDRAPAL</i>	68
16.	TQM AND QUALITY PERFORMANCE AT WORKING IRON AND STEEL FIRMS OF HYDERABAD-KARNATAKA REGION <i>K C PRASHANTH</i>	76
17.	PRODUCT PLACEMENTS AS A MARKETING TOOL: FROM TRADITIONAL TO SOCIAL MEDIA <i>BIMALDEEP KAUR</i>	82
18.	RELATIONSHIP BETWEEN SERVICE QUALITY, CUSTOMER TRUST, SATISFACTION AND LOYALTY IN E-RETAILING <i>DR. ADIL RASOOL</i>	89
19.	TAX SPEND DEBATE: TIME SERIES EVIDENCE FROM INDIA <i>MASROOR AHMAD</i>	101
20.	SUCCESS STORY OF INDIGO: A LESSON TO INDIAN AIRLINES INDUSTRY <i>DR. SUMIT AGARWAL, DR. GARIMA BHARDWAJ & DR. SHALINI SRIVASTAVA</i>	107
21.	A REVIEW OF MAJOR TRAINING TRANSFER STUDIES OF THE PAST <i>ANA RIZVI & DR. SURENDRA KUMAR</i>	111
22.	A STUDY ON FINANCIAL PERFORMANCE ANALYSIS OF "KARASSERY SERVICE CO-OPERATIVE BANK LTD" <i>R. BUVANESWARI & RIYAS. K</i>	115
23.	A STUDY ON CONSUMPTION BEHAVIOUR OF FAIRNESS CREAM BETWEEN WORKING WIVES AND NON WORKING WIVES IN SINGANALLUR TALUK <i>DR. P. KANNAN & E. SAKTHI PRIYA</i>	121
24.	EMOTIONAL INTELLIGENCE: A STUDY OF THE CONCEPTUAL FRAMEWORK <i>VAISHALI JOSHI, HANSIKA KHURANA & JASLEEN KAUR ANEJA</i>	124
25.	PHYSICAL AND FINANCIAL PERFORMANCE OF APSRTC AND MSRTC <i>DR. T. MADHU SUDANA</i>	127
26.	DYNAMICS OF SIKKIM ECOTOURISM AND ITS GROWTH <i>TENZING DORJEE BHUTIA</i>	132
27.	FUTURE ASPECTS OF PLAIN PACKAGING OF TOBACCO PRODUCTS IN INDIA <i>ANKIT KUMAR KATIYAR</i>	137
28.	DEMONETIZATION AND ITS IMPACT ON INDIAN ECONOMY IN INDIA <i>DR. S. P. KIRAN & DR. YOGESH H. S.</i>	140
29.	PENSION SYSTEM IN INDIA: POLITICAL AND ECONOMIC ISSUES <i>TEAVASPREET KAUR</i>	143
30.	TO STUDY THE NATIONALIZE PLASTIC MONEY PAYMENT GATEWAY SYSTEM: RUPAY <i>DR. SHEETAL KHANDRE</i>	149
	REQUEST FOR FEEDBACK & DISCLAIMER	155

CHIEF PATRON**Prof. (Dr.) K. K. AGGARWAL**

Chairman, Malaviya National Institute of Technology, Jaipur
 (An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)
 Chancellor, K. R. Mangalam University, Gurgaon
 Chancellor, Lingaya's University, Faridabad
 Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi
 Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

FOUNDER PATRON**Late Sh. RAM BHAJAN AGGARWAL**

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

FORMER CO-ORDINATOR**Dr. S. GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

ADVISOR**Prof. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

EDITOR**Dr. R. K. SHARMA**

Professor & Dean, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

CO-EDITOR**Dr. BHAVET**

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

EDITORIAL ADVISORY BOARD**Dr. CHRISTIAN EHIOBUCHÉ**

Professor of Global Business/Management, Larry L Luing School of Business, Berkeley College, USA

Dr. SIKANDER KUMAR

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

Dr. JOSÉ G. VARGAS-HERNÁNDEZ

Research Professor, University Center for Economic & Managerial Sciences, University of Guadalajara, Guadalajara, Mexico

Dr. RAJENDER GUPTA

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

Dr. TEGUH WIDODO

Dean, Faculty of Applied Science, Telkom University, Bandung Technoplex, Jl. Telekomunikasi, Indonesia

Dr. S. P. TIWARI

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

Dr. KAUP MOHAMED

Dean & Managing Director, London American City College/ICBEST, United Arab Emirates

SUNIL KUMAR KARWASRA

Principal, Aakash College of Education, ChanderKalan, Tohana, Fatehabad

Dr. MIKE AMUHAYA IRAVO

Principal, Jomo Kenyatta University of Agriculture & Tech., Westlands Campus, Nairobi-Kenya

Dr. M. S. SENAM RAJU

Professor, School of Management Studies, I.G.N.O.U., New Delhi

Dr. NEPOMUCENO TIU

Chief Librarian & Professor, Lyceum of the Philippines University, Laguna, Philippines

Dr. PARVEEN KUMAR

Professor, Department of Computer Science, NIMS University, Jaipur

Dr. ANA ŠTAMBUK

Head of Department of Statistics, Faculty of Economics, University of Rijeka, Rijeka, Croatia

Dr. H. R. SHARMA

Director, Chhatarpati Shivaji Institute of Technology, Durg, C.G.

Dr. CLIFFORD OBIYO OFURUM

Professor of Accounting & Finance, Faculty of Management Sciences, University of Port Harcourt, Nigeria

Dr. SHIB SHANKAR ROY

Professor, Department of Marketing, University of Rajshahi, Rajshahi, Bangladesh

Dr. MANOHAR LAL

Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi

Dr. SRINIVAS MADISHETTI

Professor, School of Business, Mzumbe University, Tanzania

Dr. ANIL K. SAINI

Professor, Guru Gobind Singh Indraprastha University, Delhi

Dr. R. K. CHOUDHARY

Director, Asia Pacific Institute of Information Technology, Panipat

Dr. VIJAYPAL SINGH DHAKA

Dean (Academics), Rajasthan Institute of Engineering & Technology, Jaipur

Dr. NAWAB ALI KHAN

Professor & Dean, Faculty of Commerce, Aligarh Muslim University, Aligarh, U.P.

Dr. EGWAKHE A. JOHNSON

Professor & Director, Babcock Centre for Executive Development, Babcock University, Nigeria

Dr. ASHWANI KUSH

Head, Computer Science, University College, Kurukshetra University, Kurukshetra

Dr. ABHAY BANSAL

Head, Department of Information Technology, Amity School of Engg. & Tech., Amity University, Noida

Dr. BHARAT BHUSHAN

Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar

MUDENDA COLLINS

Head, Operations & Supply Chain, School of Business, The Copperbelt University, Zambia

Dr. JAYASHREE SHANTARAM PATIL (DAKE)

Faculty in Economics, KPB Hinduja College of Commerce, Mumbai

Dr. MURAT DARÇIN

Associate Dean, Gendarmerie and Coast Guard Academy, Ankara, Turkey

Dr. YOUNOS VAKIL ALROAIA

Head of International Center, DOS in Management, Semnan Branch, Islamic Azad University, Semnan, Iran

SHASHI KHURANA

Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala

Dr. SEOW TA WEEA

Associate Professor, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia

Dr. OKAN VELI ŞAFAKLI

Associate Professor, European University of Lefke, Lefke, Cyprus

Dr. MOHINDER CHAND

Associate Professor, Kurukshetra University, Kurukshetra

Dr. BORIS MILOVIC

Associate Professor, Faculty of Sport, Union Nikola Tesla University, Belgrade, Serbia

Dr. IQBAL THONSE HAWALDAR

Associate Professor, College of Business Administration, Kingdom University, Bahrain

Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

Dr. ALEXANDER MOSESOV

Associate Professor, Kazakh-British Technical University (KBTU), Almaty, Kazakhstan

Dr. MOHAMMAD TALHA

Associate Professor, Department of Accounting & MIS, College of Industrial Management, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

Dr. ASHOK KUMAR CHAUHAN

Reader, Department of Economics, Kurukshetra University, Kurukshetra

Dr. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

WILLIAM NKOMO

Asst. Head of the Department, Faculty of Computing, Botho University, Francistown, Botswana

YU-BING WANG

Faculty, department of Marketing, Feng Chia University, Taichung, Taiwan

Dr. SHIVAKUMAR DEENE

Faculty, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

Dr. MELAKE TEWOLDE TECLEGHIORGIS

Faculty, College of Business & Economics, Department of Economics, Asmara, Eritrea

Dr. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

Dr. THAMPOE MANAGALESWARAN

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

Dr. ASHISH CHOPRA

Faculty, Department of Computer Applications, National Institute of Technology, Kurukshetra

SURAJ GAUDEL

BBA Program Coordinator, LA GRANDEE International College, Simalchaur - 8, Pokhara, Nepal

Dr. SAMBHAVNA

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

FORMER TECHNICAL ADVISOR**AMITA*****FINANCIAL ADVISORS*****DICKEN 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**

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to the recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography; Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** **anytime** in **M.S. Word format** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR

IJRCM

Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF _____.

(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, **please specify**)

DEAR SIR/MADAM

Please find my submission of manuscript titled ' _____ ' for likely publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published anywhere in any language fully or partly, nor it is under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to inclusion of their names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR

Designation/Post* :

Institution/College/University with full address & Pin Code :

Residential address with Pin Code :

Mobile Number (s) with country ISD code :

Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No) :

Landline Number (s) with country ISD code :

E-mail Address :

Alternate E-mail Address :

Nationality :

* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation etc. **The qualification of author is not acceptable for the purpose.**

NOTES:

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. **pdf. version is liable to be rejected without any consideration.**
 - b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail:**
New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)
 - c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.
 - d) The total size of the file containing the manuscript is expected to be below **1000 KB**.
 - e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.
 - f) **The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
 - g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters, centered and fully capitalised**.
 3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name, designation, affiliation (s), address, mobile/landline number (s), and email/alternate email address** should be given underneath the title.
 4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
 5. **ABSTRACT:** Abstract should be in **fully italic printing**, ranging between **150 to 300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA**. **Abbreviations must be mentioned in full**.
 6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
 7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aea-web.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.
 8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. **It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
 9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
 10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
 11. **MAIN TEXT:**

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:**INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESIS (ES)****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****LIMITATIONS****SCOPE FOR FURTHER RESEARCH****REFERENCES****APPENDIX/ANNEXURE****The manuscript should preferably be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript.**

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered** & self-explained, and the **titles must be above the table/figure. 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.**
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **REFERENCES:** The list of all references should be alphabetically arranged. **The author (s) should mention only the actually utilised references in the preparation of manuscript** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper.** The author (s) are supposed to follow the references as per the 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 italic printing. 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 parenthesis.
 - **Headers, footers, endnotes and footnotes should not be used in the document.** However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

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, Nigeria.

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

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

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

WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

THE IMPACT OF CRUDE PALM OIL SUPPORTING FUND POLICY ON FARMER'S LEVEL PRICE FOR FFB

SUNGGU SITUMORANG
STUDENT
GRADUATE PROGRAM OF MANAGEMENT & BUSINESS
BOGOR AGRICULTURAL UNIVERSITY
BOGOR

AMZUL RIFIN
LECTURER
DEPARTMENT FACULTY OF ECONOMICS & MANAGEMENT
BOGOR AGRICULTURAL UNIVERSITY
BOGOR

BUNGARAN SARAGIH
PROFESSOR
DEPARTMENT OF MANAGEMENT & BUSINESS
BOGOR AGRICULTURAL UNIVERSITY
BOGOR

ABSTRACT

The Government policy to impose retribution to the export of CPO (export tariff and Crude Palm Oil Supporting Fund) in order to boost the downstream business activities, price stabilization and also to maintain domestic industry. This is because of CPO domestic price condition which is unstable and tend to decline. With such condition there is a need to open demand for new CPO domestic market by boosting the downstream industries so that acquiring the nation revenue increase and also improving the domestic demand. Besides the policy on imposing retribution for CPO export shall give impact to the FFB price in the level of farmers. The purpose of the study this is to look at the impact posed by the CPO price against the Fund of fresh fruit bunches (FFB) at the level of farmers using multiple linear regression analysis. The results showed that the levy to Fund CPO price reduction level of farmers, because the FFB the exporter or producer of the levy imposes some CPO to farmers.

KEYWORDS

CPO fund, levy, FFB.

INTRODUCTION

By the time this paper is published Indonesia is at the top of world palm oil plantation by 10.9 million Ha cultivating area and harvesting 29.3 million tonnes of CPO. CPO production in Indonesia is competitively active in the world market. The future of palm oil plantation in Indonesia might double its size, better harvest and quality to meet the world demands for CPO from Indonesia. Such good news is positive contributing factors and posed some challenges to the development of palm oil industry in Indonesia. In consideration of the world market, for the last 10 years, the world demands or consumption of palm oil in average grew 8% - 9% per annum. Prediction estimates, the progress is steady with some opportunities to see increases following the world trend in alternative fuel from plants or biodiesel. Oil World data shows that the global trend related to palm oil based commodities is rising from time to time in addition to any other vegetable oil based commodities such as wheat, corn oil, coconut oil.

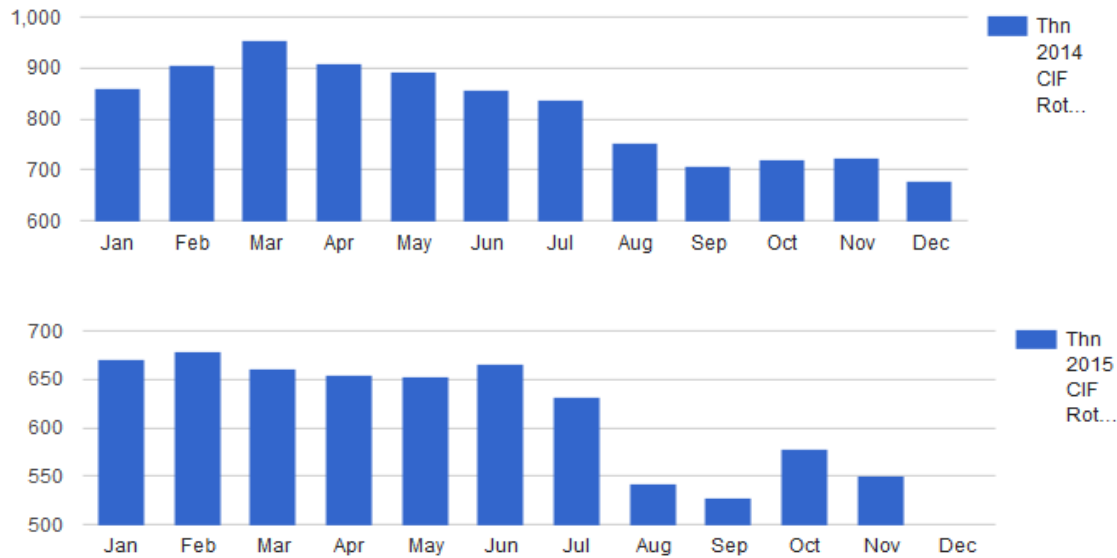
TABLE 1: INDONESIA PALM OIL PRODUCTION AND EXPORT

Indonesia Palm Oil Production and									
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production (million)	19.2	19.4	21.8	23.5	26.5	30.0	31.5	32.5	32.0*
Export (million)	15.1	17.1	17.1	17.6	18.2	22.4	21.7	26.4	27.0*
Export (US Dollar)	15.6	10.0	16.4	20.2	21.6	20.6	21.1	18.6	18.6*

Indicating prognosis
Source: Indonesian Palm Oil Producers Association (Gapki) & Indonesian Ministry of Agriculture

Table 1 shows positive performance of Indonesia production and exports which seen a rising from 2008 production as much as 19.2 million tonnes to 32.5 million tonnes in 2015 followed by exports data which seen a rising within the period of 2008 to 2015. Furthermore, the world demands for vegetable oils including palm oil (CPO) within the period of 2010 to 2014 seen a significant increase. However, such demand seemed to be left aside CPO from Indonesia and the result is it suffered lower price to make it more attractive. The fall of price for CPO from Indonesia is significantly low as of August 2014 as can be summarized in the Figure 1 below:

FIGURE 1: CPO PRICE IN 2014 AND 2015



By: infoSAWIT data center

The fall of price as of August 2014, has put Indonesia palm oil industry in distress. The market price for CPO from Indonesia is US\$ 630/tonne which is lower than its export tax which imposed at USD 750/Mt. This condition forced Indonesia to create domestic demand for its own CPO which is expected shall come from national biodiesel industry (Info Sawit 2015), to save its palm oil industry the government of Indonesia is trying to implement B-15 biodiesel mandatory policy to increase domestic CPO consumption, better price both for the CPO, related products and FFB.

To support such mandatory policy on Biodiesel pursuant to the Government Regulation No. 24/2015 and the President Regulation No. 61/2015 which levying CPO exports and its related products as a fundraising efforts for the Crude Palm Oil Supporting Fund (CSF). Some of fund will be used for biodiesel subsidy (such subsidy is nonexistent in APBN 2015), the most interesting reason of such fund is if the B-15 and its CSF (B-15/CSF) were an implementation success the result should be better price for CPO from Indonesia, which has fallen as lows as USD 750 per tonne in 2014. If that is true, CSF levy will be compensated. The funds will be stipulated and shall have significant impact to the farmer's level price.

Various past researches have analyzed the impact of export tax or export duties. The findings of research done by by Amzul Rifin (2012) on export tax policy in relation to cacao farmers and supply chain by survey method at farmers and government level. Supply chain was analyzed to identify the difference before and after export tax. The findings shows what the farmer's level price is significantly affected by the price at international level. Whereas the price at international level is transmitted near to perfection on the farmer's level price for cacao. These findings attributed to higher bargaining power of the farmers to the exporters; in particular after export tax is imposed as of April 2014. Such export tax has lower exporter's margin in the midst of pierce competition to buy cacao from the farmers. The findings from research on CPO Export Levy and the price drop bear consequences that are favorable and unfavorable at the same time. Those who favor such levy are domestic buyers (palm oil upstream industry), the countries and exporters that compete with Indonesia in such products. Palm oil upstream industry favors such levy that shall lower even more the domestic CPO and processed CPO price. The government revenue shall be increased to the magnitude of the levy, price and export volume. Those who suffer from such levy are national CPO producers, foreign buyers (importers), stevedores, palm oil input supplier and the government. The mechanistic of such levy shall depress the domestic price, which shall create disincentives to CPO producers and its related products. For CPO in particular, the CPO producer will try to depress FFB price at the farmer's level. Therefore implicitly FFB will be affected by such levy notwithstanding to the farmer's role in export (Drajat and Bustomi, 2009). Maswardi (2012) in the research on the impacts of CPO levy in relation to the agribusiness performance of coconut oil and the farmer's income by new instrument analysis in the world market which affected by export tax stipulated on September 10, 2005 by the issuance of PP No.35 arrived in a conclusion that such levy shall lower the GNP in every scenario of palm oil agribusiness. Such levy also negatively affected the size of plantation and unemployment and CPO exports. The increase of such levy as much as 3% had lowered the FFB price and the farmer's income. According to the research by Elianur D (2009) such export tax has favorable and unfavorable consequences. However, such policy is not effective. As evidenced by the population who will suffer from such policy which is larger than those who will benefits from such policy. The impacts of CPO export tax are favorable to the oil palm upstream industry and the government. The palm oil downstream industry will also favour such export tax when they learn it will depress the domestic CPO and its related products price therefore cheaper and stable inputs. The impacts of CPO export tax will suffer the CPO producers, the farmers and the domestic cooking oil consumers.

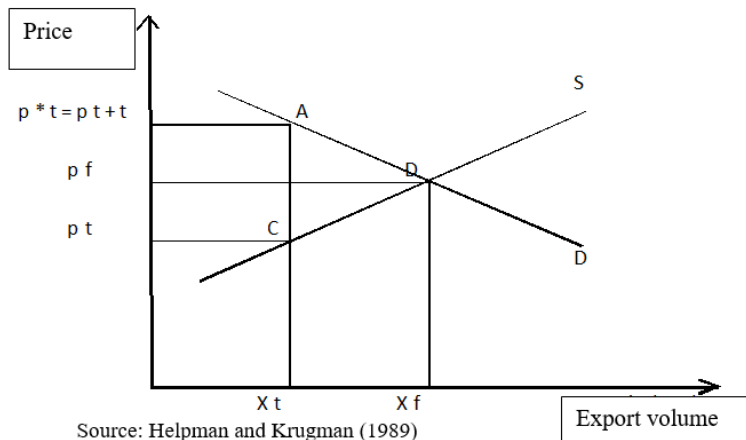
The purpose of this research is to identify the impact of Crude Palm Oil Supporting Fund on the farmer's level price for FFB.

REVIEW OF LITERATURE

THE IMPACT OF EXPORT TAX ON PRICE

In consideration of to ensure enough supplies for domestic demands, preserving natural resources, anticipating drastic price increase for some export commodities in the world market, and to stabilize some commodities price in the domestic market, the Government imposed export tax on some products. Such levy will have some negative impacts on export. Such levy will lower the price in the domestic market and increase the price of export.

FIGURE 2: THE IMPACT OF LEVY ON PRICE



Source: Helpman and Krugman (1989)

Figure 2 shows that when levy is imposed at t , the quantity of export (X) shall be less than X_f to X_t . The exported goods will be sold to the domestic market therefore lower the domestic price to P_t , whereas the goods exported shall increase to C . Figure 2 shows that in theory export tax shall lower export quantity and domestic CPO price therefore it can be expected to achieve the first goal which is affordable CPO price for cooking oil raw material. In reality CPO price is fluctuating for the last several years. This fluctuation affected by unstable world economics, depleting petroleum price and uncertain weather.

CPO FUND

The implementation instrument for collecting the plantation Fund has been actually existed since 2007. The bases of plantation Fund collection is Act 30 of 2007 on Energy, article 20 and 21 which state that the Government shall promote the development and utilization of Alternative Fuel from Plants (AFP) as one of renewable energy sources. Then Act 39 of 2014 on Plantation, in article 93 states that plantation business funding done by business entities involving the plantation businesses shall come from their own funds, financing institution, public fund, and any other legal financing. The government implement the policy on utilizing the AFN biodiesel to anticipate the huge amount of fossil fuel imports and to increase biodiesel competitiveness. The government intends to implement mandatory use of palm oil fuel from B10 to B15 in 2015 and B20 in 2016. Whereas biodiesel consumption increased as much as 0.24 million KL from 0.93 million KL in 2013 to 1.17 million KL in 2014. Yet the market price index (HIP) of Biodiesel is more expensive if compare with HIP diesel fuel. APBN-P2015 has no allocation for biodiesel subsidy because what is available is subsidy for diesel fuel as much as Rp.1,000/litre. On the other side the CPO price is below threshold, the government suffers a great loss from ET sector, since revenue targeted from ETCPO for APBN-P 2015 is around Rp.11 Trillion is under threat to miss. Therefore the government immediately implement the policy to enable a mechanism to collect the funds from plantation which is connected to the ET imposition on Palm Oil, CPO and thier related products which is expected creating incentives for re-planting of the people’s plantation, to promote human resources development in palm oil sectors, to promote research and development in the palm oil plantation, to promote palm oil plantation and to develop palm oil plantation infrastructure and facilities. The government enacts the Government Regulation No. 24 of 2014 on Plantation Fund Collection and Government Regulation No. 61 of 2015 on Collection and Utilization of Plantation Fund from and for the players of the industry since May 25, 2015. Such policy is intended to provide the funds needed for the development of sustainable plantation, improving the human resources in plantation sector, upstream industry development, optimizing plantation production for industry, energy, renewable energy, and export, to increase and maintain stability of revenue from plantation by price optimization in relation to the world price commodities fluctuation, and to support the welfare and continuity of the people’s plantation from any negative world commodity price uncertainty (Warta Bea Cukai bulletin of 2015).

The export tax on commodities imposed by the Minister of Finance shall be paid in Rupiah (Government Regulation No.61 of 2015). The Tariff imposed on Plantation Retribution of Oil Palm Exports, CPO and/or its related products which shall be paid by business doers and exporters shall be paid in Rupiah at the current exchange rate. Such retribution imposed on palm oil plantation business is based on the memorandum of understanding between the Head of General Services Agency for Palm Oil Plantation of the Ministry of Finance with the players of palm oil industry with respect to continuity aspects and services development, fairness and feasibility. (PMK No. 114 of 2015 and PMK No. 133 of 2015).

CPO Supporting Fund is a retribution package imposed on palm oil industry, especially its export activities. The retribution imposed is as much as US 50 per tin CPO and USD 30 per tin for its derivative products. The CSF imposed by the government is implemented by the General Services Agency (BLU). Whereas the utilization of such CSF will be allocated to subsidize biodiesel (for the realization of mandatory use of biodiesel B-15) and the remaining will be used for replanting and any other purposes as provided under the applicable law and regulations (PASPI 2015). The basis for CSF implementation that if the CPO price average is below the reference price or threshold, the threshold price is US\$750 per tonne, therefore to the exporters shall be imposed with the CPO Supporting Fund in accordance with the predetermined tariff. However, if the CPO price is above the threshold, the difference shall be imposed as revenue from export whereas anything below that shall be treated as Non-Taxes State Revenue (PNBP) of the Palm Oil BLU. Therefore, the employers of oil palm plantations will be guaranteed to be freed from double taxation. For example, if the threshold price is US\$750 per tonne and the CPO price is below that threshold, the exporters have to pay the PNBP (CPO Supporting Fund). But if the price is above the threshold, the difference shall be imposed as export duties.

RESEARCH METHOD

The data used in the analysis of the impacts of CPO Fund in Indonesia is time series secondary data, including monthly domestic and international CPO price for the period of January 2011 to June 2016. The data obtained from the Indonesian Palm Oil Producers Association (GAPKI). FFB Price at the farmers level obtained from Central Kalimantan and Riau. The exchange rate obtained from the Bank Indonesia. Whereas export tax and CSF obtained from GAPKI, past researches and literature review on the relevant government regulation, including the regulations enacted by The Republic Of Indonesia Ministry of Finance and The Republic Of Indonesia Ministry of Trade. The impacts of CSF in FFB prices can be represent by the following equation:

$$PFFB_t = a_0 + a_1 PCPO_t + a_2 CSF_t + a_3 EXR_t + a_4 PFFB_{t-1} + u$$

Where:

- PCPO_t = the price of CPO CIF Rotterdam for the period of January 2011 to June 2016 (USD/tonne)
- PFFB_t = the price of FFB at the farmers level for the period of January 2011 to June 2016 (Rp/kg)
- CSF_t = CFS for the period of January 2011 to June 2016 (%)
- EXR_t = Rupiah exchange rate against US\$ for the period of January 2011 to June 2016 (Rp/US\$)
- PFFB_{t-1} = times series variables of PFFBt (Rp/kg)
- u_t = confounding variable

Expected regression coefficient:

$$a_1, a_3 > 0, a_2 < 0; \text{ and } 0 < a_4 < 1$$

N = 66

Indonesia is the biggest CPO exporter in the world. The main destinations for Indonesia CPO are Western Europe, India, Pakistan, China and Japan. The border price and the whole sale price of CPO at the world market is transmitted to the domestic market by market mechanism. In general, the domestic CPO price is affected by the following factors:

1. World CPO demands
2. Domestic CPO demands
3. World Fossil Oil Price
4. Soybean Oil Price (substitution)
5. Exchange rate

Therefore, the CPO price experience seasonal fluctuation. Since January 2012 to the end of 2012 the CPO price is considerably high, but in the beginning of 2013 the CPO price is steadily falling until 2016. From the trend of export price and the declining domestic CPO price, whereas Export Tax is not applicable (nil) because the CPO price is below the threshold at USD\$750, the government issue CSF policy by PP Number 24/2015 on Plantation Fund and Government Regulation Number 61/2015 on CPO Supporting Fund and CPO Fund tariff is regulated under the Minister of Finance Regulation Number 114/PMK which intended to increase the domestic CPO price because most of such CPO Fund will be used to leverage the domestic CPO price as the most of it is used to subsidized biodiesel. The issuance of B-15 mandatory policy in 2015 and B-20 in 2016 is expected to increase the domestic consumption and therefore increase the CPO price. The implementation of CPO Fund will have some impacts on the domestic and world CPO price and will be transmitted to FFB price at the farmers level. These researches identify the impact of such CPO Fund Policy on the farmers level price for FFB. The findings of this research might serve as recommendation to the government and stakeholders, in particular to recommend the solution to mitigate the negative impact of CPO Fund.

RESULT DISCUSSION

The estimation result of study model of the impact of CSF imposition (for the period of July 2015 – June 2016) on FFB price is as follows: In the period of the implementation of CPO Supporting Fund (CSF), which in July 2015 until June 2016, it is obtained the results of the coefficient of determination (R²) of 0.929. The value of R² explains that 92.9 percent of the diversity of FFB prices changer can be explained by the independent variables together, i.e. by the variable price of CPO, CSF palm retribution and the rupiah against the USD. In addition, it is also obtained statistical value of F which is 19.666, while the value of F table at alpha 5% is 4.534. Because the F counts higher than F table or 19.666> 4.534, then the model built is good. This is also reflected from the F-probability value of 0001. Thus, it can be stated that the variation of endogenous changer actually can be explained by exogenous changer respectively.

The estimation results of research model of the impact of the imposition of CSF on FFB prices are as follows:

$$P_{FFB} = -4686.725 + 0.097 PCPO + 0.820 CSF_t - 0.271 EXRI_t - 0.218 PFFB_{t-1}$$

Where:

- PCPO_t = the price of CPO FOB Belawan for the period of July 2015-June 2016 (USD/ton)
- PFFB_t = the price of FFB at the farmers level for the period of July 2015-June 2016 (Rp/kg)
- CSF_t = CPO Supporting Fund for the period of July 2015-June 2016 (Rp/kg)
- EXRI_t = Rupiah exchange rate against US\$ for the period of July 2015-June 2016 (Rp/US\$)
- PFFB_{t-1} = time series variables of PFFBt(Rp/kg)

TABLE 2: FFB PARAMETER ESTIMATION FOR THE CPO SUPPORTING FUND PERIOD OF JULY 2015 – JUNE 2016

Independent Variables	Parameter Estimation	t-value	Prob. t	Interpretation
<i>Intercept</i>	4686.725	1.375	0.218	Not significant
PCPO (CPO Price)	0.097	0.979	0.365	Not significant
CSF (CPO Supporting Fund)	0.820	1.373	0.219	Not significant
EXRI (Exchange Rate)	-0.271	-1.428	0.203	Not significant
HFFB-1 (FFB Price lag)	-0.218	-0.778	0.466	Not significant

CPO price positively affect FFB price, where every Rp.1/kg increase on the CPO price shall increase FFB price at the farmers level as much as Rp.0.0097/kg. Based on the t-test, the t statistic value of 0.979 for alpha 5% is 2.228. This result shows the impacts of CPO price on FFB price is not significant because t score is less than 0.979 of t-table for alpha 5%.

Oil palm retribution in the form of CPO Supporting Fund has positive effect on the price of FFB, where any increase in CSF amounting to Rp1 / kg, then the CSF price will rise by Rp 0.820 / kg. This shows that the palm retribution caused the FFB price increase in levels of farmers, and encouraging the farmers. However, when seen from the results of the t test, can be obtained t value statistics which is 1373, while the value of the t statistic at 5% alpha is 2.228. This shows that in the period of the above analysis, the effect of CSF on the price of FFB is not significant, where the t value is smaller than t table or 1,373 <2.228). The positive influence of CSF in accordance with the purpose of the policy is implemented in which the fund plantation collection (CSF) through BDPD is used as a stabilizer of prices in the domestic oil palm industry through a support program of biodiesel absorption. The impact of the biodiesel absorption has succeeded in creating a demand to absorb the oversupply of CPO and then slowly to stabilize the CPO prices and then slowly stabilizing the CPO price which can be felt by farmers of oil palm in the price increases of the FFB price as raw materials. The empirical fact that the FFB price increases has not been felt yet by the farmers because of the tendency of exporters and manufacturers which are still trying to get a big enough margin by pressing the FFB price of the farmers

The exchange rate of Rupiah against US\$ negatively affect FFB price. Based on t test, the t score is -1.428, whereas t statistic for alpha 5% is 2.228. This shows that the impact of exchange rate on FFB price is not significant, because t score is less than 1.428 of t-table for alpha 5%.The above parameter estimation shows that t-test of independent variables is not significant. This result due to data availability at the time of this research it is too early to infer the impact of CSF on FFB price, because the age of CSF implementation is only 1 year, or from statistical approach, the data is relatively limited (n=12). However, the findings of this research provide preliminary study to analyze the impact of CSF on FFB price at the farmers level, which shows positive impact. In the face of world trend which shows a price decline, CSF has positive impact and drive a price increase at the farmers level. This empirical phenomenon can be explained by relevant theory on the government policy to impose CSF in relation to biodiesel mandatory use. The increase in CPO used for biodiesel will shift the supply to the left. This shift in turn will have some impact to the price, at the farmers level.

T-TEST OF PRODUCER’S MARGIN FOR THE CSF PERIOD

T-test of FFB price between the period of before and after CPO Supporting Fund (CSF) can be summarized in the table 3 below:

TABLE 3: T-TEST OF FFB PRICE BETWEEN THE PERIOD OF BEFORE AND AFTER CPO SUPPORTING FUND (CSF) AND WITHOUT EXPORT TAX (ET)

	CSF	Non ET and CSF
Mean	380.7	93.8
Variance	7,962.6	7.4
Observations	12	11
Hypothesized Mean Difference	0	
Df	11	
t Stat	11.1337	
P-value	0.0000	
t Critical	2.2010	

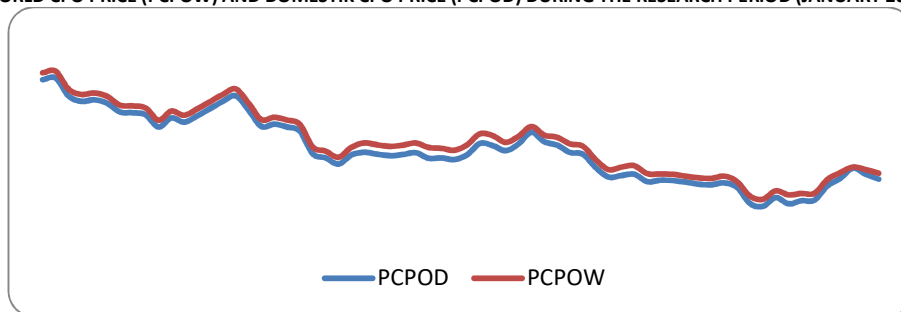
The average margin of FFB price at the farmers level for CSF period is Rp.380.7/kg, whereas before CSF is Rp.93.8/kg. This shows that CSF places some burden to the farmers. The t-test (Table 3) result shows significant difference, the t score of 11.1337, whereas t-table of 2.2010. This result shows that the t-test result is significant between the period before and after CSF, because the t-score of 15.7591 is greater than 2.2010 of t-table. Based on the two results above, the findings show that both ET and CSF has some impacts to FFB price decline at the farmers level. Therefore, export duty on CPO and its related products in unfavourable to the farmers, because it depress the price in the domestic market which shall create production disincentive to the CPO producers and its related products. CPO producers will depress the price of FFB at the farmers level. Thus implicitly FFB is imposed by export tax, even though the farmers do not carry out any exportation. This finding shows that the argument proposed by the government who stated that levy on CPO exports is intended to prevent the decline of world CPO price is not true. On the contrary, the world CPO price was falling as much as USD 100 per tonne from the time such levy is enacted to January 31, 2016. In theory, according to PASPI analysis (2015), the decrease of CPO exports to the world market shall leverage the CPO price if: (1) there is a significant decrease of palm oil export from Indonesia due to export tax policy, and (2) if the variable world demands such as economic growth, other vegetable oil price and fossil oil price is not declining. The fact is for the period of July to December 2015 the volume of palm oil exports from Indonesia is increasing (as compared to the same previous period) from 11.9 million tonnes to 14 million tonnes. The three variables which affect the world demands also experienced decline. The loss suffered by the CPO producers as explained above is due to the method of export tax which is an indirect export levy, therefore affect the mechanism of CPO price in the domestic market. If direct export tax were use such export tax will not affect such price mechanism therefore prevent CPO produces from any losses. Such direct method, export tax will be imposed only to any entity engaged in palm oil exportation and at a fixed annual rate. Furthermore (pursuant to the Interpretation of Article 5 PP No. 24/2015) such export tax can be included as deductible in corporate tax calculation. Empirical facts show that the statement which believed that export shall increase the domestic CPO price is not true. Likewise, the domestic CPO price after export levy implementation will be higher than before its implementation. As the world CPO price is declining, export levy lowers the domestic CPO price below its export levy.

The findings support past research on the impact of export tax in relation to palm oil exports, in total the overall losses suffered by Indonesia as a result of export levy is far larger than the revenue generated from such levy. And those who suffered biggest losses from such export levy are the domestic CPO producers which includes the farmers, State Owned enterprise which engaged in palm oil, palm oil plantation SMEs and giants.

THE DIFFERENCE OF CPO PRICE IN THE WORLD AND DOMESTIC MARKET

In accordance with the literature review, levy on palm oil in the form of export tax or CPO Supporting Fund shall increase the world CPO price (PCPOW) and lower the domestic CPO price (PCPOD). The difference can be seen in the Figure 3 below:

FIGURE 3: WORLD CPO PRICE (PCPOW) AND DOMESTIK CPO PRICE (PCPOD) DURING THE RESEARCH PERIOD (JANUARY 2011-JUNE 2016)



The above results show that the world CPO price is higher than the domestic CPO price. For the period of January 2015 to June 2015, there is no export tax and CPO Supporting Fund. However, the fact shows a difference in price. This is a result of price adjustment that takes some times in the process. But then, since July 2015, the CPO Supporting Fund policy is implemented which followed by a decline of CPO price in the world and domestic market even though the price in the world market is higher than in the domestic market.

The average of CPO price in the world market during the research period is USD 862,380 per tonne, whereas the average of CPO price in the domestic market is USD .819.308. The data shows that the price in the domestic market is USD 43,073 lower or down by 4.995%.

TABLE 4: HYPOTHESIS TEST RESULTS OF CPO PRICE

	World Market	Domestic Market	Difference	Percentage
Mean	862.380	819.308	-43.073	-4.995%
Variance	37946.952	38060.490		
Observations	66	66		
Pearson Correlation	0.999			
Df	65			
t Stat	39.962			
P(T<=t) two-tail	0.000			
t Critical two-tail	1.997			

Statistical test results shows t-score of 39.962, whereas t-table is 1.997. Therefore, there is a significant difference between the CPO price in the world market and in the domestic market. The results shows significant difference (significantly different from zero) between before and after levy, where t-score of 39.962 is greater than 1.997 of t-table, thus Ho is rejected and H1 is accepted, this means that Hypothesis 5 (H5) which stated the CPO price before levy is higher than after levy is accepted. In accordance with the literature review, levy on palm oil in the form of export tax shall directly affect the CPO price in the domestic market and in the world market. If before levy it assumed that the CPO price in the domestic market (Pd₀) is equal to the CPO price (f.o.b) in the world market (Pd₀) the levy of t unit shall lower the CPO price in the domestic market as much as Pd₁= Pw₀ (1 - t) and shall increase the CPO f.o.b price in the world market as much as Pw₁= Pw₀ (1 + t). As a result, the CPO f.o.b price in the world market after the levy is higher than the CPO price in the domestic market. This means a price disparity is existed between the CPO price in the domestic market and the CPO f.o.b price in the world market. Therefore, it is of importance to observe such price disparity for the period after Export Tax (ET) (The CPO price in the world market is above USD 750 per tonne), for the period of Export Tax is zero and for the period after export levy.

CONCLUSION

The average of CPO price in the global market in 2015 was below US\$700 per metric tonne, therefore in that year the CPO and its related products exportation was automatically freed of charge the export tax because its average price was below US\$750 per metric tonne which had been set as the minimum to charge its relevant export tax. The average CPO price in 2015 was only near about US\$614 per metric tonne. Such price average was down by 25% as compared to the average price in 2014 of US\$818,2 per metric tonne. The government responded such poor price by issuing CSF policy.

The most significant contribution of this research is providing preliminary data for deep analysis on the government policy on levy as much as USD 50 per tonne on CPO exports from Indonesia pursuant to the Government Regulation No. 24/2015 and the President Regulation No.61/2015. In particular, this research is presenting test results of the impact of Crude Palm Oil Supporting Fund on the farmer's level price for Fresh Fruit Bunch (FFB).

The CPO price (FOB Belawan) has positive significant impact on FFB price at the farmers' level. CPO Supporting Fund (CSF) positively affect the FFB price notwithstanding to the result of hypothesis test which is not significant. This is in accordance with the government intention when decided to implement such policy, the CSF is imposed by BPDP to support or to provide funding to subsidized biodiesel mandatory use (B-15 in 2015 and B-20 in 2016). When the implementation of mandatory use of biodiesel is running the government expects higher domestic demands for CPO which shall increase the CPO price including the farmer's level price. The implementation of CPO Supporting Fund (CSF) policy has increase the FFB price up by Rp.0.820/kg. However, analysis shows that such increase is not significant. The results affected by the period of this research which was carried out in short time and when the price is at adjustment stage with respect to the CSF implementation. In addition, findings show that when the CSF was initiated it faced a downturn in the domestic and world market.

REFERENCES

1. Aprina, H.(2014). Analysis of Effect of Price of the World Crude Palm Oil (CPO) to the Real Rupiah Exchange. *Bulletin of Monetary Economics and Banking*. 16 (4): 316-338
2. Custom Duties.(2015). Export duties and Retribution fund of the Xport of Oil Palm Plantation, CPO and its derivative products 47 (9).
3. DN Gujarati and Porter D C.(2009). *Basic Econometrics*. Fifth Edition.mc Graw- Hill Companies, Singapore.
4. Government Regulation No. 24 of 2015 on CPO Supporting Fund.
5. Intan E et al.(2008). Export retribution policy of Crude Palm Oil and Palm Oil Development Mechanism Retribution. *Journal of Agribusiness and Agricultural Economics*.2 (1).
6. Joni, R. (2012). Impact of Biodiesel Development from Palm Oil on Poverty, Unemployment and Economic Growth in Indonesia. [Dissertation]. IPB. Bogor
7. Maswadi.(2012). Impact of Retribution Application of Crude Oil Export to the Performance of Oil Palm and Farmers' Income in Indonesia. *Agricultural Social Economic Journal*.1 (1): 1-14.
8. Nazir,M. (1989). *Research Methods*. Ghalia Indonesia. Jakarta.
9. Nurmantu Safri. (2005). *Introduction to Taxation*. Jakarta: Granite.
10. Obado et all.(2009).*The Impact of Export Policy on The Indonesia Crude Palm Oil Industry*.*Jurnal ISSAAS* (15):2:107-119
11. PASPI. (2015). Can B-15 dan CPO Supporting Fund Boosting the Word CPO Price?. *PASPI Journal, Monitor* 1 (4): p 25-30.
12. PASPI. (2015). Can B-15 dan CPO Supporting Fund Boosting the Word CPO Price?. *PASPI Journal, Monitor, Analysis of Strategic Issue of Palm*. 1 (4): 26-30
13. PASPI. (2015). Prognosa Dampak Pungutan Ekspor Minyak Sawit Terhadap Industri Minyak Sawit Indonesia. *Jurnal PASPI Monitor*. 1 (13) : p 91-96.
14. PASPI.(2015). Pembiayaan Perkebunan dan CPO Supporting Fund.*Jurnal PASPI Monitor*.1(2):12-15
15. Purba, JHV.(2012). Impact of Export Taxation of Crude Palm Oil to the cooking oil of Indonesia [Dissertation]
16. Rifin, A.(2014). *The effect Of Crude Palm Oil Export Tax on Export and Price*.*Asean Journal of Economic, Management and Accounting* 2(1&2):82-95
17. Rifin, A.(2014).*The effect of Progressive Export tax on Indonesia Palm Oil Industry*.*Oil Palm Industri Economic Journal*.14 (1)
18. Rifin, A.(2015).*The Impact of Export Tax Policy on Cocoa Farmers and SupplyChain*.*The International Trade Journal*.29:39-62
19. Sadewo. H.(2012). Mandatory Policy Analysis, Indonesia Biodiesel Utilization, FE.Ul {mini thesis}
20. Saragih, B.(2010). Agribusiness voice, the collection of thoughts of Bungaran Saragih, PT. Permata Wacana Lestari (AGRINA)
21. Sipayung, T. and JHV Purba. (2015). Agribusiness Economy. Palm Oil. Palm Oil Agribusiness Strategic Policy Institute (PASPI). Bogor.
22. SMART Investor Relation http://www.smart-tbk.com/ir_international_prices.php.
23. Susila, W.R. (2004). *Impact of CPO Export Tax on Several Aspects on Indonesia CPO Industry*. *Oil Palm Industry Economic Journal* 4 (2): 1-13.
24. The Directorate General of Plantation: Palm Area Growth is Arising.ditjenbun.pertanian.go.id/news-363-pertumbuhan-areal-kelapa-sawit-meningkat.
25. The Republic of Indonesia Minister of Finance Regulation No.114/PMK.05/2015 on The Tariff of Services provided by the General Services Agency of the Palm Oil Plantation Fund Management.
26. The Republic of Indonesia Minister of Finance Regulation No.133/PMK.05/2015 on The Tariff of Services provided by the General Services Agency of the Palm Oil Plantation Fund Management.
27. The Republic of Indonesia President Regulation No. 61 of 2015 on CPO Supporting Fund.
28. Tomich, T.P and Mawardi, M. S. (1995): *Evolution of Palm Oil Trade Policy in Indonesia 1978-1991*. *Elaeis*. 7 (1): P 87-102.
29. Yulianto, A. (2015). Government Regulation (PP) No. 24 of 2015. Showing the Double Tax Collection. VII(7) Palm Information

REQUEST FOR FEEDBACK

Dear Readers

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

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail infoijrcm@gmail.com for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

DISCLAIMER

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals

