

## Faculty Research 2013-2015

### **Anand, Smriti**

"The social aspect of workplace: Dyadic relationships between leaders and subordinates."

### **Anand, Smriti; Vidyarthi, Prajya; Erdogan, Berrin; Liden, Robert**

"One member, two leaders: Extending leader-member exchange theory to a dual leadership context"

*Journal Of Applied Psychology*

In this study, we develop and test a model that extends leader-member exchange (LMX) theory to a dual leadership context. Drawing upon relative deprivation theory, we assert that when employees work for 2 leaders, each relationship exists within the context of the other relationship. Thus, the level of alignment or misalignment between the 2 relationships has implications for employees' job satisfaction and voluntary turnover. Employing polynomial regression on time-lagged data gathered from 159 information technology consultants nested in 26 client projects, we found that employee outcomes are affected by the quality of the relationship with both agency and client leaders, such that the degree of alignment between the 2 LMXs explained variance in outcomes beyond that explained by both LMXs. Results also revealed that a lack of alignment in the 2 LMXs led to asymmetric effects on outcomes, such that the relationship with agency leader mattered more than the relationship with one's client leader. Finally, frequency of communication with the agency leader determined the degree to which agency LMX affected job satisfaction in the low client LMX condition.

<http://www.ncbi.nlm.nih.gov/pubmed/24417554>

### **Anand, Smriti; Vidyarthi, Prajya; Liden, Robert**

"Do emotionally perceptive leaders motivate higher employee performance? The moderating role of task interdependence and power distance"

*Leadership Quarterly*

Extant emotional intelligence research has examined the relationship between employees' emotional intelligence and their job performance. We developed theory to extend this line of research to the domain of leader-employee relationships. Integrating emotional intelligence research with social exchange theory, we contended that leaders' emotion perceptions enhance employees' job performance. Drawing from social impact theory, we further argued that the strength of this relationship depends upon two contextual variables: within-group task



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interdependence and power distance. We tested our hypotheses using a sample of 350 employee nested in 74 workgroups. Hierarchical linear modeling results supported the hypothesized relationships between leaders' emotion perceptions and employees' job performance, and revealed that this relationship was strengthened by task interdependence and attenuated by power distance.

<http://www.sciencedirect.com/science/article/pii/S1048984313000817>

**Ashton, Weslyne; Eckelman, Matthew; Arakaki, Y.; Malone Lee, Lai-Choo**  
"Island Waste Management and Industrial Ecology"  
*Journal of Industrial Ecology*

Island waste management professionals are faced with limited land resources, high energy costs, large seasonal fluctuations in waste volumes, and complex social and political dynamics that stem from their often closely knit societies. These and other factors can discourage typical waste management practices, but they also provide opportunities for island governments and businesses to explore alternative technologies and policies that suit their particular circumstances and that might be environmentally preferable. This critical review discusses the waste management literature on islands to date, including several industrial ecology (IE) studies. Common advantages and disadvantages faced by island waste management challenges are presented from the perspectives of business and municipal management. Waste generation data are presented from more than 40 islands around the world and tested for correlation with economic and geographic parameters and using cluster analysis, with the aim of identifying trends among island types. Poor data quality and comparability are ongoing challenges that underscore the potential benefits of a consistent program of island waste management data collection. Finally, the review explores opportunities for applying IE research to generate useful insights and policies in the areas of material flow analysis, industrial symbiosis, life cycle assessment, and social ecology.

<http://onlinelibrary.wiley.com/doi/10.1111/jiec.12113/abstract>

**Balasubramanian, Siva; Jiang, Pingjun**  
"An Empirical Comparison of Market Efficiency: Electronic Marketplaces Vs. Traditional Retail Formats"  
*Electronic Commerce Research and Applications*

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Researchers have found that price dispersion and market inefficiency exists in electronic marketplaces. Little attention has been bestowed to explore difference in market efficiency between traditional and electronic marketplaces. This study integrates both product and channel preference factors to analyze differences in market efficiency between electronic and traditional shopping environments. Data Envelopment Analysis (DEA) is applied to calculate market efficiency for single-channel and multi-channel shoppers. Results show that market efficiencies vary across consumer segments and products. In summary, this paper enhances understanding of market efficiency by incorporating behavioral segment and product characteristics into the explanatory framework.

<http://www.journals.elsevier.com/electronic-commerce-research-and-applications/>

**Balasubramanian, Siva; Jiang, Pingjun; Lambert, Zarrel**

“Consumers' Value Perceptions of E-customization: A Model Incorporating Information Framing and Product Type”

*Journal Of Consumer Marketing*

**Purpose** – Despite significant business spending in areas such as personalization tools and add-on options representing levels of product attributes, most marketers do not know the amount of value that is directly attributable to their e-customization strategies. This study aims to offer an in-depth investigation of consumers' value perceptions of e-customization and their relationship with perceived sufficiency of information and cognitive cost. The context effects on value perception in e-customization are studied together with antecedent constructs.

**Design/methodology/approach** – The research consists of a 2×2 between-subjects factorial design. The full model is tested using multiple-group structural equation modeling analysis to verify the significance of the inter-relationships between constructs, as well as the main and the interaction effects of two experimental factors (product information framing and product type).

**Findings** – The experimental results showed that perceived e-customization value does not simply stem from the ability to “narrow-cast” content more specifically related to a shopper's interests (i.e. anticipated fulfillment value). Rather, this value also stems from the dynamic flexibility of the information system and its ability to entertain and educate during the information dissemination process (i.e. process value and knowledge value). Furthermore, when the customization framing features are better matched with product type characteristics, e-customization seemed to

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increase value in ways that are difficult to achieve in conventional shopping environments.

Originality/value – By testing the proposed structural model simultaneously with two experimental factors of product type and information framing, this work is the first to address the question of context effects on value creation in an area of increasing substantive importance.

<http://www.emeraldgroupublishing.com/products/journals/journals.htm?id=jcm>

### **Balasubramanian, Siva**

“An Empirical Comparison of Market Efficiency: Electronic Marketplaces Vs. Traditional Retail Formats”

*Electronic Commerce Research and Applications*

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### **Balasubramanian, Siva; Boostrom, Robert; Summey, John**

“Plenty of Attitude: Evaluating Measures of Attitude Toward the Site”

*Journal of Research in Interactive Marketing*

Purpose – Researchers often attempt to assess how different features and content will improve the experience of web site users. One assessment technique is to measure the attitude toward the site. A common version of this measure is the Chen and Wells attitude toward the site scale. The purpose of this paper is to determine if there is a difference in performance between that scale and the less used Bruner and Kumar scale so that researchers might use the better of the two related, but different, published scales.

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**Design/methodology/approach** – Analysis is done on survey data from an experiment utilizing three different experimental groups that all completed surveys with both the Chen and Wells and the Bruner and Kumar attitude toward the site scales. Scales are assessed for loading and reliability, as well as measures compared for equivalence within groups and used within partial least squares (PLS) models to compare overall model fit.

**Findings** – In all tests, the Bruner and Kumar scale is better than, or equivalent to, the Chen and Wells scale in each comparison.

**Research limitations/implications** – The research implication is that the Bruner and Kumar scale would be a better choice when selecting scales for future research projects.

**Originality/value** – Although Bruner and Kumar had previously performed comparisons of the two scales, in a follow-up article, this is the first paper to compare the two scales between three different groups and demonstrate how the two different scales would perform within the same conceptual model using PLS structural equation modeling. It will help researchers select the best scale for attitude toward the site.

<http://www.emeraldinsight.com/products/journals/journals.htm?id=jrim>

**Balasubramanian, Siva**; Li, Shenyu; Popkowski-Leszczyc, Peter  
“The Profit Impact of the Transaction Specific Assets: A Process Model of Adaptive Marketing Resources”  
*Journal of Strategic Marketing*

This study proposes and tests a process model of the impact of the retailer’s transaction specific assets (TSA) on the retailer’s profit. We found that product and promotional resources transacted across the firm boundary fully mediate the relationship between the retailer’s TSA and the retailer’s profit. Results support predictions that TSA embody the resource based elements in a channel setting. Besides, the result shows that product resource is more important a resource that mediates the relationship between TSA and the retailer’s profit than the promotion. Managerially, this study identifies the objectives of building up TSA and justifies the profit impact of TSA.

[http://www.tandfonline.com/toc/rjism20/current#.U0Frn\\_mwJcQ](http://www.tandfonline.com/toc/rjism20/current#.U0Frn_mwJcQ)

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**Bilson, John**; Baek, Seunggho  
"Size and Value Risk in Financial Firms"  
*Journal Of Banking And Finance*

Although the Fama and French's three factor model is now the most popular replacement for CAPM in corporate finance and investment management, the exclusion of financial firms can be questioned on both theoretical and empirical grounds. Financial firms are around 19 percent of the value of the U.S. stock market. The financial service industry is the major industry in many large U.S. cities including New York, Chicago, Los Angeles and Miami in that their GDPs of financial services for each city are more than 23 percent. Also, there is no theoretical reason for excluding financial firms. Modigliani and Miller (1958,1963) suggest that leverage affects beta, but it does not invalidate the capital asset pricing model. It would therefore be more satisfying if the pricing model applied generally, rather than being restricted to nonfinancial corporations. From this consideration, this paper assesses the validity of size and value risk as common risk factors to measure of expected equity returns in financial companies based on the fact that Fama and French (1992, 1993) excluded financial firms in their study of the cross-section of expected stock returns. The findings from empirical asset pricing tests suggest that size and value risk premia commonly exists in both nonfinancial and financial firms even if two factors are less explicable in financial firms, that interest rate risk premium, which defined as a financial firm specific risk factor only appears in financial companies.

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2323928](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2323928)

**Bilson, John**; Molyboga, Marat; Baek, Seunggho  
"CTA Performance Persistence: 1994-2010"  
*The Journal of Alternative Investments*

This study attempts to test the performance persistence hypothesis for Commodity Trading Advisors (CTAs) considering the impact of incubation and backfill bias. From the empirical test using Fama-MacBeth regression and quintile analysis, we suggest a robust result that ranking CTAs using the t-statistic of alpha with respect to a CTA benchmark is predictive of future unleveraged returns. We provide evidence that the identified strong persistence of the best performing funds is potentially solely driven by the incubation and backfill biases. We find that the worst performing funds have a significantly higher probability of liquidation than those of the other quintiles, and the top performing funds have a higher conditional probability of staying top

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performers versus becoming worst performers than that of the worst performing funds.

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2229043](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2229043)

**Bilson, John;** Wang, Carolyn  
"A Study of International Bond Portfolios"  
*The International Journal of Finance*

Most of the research on the benefits of diversification into emerging markets (EMs) has focused on equity markets. In this research, the focus is on investments in fixed income instruments. Specifically, the research explores the performance benefits of developed markets (DMs) combined with the Asian emerging market (AEM). This research identifies the linkage and leverage of government bond portfolios between DMs and the AEM. It first identifies the potential diversification and describes the financial integration for incorporating AEM government bonds into DMs government bond portfolios, in the second phase, it constructs the dynamic linear regression models and conducts the mean-variance tests to demonstrate the incremental benefit of the strategy. In the last phase, a robust test examines the strength of bond portfolio performance between DMs with the AEM and the government bond index.

<http://connection.ebscohost.com/c/articles/90175187/study-international-bond-portfolio-empirical-evidence-from-asian-emerging-market>

**Cai, Li;** He, Chaohua  
"Corporate Environmental Responsibility and Equity Prices"  
*Journal Of Business Ethics*

This paper uses an innovative way to screen stocks and analyzes the relationship between corporate environmental responsibility and long-run stock returns. By our definition, an environmentally responsible (green) company gives no environmental concern and shows environmental strength(s). Using 20 years' data of 1992–2011, we find evidence that environmentally responsible company outperforms, in the 4th to 7th year after the screening year. An equal-weighted environmentally responsible portfolio earned an annual four-factor alpha of 4.06 % in the 4th year, 3.00 % above industry benchmarks, and 3.87 % above characteristic benchmarks. The results are robust to alternative portfolio weighting methodologies, controlling for firm characteristics, and the removal of outliers. Testing using industry-adjusted Tobin's Q, we find consistent evidence that environmental strength creates firm value. We

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argue that environmental responsibility is an intangible asset, likely to be undervalued by the market, especially in the long horizon, thereby causing environmentally responsible companies to exhibit long-horizon excess returns.

<http://www.springer.com/social+sciences/applied+ethics/journal/10551>

**Cooper, Ricky; Li, TingTing**

“Adding Derivatives to Absolute Return Attribution”

*Journal of Performance Measurement*

This article develops a methodology to incorporate the return to derivative positions into the recently developed absolute return attribution framework of Cooper and Li. This innovation greatly broadens the scope of use for this attribution model. The positions are integrated into the attribution primarily by breaking their return into effects due to movements in the underlying equities and arbitrage effects. For derivative positions held longer, a time effect is also introduced. The exposures are expressed in terms of option pricing quantities commonly known as the Greeks, and their equivalent in the futures market.

<http://spauldinggrp.com/product/adding-derivatives-to-absolute-return-attribution-2/>

**Cooper, Ricky**

“The Rationale for AT9000: An ISO 9000-Style Quality Management System Standard for Automated and Algorithmic Trading”

*Journal of Trading*

AT 9000 is an industry-specific quality management system standard for automated and algorithmic trading. The aim of AT 9000 is to address the safety issues inherent in automated trading by way of industry self-regulation. While the project is being developed under the ANSI/X9 umbrella, the goal is for AT 9000 to become a global standard. This article presents the final version of the rationale document used to propose this standard. - See more at:

<http://www.ijournals.com/doi/abs/10.3905/jot.2013.8.3.102#sthash.AhDc1EN3.dpuf>

<http://www.ijournals.com/doi/abs/10.3905/jot.2013.8.3.102#sthash.AhDc1EN3.dpbs>

**Durango-Cohen, Elizabeth; Durango-Cohen, Pablo; Torres, Ramon**

“A Bernoulli-Gaussian Mixture Model of Donation Likelihood and Monetary Value:

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An Application to Alumni Segmentation in a University Setting”  
*Computers & Industrial Engineering*

Advances in computational power and enterprise technology, e.g., Customer Relationship Management (CRM) software and data warehouses, allow many businesses to collect a wealth of information on large numbers of consumers. This includes information on past purchasing behavior, demographic characteristics, as well as how consumers interact with the organization, e.g., in events, on the web. The ability to mine such data sets is crucial to an organization’s ability to deliver better customer service, as well as manage its resource allocation decisions. To this end, we formulate a Bernoulli–Gaussian mixture model that jointly describes the likelihood and monetary value of repeat transactions. In addition to presenting the model, we derive an instance of the Expectation–Maximization Algorithm to estimate the associated parameters, and to segment the consumer population.

We apply the model to an extensive dataset of donations received at a private, Ph.D.-granting university in the Midwestern United States. We use the model to assess the effect of individual traits on their contribution likelihood and monetary value, discuss insights stemming from the results, and how the model can be used to support resource allocation decisions. For example, we find that participation in alumni-oriented activities, i.e., reunions or travel programs, is associated with increased donation likelihood and value, and that fraternity/sorority membership magnifies this effect. The presence/characterization of unobserved, cross-sectional heterogeneity in the data set, i.e., unobserved/unexplained systematic differences among individuals, is, perhaps, our most important finding. Finally, we argue that the proposed segmentation approach is more appealing than alternatives appearing in the literature that consider donation likelihood and monetary value separately. Among them and as a benchmark, we compare the proposed model to a segmentation that builds on a multivariate Normal mixture model, and conclude that the Bernoulli–Gaussian mixture model provides a more coherent approach to generate segments.

<http://www.sciencedirect.com/science/article/pii/S0360835213002611>

**Cutler, Jennifer**

“Predicting the demographics of Twitter users from social evidence using website traffic data”

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**Durango-Cohen, Elizabeth;** Torres, Ramon; Durango-Cohen, Pablo  
“Donor Segmentation: When Summary Statistics Don't Tell the Whole Story”  
*Journal Of Interactive Marketing*

Funding pressures amidst the slow economic recovery from the late-2000's recession have forced universities, as well as other not-for-profit organizations, to increase the volume and sophistication of their direct marketing activities. The efficiency of direct marketing strategies is linked to an organization's ability to effectively target individuals. In this paper, we present a finite-mixture model framework to segment the alumni population of a university in the midwestern United States.

Much of the research on customer segmentation summarizes response data (e.g., purchase and contribution histories) via recency, frequency and monetary value (RFM) statistics. Individuals sharing similar RFM characteristics are grouped together; the rationale being that the best predictor of future behavior is past behavior. Summary statistics such as RFM, however, introduce aggregation bias that mask the dynamics of purchase/contribution behavior. Accordingly, we implement latent-class segmentation models where alumni are classified based on how an individual's contribution sequence compares to those of other individuals. The framework's capability to process contribution sequences, i.e., longitudinal data, provides fundamental new insights into donor contribution behavior, and provides a rigorous mechanism to infer and segment the population based on unobserved heterogeneities (as well as based on other observable characteristics). Specifically, we analyze Markov mixture models to segment alumni based on contribution-behavior patterns, under the assumption of serially-dependent contribution sequences. We use the expectation-maximization algorithm to obtain parameter estimates for each segment. Through an extensive empirical study, we highlight the substantive insights gained through the processing of the full contribution sequences, and establish the presence of three distinct classes of alumni in the population (each with a discernible contribution pattern). The proposed framework, collectively, provides a basis to tailor direct marketing policies to optimize specific performance criteria (e.g., profits).

<http://www.sciencedirect.com/science/article/pii/S1094996813000145>

**Durango-Cohen, Elizabeth;** Wagman, Liad  
“Strategic Obfuscation of Production Capacities”  
*Naval Research Logistics*



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Recent supply-chain models that study competition among capacity-constrained producers omit the possibility of producers strategically setting wholesale prices to create uncertainty with regards to (i.e., to obfuscate) their production capacities. To shed some light on this possibility, we study strategic obfuscation in a supply-chain model comprised of two competing producers and a retailer, where one of the producers faces a privately-known capacity constraint. We show that capacity obfuscation can strictly increase the obfuscating producer's profit, therefore, presenting a clear incentive for such practices. Moreover, we identify conditions under which both producers' profits increase. In effect, obfuscation enables producers to tacitly collude and charge higher wholesale prices by moderating competition between producers. The retailer, in contrast, suffers a loss in profit, raises retail prices, while overall channel profits decrease. We show that the extent of capacity obfuscation is limited by its cost and by a strategic retailer's incentive to facilitate a deterrence. © 2014 Wiley Periodicals, Inc. *Naval Research Logistics* 61: 244–267, 2014

<http://mypages.iit.edu/~lwagman/Obfuscation.pdf>

**Durango-Cohen, Elizabeth;** Balasubramanian, Siva  
“Effective Segmentation of University Alumni: Mining Contribution Data with Finite-Mixture Models”  
*Research In Higher Education*

Having an effective segmentation strategy is key to the viability of any organization. This is particularly true for colleges, universities, and other nonprofit organizations—who have seen sharp declines in private contributions, endowment income, and government grants in the past few years, and face fierce competition for donor dollars (Wall Str J p. R1, 2011). In this paper, we present a finite-mixture model framework to segment the alumni population of a university in the Midwestern United States based on the monetary value of annual contributions. A salient feature of the model is that it exploits longitudinal data, i.e., contribution sequences. Another important feature of the model is that it supports the identification of unobserved heterogeneities in the population's giving behavior. Our empirical study presents substantive insights gained through the processing of the full contribution sequences, and establishes the presence of seven distinct segments of alumni in the population. Results provide a basis to support the design of segment-tailored solicitations, and guide the allocation of resources (e.g., telemarketing dollars) to fundraising activities.



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<http://link.springer.com/article/10.1007%2Fs11162-014-9339-6#page-1>

**Erramili, M. Krishna**

"Consumer Ambivalence Towards Contraception: An Integrative Framework"  
*International Journal of Pharmaceutical and Healthcare Marketing*

**Fang, Yiwei**

"Geographic Diversification in Banking"  
*Journal of Financial Stability*

**Geisler, Eliezer; Turchetti, Giuseppe**

"Commercialization of technological innovations: The effects of internal entrepreneurs and managerial and cultural factors in public-private interorganizational cooperation"  
*International journal of innovation and technology management*

**Geisler, Eliezer; Turchetti, Giuseppe; Micera, Silvestro; Vitello, Nicola**

"Why effectiveness of robot-mediated neuro-rehabilitation does not necessarily influence its adoption"  
*IEEE Reviews in Biomedical Engineering*

This paper discusses the reasons why evidence of clinical effectiveness is not enough to facilitate adequate adoption of robotic technologies for upper-limb neurorehabilitation. The paper also provides a short review of the state of the art technologies. In particular, the paper highlights the barriers to the adoption of these technologies by the markets in which they are, or should be, deployed. On the other hand, the paper explores how low rates of adoption may depend on communication biases between the producers of the technologies and potential adopters. Finally, it is shown that, although technology-efficacy issues are usually well-documented, barriers to adoption also originate from the lack of solid evidence of the economic implications of the new technologies.

<http://ieeexplore.ieee.org/xpl/abstractKeywords.jsp?reload=true&arnumber=6718049>

**Fang, Yiwei; Hasan, Iftexhar; Marton, Katherine; Waisman, Maya**

"Bank valuation in new EU member countries"  
*Economic Systems*

This paper studies the role of institutional reforms in affecting bank valuation in new European Union (EU) member countries. It takes advantage of the dynamic nature of

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institutional reforms in transition economies and explores the causal effects of those reforms on banks' Tobin's Q over the period of 1997–2008. Using a difference-in-difference approach, the paper shows that Tobin's Q increases substantially after these countries reform their legal institutions and liberalize banking. However, it decreases after stock market reforms. After further examination of the interactive relationships between different reforms and bank valuation, it is observed that when the banking reform is well implemented, legal reform can have a stronger impact on banks' Tobin's Q. On the other hand, banking reform and security market reform has a substitutive relationship. The analysis also suggests that foreign ownership, market power, and asset diversification significantly affect Tobin's Q. These results are robust even after simultaneously controlling for equity risk.

<http://www.sciencedirect.com/science/article/pii/S0939362513000800>

### **Fang, Yiwei**

"Past Alliance Experience and Acquirer Returns: Evidence from Diversifying Acquisitions"

*Studies In Economics And Finance (Studies In Economic Analysis)*

### **Fang, Yiwei; Hasan, Iftexhar; Marton, Katherine**

"Institutional development and bank stability: Evidence from transition countries"

*Journal Of Banking And Finance*

This paper takes advantage of the dynamic nature of institutional reforms in transition economies and explores the causal effects of those reforms on bank risk. Using a difference-in-difference approach, we show that banks' financial stability increases substantially after these countries reform their legal institutions, liberalize banking, and restructure corporate governance. We also find that the effects of legal and governance reforms on bank risk may critically depend on the progress of banking reforms. A further examination of alternative risk measures reveals that the increases in financial stability among banks mainly come from the reduction of asset risk. Banks tend to have lower ROA volatility and fewer nonperforming loans after reforming the institutional environment. Finally, we split our sample into foreign and domestic banks and find that the enhancement of financial stability is more pronounced for domestic banks.

<http://www.sciencedirect.com/science/article/pii/S0378426613004160>

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**Khalili, Nasrin; Duecker, Susanna; Ashton, Weslynn; Chavez, Francisco**  
"From Cleaner Production to Sustainable Development: The Role of Academia"  
*Journal of Cleaner Production Elsevier*

Cleaner Production (CP) strategies are fundamentally concerned with operations, environmental sustainability and maximization of waste reduction, recycling, and reuse at the enterprise level, and are thus microeconomic in scope. Sustainable development (SD), however, involves the design of integrated approaches that are capable of addressing environmental sustainability and waste while ensuring social and economic prosperity at the national or even global level implying a macroeconomic scope. Due to its philosophy, broad scope and long-term horizons, sustainable development necessitates capacity building via advancement of sustainable societal patterns and the creation of a new set of visions, paradigms, policies, methodological tools and applicable procedures. The first and foremost step on this path is the development of human capital required to make such a transition. This paper proposes the application of a methodology via which leaders in higher education could assess the necessity and the urgency for designing training programs that could assist with developing human capital needed to support SD. The methodology evaluates the conditions and constraints that could control the effectiveness and ease of implementation of such programs. At its core, the proposed methodology utilizes expert judgment to assess importance of including CP and SD indicators listed in the questionnaire on the proposed academic programs. During a pilot study which was conducted in the fall of 2013 at selected universities in the USA, Latin America, and China, experts evaluated a series of proposed CP-infused academic programs according to a matrix consisting of SD indicators, and under consideration of the norms, culture, political systems, regulations, resource availability, and local, regional and global economic development goals and objectives. Results of data analysis in the pilot study suggested that inclusion of the resource management (RM) topics in designing academic programs is the most preferred approach in all three different regions, followed by development of programs that could cover topics in areas of human capital development (HCD), human system designs (HSD) and sustainable economic development and prosperity (SEDP). Quantitative analysis of the data indicated existence of two clusters of preferences for CP–SD criteria: one for in the Americas (including Latin America) and one for China.

<http://www.sciencedirect.com/science/article/pii/S0959652614001322>

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**Sabbaghi, Navid;** Li, Jing

“Decision Analysis on CDM Project Investments”

*International Journal Of Production Economics*

The Clean Development Mechanism (CDM) is a mechanism defined in the Kyoto protocol that incentivizes parties to the protocol to fund sustainable development projects in countries that are not party to the protocol. We analyze a target contract financing structure for different CDM projects in order to see under what conditions the financing structure is efficient and to explore the contract's allocation of profit among the firms. In the two broad categories of CDM projects we consider, we find the optimal investment decision for the investor and for the overall system. We also analyze how the residual value of technology would affect the financing, target contract's efficiency and allocation of profit.

<http://dx.doi.org/10.1016/j.ijpe.2013.07.010>

**Sabbaghi, Navid;** Sheffi, Yossi; Tsitsiklis, John

“Allocational Flexibility in Constrained Supply Chains”

*International Journal Of Production Economics*

We show that when a one-supplier/one-newsvendor supply chain is capacity-constrained, wholesale price contracts have some flexibility in allocating the channel-optimal profit. We analyze how this flexibility changes as we change the supply chain's capacity constraint and market demand. We also explore the allocation that is achieved in equilibrium in a newsvendor procurement game. Finally, we generalize our results to risk-sharing contracts and show that those contracts also gain additional flexibility in allocating the channel-optimal profit.

<http://www.sciencedirect.com/science/article/pii/S0925527314000164>

**Sun, Jiong;** Debo, Laurens

“Sustaining Long-term Supply Chain Partnerships Using Price-Only Contracts”

*European Journal Of Operational Research*

In this paper, we study how an informal, long-term relationship between a manufacturer and a retailer performs in turbulent market environments characterized by uncertain demand. We show that the long-term partnership based on repeated interaction is sustainable under price-only contracts when the supply chain partners are sufficiently patient. That is, the channel can be coordinated over a

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long time horizon when the factor whereby the members discount the future value of this trusting relationship is sufficiently high. Second, above the minimum discount factor, a range of wholesale prices exists that can sustain the long-term partnership, and there are different possible profit divisions between the two players. Third, when the market is turbulent, i.e., either the expected demand or the demand variance changes from period to period according to a probabilistic law, it is typically less possible to sustain the long-term partnership in a booming market or in a market with low demand variability. Finally, obtaining more information about future market fluctuation may not help the supply chain to sustain the long-term partnership, due to partners' strategic considerations. With the availability of the market signal, total supply chain profits increase, but the retailer may even be worse-off.

<http://www.sciencedirect.com/science/article/pii/S0377221713007753#>

### **Sun, Jiong**

"The Effect of Sister-Store Presence and Market Competition on Product Assortment: Evidence from Book Retailing"

*POMS Annual Meeting*

### **Tourk, Khairy**

"Comparative Analysis of Economic Development in Colonial and Post-Colonial Egypt and Korea"

*Journal is not in list - being petitioned*

The paper compares the economic development experiences of Egypt and (S)Korea during the colonial and post-independence periods. It shows that the two most important requirements of modernization are: first, an external condition related to the crucial role that global and regional powers play in promoting or hampering the developing country's efforts to modernize. The second is an internal one showing that a strong government is usually more efficient in carrying out successful economic policies than a soft one. This is especially true during the early stages of industrialization.

### **Van Vliet, Benjamin; Kumiega, Andrew; Xanthopoulos, Apostolos**

"Unconstrained Strategies and the Variance-Kurtosis Trade-off"

*Applied Financial Economics*

In this article, we study unconstrained strategies through a respecification of classic mean-variance utility and, as a reference implementation, a long-only strategy

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based on Canadian and US bond markets. First, we capture the underlying economic forces that drive benchmark indices in the two economies as orthogonal components of yields. We find that bond indices in the two markets are sensitive to components that account for lesser total yield variability. Next, we develop a new polynomial utility function that captures the kurtosis effects found in the sensitivities to lower-eigenvector components. In our unconstrained strategy, excess kurtosis triggers portfolio adjustments and the resulting returns outperform those of traditional mean-variance optimization. The respecified utility function introduces iso-risk contour lines that account for abrupt adjustments of portfolios to eigenvectors of hidden influence.

<http://www.tandfonline.com/doi/abs/10.1080/09603107.2014.924289#.U7wfV7GmXh4>

**Van Vliet, Benjamin;** Kumiega, Andrew; Sterijevski, Greh  
"Perspectives on Hedge Fund Herding: A Survey of Analytical Methods"  
*Wilmott Magazine*

**Wagman, Liad**  
"The Economics of Privacy"  
*Journal Of Economic Literature*

**Wagman, Liad**  
"Marketing Educational Quality via International Partnerships under Brain-Drain Constraints"  
*Education Economics*

<http://mypages.iit.edu/~lwagman/Partnership.pdf>

**Wagman, Liad**  
"Screening Incentives and Privacy Protection in Financial Markets: A Theoretical and Empirical Analysis"  
*Rand Journal Of Economics*

In 1999, Congress enacted the Gramm-Leach-Bliley Act, allowing a variety of financial institutions to sell, trade, share, or give out nonpublic personal information about their customers unless their customers direct that such information not be disclosed. We study a model in which firms offer financial products to individuals, such as loans, post prices for their products, and screen consumers who apply to purchase them. Any information obtained in the screening process may be traded to another firm selling related products. We show that firms' ability to sell consumer

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information can lead to lower prices, higher screening intensities, higher rejection rates of applicants, and increased social welfare. By exploiting variations in the adoption of local financial-privacy ordinances in five California Bay Area counties, we are able to provide simple estimates of the effects of stricter financial-privacy laws on the denial rates of applications for home-purchase loans and loan refinancing during 2001-2004. Consistent with the model's predictions, we show that denial rates for both purchase loans and loan refinancing decreased in counties where opt-in privacy ordinances were adopted. Moreover, we find that during the financial crisis of 2007-2008, estimated foreclosure rates were higher in counties where the privacy ordinance was adopted.

**Wagman, Liad;** Taylor, Curtis

“Consumer Privacy in Oligopolistic Markets: Winners, Losers, and Welfare”  
*International Journal Of Industrial Organization*

Motivated by the unprecedented availability of consumer information on the Internet, we characterize the winners and losers from potential privacy regulation in the context of four commonly-used oligopoly models: a linear city model, a circular city model, a vertical differentiation model, and a multi-unit symmetric demand model. We show that while there are winners and losers as a result of privacy enforcement, the parties who stand to benefit and the parties who stand to lose, as well as whether social welfare is enhanced or diminished, largely depends on the specific economic setting under consideration.

[http://mypages.iit.edu/~lwagman/Privacy\\_IJIO.pdf](http://mypages.iit.edu/~lwagman/Privacy_IJIO.pdf)

**Wagman, Liad;** Conitzer, Vincent

“False-Name-Proof Voting with Two Alternatives”  
*International Journal Of Game Theory*

In open, anonymous settings such as the Internet, agents can participate in a mechanism multiple times under different identities. A mechanism is false-name-proof if no agent ever benefits from participating more than once. Unfortunately, the design of false-name-proof mechanisms has been hindered by a variety of negative results. In this paper, we show how some of these negative results can be circumvented by making the realistic assumption that obtaining additional identities comes at a (potentially small) cost. We consider arbitrary such costs and apply our results within the context of a voting model with two alternatives.



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<http://mypages.iit.edu/~lwagman/FNP.pdf>

**Wagman, Liad;** Durango-Cohen, Elizabeth  
"Strategic Obfuscation of Production Capacities"  
*Naval Research Logistics*

Recent supply-chain models that study competition among capacity-constrained producers omit the possibility of producers strategically setting wholesale prices to create uncertainty with regards to (i.e., to obfuscate) their production capacities. To shed some light on this possibility, we study strategic obfuscation in a supply-chain model comprised of two competing producers and a retailer, where one of the producers faces a privately-known capacity constraint. We show that capacity obfuscation can strictly increase the obfuscating producer's profit, therefore, presenting a clear incentive for such practices. Moreover, we identify conditions under which both producers' profits increase. In effect, obfuscation enables producers to tacitly collude and charge higher wholesale prices by moderating competition between producers. The retailer, in contrast, suffers a loss in profit, raises retail prices, while overall channel profits decrease. We show that the extent of capacity obfuscation is limited by its cost and by a strategic retailer's incentive to facilitate a deterrence. © 2014 Wiley Periodicals, Inc. *Naval Research Logistics* 61: 244–267, 2014

<http://mypages.iit.edu/~lwagman/Obfuscation.pdf>

**Wang, Haizhi;** Francis, Bill; Hasan, Iftekhhar  
"Banking deregulation, consolidation, and corporate cash holdings: U.S. evidence"  
*Journal Of Banking And Finance*

This paper tests the effects of banking deregulation on the cash policies of nonbanking firms in the United States. We document a significant and negative relation between intrastate banking deregulation and corporate cash holdings. We show that the negative relation is driven by financially constrained firms, especially by constrained firms with low hedging needs. Further, we construct indexes measuring the intensity of bank consolidation in local markets. We find that the intensity of in-market bank mergers is negatively related to corporate cash holdings. However, in-market bank mergers in highly concentrated markets tend to be positively related to corporate cash holdings.

<http://www.sciencedirect.com/science/article/pii/S0378426613004901>

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**Wu, Tao;** Iron, Robert

“Will the market P/E ratio revert to its mean?”

*Investment Management and Financial Innovations*

Changes in the market Price to Earnings (P/E) ratio have been shown to have a significant effect on the US equity returns. The prevailing model of the behavior of the market P/E ratio was put forth by Campbell and Shiller (1998, 2001), which states that the market P/E is a ratio of cointegrated variables, and therefore the ratio itself is stationary and mean-reverting. The authors show that the time series behavior of the market P/E ratio has changed and is no longer mean-reverting, indicating a fundamental change in the economic relationship between prices and earnings. This change suggests that the market P/E ratio (and its inverse, the market earnings yield) may no longer be useful in forecasting market returns.

**Wu, Tao;** Xu, Shengqiang

“A Random Field LIBOR Market Model”

*Journal Of Futures Markets*

A random field LIBOR market model is proposed by extending the LIBOR market model with uncertainty modeled via random field. First, closed-form formulas for pricing caplet and swaption are derived. Then the random field LIBOR market model (RFLMM) is integrated with the lognormal-mixture model to capture the implied volatility skew/smile. Finally, the model is calibrated to cap volatility surface and swaption volatilities. Numerical results show that the random field LIBOR market model outperforms LIBOR market model in capturing caplet volatility smile and the pricing of swaptions, in addition to possessing other documented advantages (no need of frequent recalibration or to specify the number of factors in advance).

[http://www.kafo.or.kr/eng\\_image/pdf/5\\_4\\_APAD2013.pdf](http://www.kafo.or.kr/eng_image/pdf/5_4_APAD2013.pdf)

**Anand, Smriti**

“Family interference and employee dissatisfaction: Do agreeable employees better cope with stress?”

*Human Relations*

Extending work–family conflict research, we draw on role theory and conservation of resources theory to propose a moderated-mediation mode of the relationship between family interference with work, job stress, agreeableness and employee attitudes. We examined the moderating effect of employee agreeableness on the



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relationship between family interference with work and job and life satisfaction mediated by job stress. Hypotheses were tested in a sample of 756 employees from 15 industries. Results showed a negative association between family interference with work and job satisfaction and life satisfaction through perceived job stress. Further, this mediated relationship was moderated by employee agreeableness, such that job stress and decrease in job and life satisfaction were perceived only by employees low in agreeableness.

### **Wang, Haizhi**

“New Evidence on Alliance Experience and Acquisition Performance: Short-run Pain, Long-run Gain?”

*Studies In Economics And Finance (Studies In Economic Analysis)*