



***MAER-Net Colloquium***  
***Hendrix College***  
October 1-2, 2010



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Thursday, September 30, 2010 {Participants arrive}

1800-2000—**Opening Reception** (Murphy House, Hendrix campus)

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1930-2100—Public Lecture: Chris Doucouliagos: “International Transfers and Economic Growth.”  
(Mills Center, Room A, Hendrix campus)

Friday, October 1, 2010

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0830-0845 **Welcome Address – Robert Entzminger**, Provost of Hendrix College  
(Mills Library, Mills Center)

0845-1015

**Plenary Session I**, (Mills Library, Mills Center) (Chair: Tom Stanley)

**Ingram Olkin— MMM: Multivariate Models in Meta-Analysis**

**Henri de Groot, Masagus Ridhwan, Peter Nijkamp & Piet Rietveld —The Impact of Monetary Policy on Economic Activity: Evidence from a meta-analysis**

1015-1030 **Break**

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1030-1215

**Plenary Session II**, (Mills Library, Mills Center) (Chair: Raymond Florax)

**Robert Johnston & Luz Londono-Diaz— Bayesian and Classical MA for Benefit Transfer of Coral Reef Values with Heterogeneous Resources and Research Methods**

**John Loomis — What Can Meta Analysis Tell Us about Hypothetical Bias of Stated Preference Valuation Studies?**

**Randall Rosenberger & T.D. Stanley —Price Elasticities of Recreation Demand: Meta-analysis and tests of publication bias**

1215-1315 **Lunch**

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1315-1445

**Concurrent Session I-A**, (Mills Library, Mills Center) (Chair: Martin Pladam)

**Geoff Pugh & Igor Velickovsky — Constraints on Exchange Rate Flexibility in Transition Economies: A meta-regression analysis of exchange rate pass-through**

**Eric Gabin—Forensic of Aid Effectiveness: A Bayesian meta-analysis of the conditional aid effectiveness literature**

**Kun Wang & Greg Shailer — Disentangling Ownership Concentration and Firm Performance in Emerging Markets**

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Friday, October 1, 2010- cont.

Concurrent Session I-B, (Murphy House, Hendrix campus) (Chair: Henri de Groot)

**Zuzana Irsova & Tomas Havranek — Which Foreigners are Worth Wooing? A Meta-Analysis of Vertical Spillovers from FDI**

**Maria Cipollina & Filomena Pietrovito— Trade Impact of EU Preferential Policies: A meta-analysis**

**Randolph Bruno & Nauro Campos —The Effect of FDI on Growth and Investment in Low Income Countries: A meta-regression analysis**

1445-1450                      **Short Break**

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1450-1530

Plenary Session III, (Mills Library, Mills Center) (Chair: Jacques Poot)

**Tomas Havranek & Marek Rusnak – How to Solve the Price Puzzle? A meta-analysis**

1530-1550                      **Break – The Burrow** in the Student Life and Technology Center

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1550-1630

Open Forum: **MAER-Net's Future** (Chair: Tom Stanley)

1830-2000

**Dinner:** Student Life and Technology Center, Hendrix Campus

Program Committee:

Chris Doucouliagos, Deakin University, Melbourne Australia

Raymond J.G.M. Florax, VU Amsterdam and Purdue University

Henri L.F. de Groot, VU Amsterdam

Patrice Laroche, Université Nancy2, France

Martin Paldam, Aarhus University, Aarhus, Denmark

Randall Rosenberger, Oregon State University, Corvallis, OR, USA

Tom Stanley, Hendrix College, Conway, AR, USA

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**Saturday, October 2, 2010**

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0830-0845 **Tom Stanley— Guidelines for the Systematic Reviews of Econometrics?**

0845-1015

**Plenary Session IV**, (Mills Library, Mills Center) (Chair: Rob Johnston)

**Jacques Poot, Henri de Groot & Martijn Smit — Cities and Growth: A Meta-Analysis**

**Martin Paldam & Chris Doucouliagos — Commerce, Strategic Interests and Aid Allocations**

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1015-1030 **Break**

1030-1215

**Plenary Session V**, (Mills Library, Mills Center) (Chair: Randy Rosenberger)

**Chris Doucouliagos, Joan Costa-Font & Filipe De-Albuquerque — Does Intergovernmental Competition Result in a Race to the Bottom in Taxes and Benefits?**

**David Hay— Meta-Regression Analysis and the **B**ig Firm Premium**

**T.D. Stanley, Chris Doucouliagos & Janto Haman —Pay for Performance and Corporate Governance Reform**

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1215-1315 **Lunch**

1315-1445

**Concurrent Session II-A**, (Mills Library, Mills Center) (Chair: Chris Doucouliagos)

**Megan Leonard & T.D. Stanley — A Meta-Regression Analysis of the Male Marriage Wage Premium**

**Patrice Laroche & Hristos Doucouliagos— Unions, R&D Investment and Technology Adoption: A Meta-Analysis**

**Fabian Homberg — Top Management Team Diversity: A systematic review**

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Saturday, October 2, 2010- cont.

Concurrent Session II-B, (Murphy House, Hendrix campus) (Chair: Ingram Olkin)

**Meng-Jia Wu—Synthesizing Education Production Functions: The application of factored likelihood function**

**Yannick Bineau —Publication Bias in Feldstein and Horioka literature: A meta-analysis for OECD countries**

**Ingram Olkin — Heterogeneity, Diversity and Inequality**

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1445-1500            **Break**

1500-1600

Concurrent Session III-A, (Mills Library, Mills Center) (Chair: John Loomis)

**Margaret Giles, Chris Doucouliagos & T.D. Stanley — The Reports of the Value of Life Have Been Greatly Exaggerated**

**Arvin Vista & Randall Rosenberger — Addressing Dependency in the Sportsfishing Valuation Literature: Implications for meta-regression analysis and in-sample benefit**

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Concurrent Session III-B, (Murphy House, Hendrix campus) (Chair: Geoff Pugh)

**Murat Genc, Jacques Poot, Masood Gheasi and Peter Nijkamp— The Impact of Immigration on International Trade: A meta-analysis**

**Jost Heckemeyer & Michael Overesch — The Tax Response of Profits, Internal Trade Volumes and Transfer Prices of Multinational Firms: A meta-study**

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**16:30-22:00 Dinner and brief tour of Little Rock**

Transportation is provided and will depart from Mills parking lot at **16:30** and Fairfield Inn & Suites **16:45, sharp!**

Dinner will be held at the Capital Hotel <http://www.capitalhotel.com/site/index.php> starting at about 19:30.

## ABSTRACTS

**Plenary Session I** (Mills Library)—845-1015 Friday October 1

### **MMM: Multivariate Models in Meta-Analysis**

Ingram Olkin

Stanford University, USA

The basic approach in medical research is the randomized clinical trial that is designed to determine the efficacy of a treatment. However, the actual studies are almost always more complex than a 2 X 2 table. Indeed, many studies produce multivariate data, but these have been analyzed as multiple univariate outcomes, thereby ignoring the correlational effects. Outcomes such as morning and evening measures are obvious examples of correlated effects; SAT math and verbal scores provide another example. Observational studies are often in the form of a regression, and here again the beta weights are correlated.

In this talk, we review a variety of multivariate models and propose methods of solutions.

### **The Impact of Monetary Policy on Economic Activity: Evidence from a meta-analysis**

Masagus Ridhwan; Bank Indonesia, Jakarta

Henri de Groot; VU University Amsterdam, The Netherlands

Peter Nijkamp; VU University Amsterdam, The Netherlands

Piet Rietveld; VU University Amsterdam, The Netherlands

This paper presents the findings a meta-analysis identifying the causes of variation in the impact of monetary policies on economic development. The sample of observations included in our meta-analysis is drawn from primary studies that uniformly employ Vector Autoregressive (VAR) models. Our findings reveal that capital intensity, financial deepening, the inflation rate, and economic size are important in explaining the variation in outcomes across regions and over time. Differences in the type of models used in the primary studies also significantly contribute to the explanation of the variation in study outcomes.

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**Plenary Session II** (Mills Library)—1030-1215 Friday October 1

### **Bayesian and Classical MA for Benefit Transfer of Coral Reef Values with Heterogeneous Resources and Research Methods**

Luz Londono-Diaz, Instituto de Investigaciones Marinas y Costeras INVEMAR, Columbia

Robert J. Johnston, Clark University, USA

Coral reefs exemplify a resource for which information on economic values is often sought for advocacy and policymaking, but for which primary valuation research is rarely available. As a result, government agencies, nonprofit organizations and others have often sought to gain insight into the economic benefits of coral reefs using *benefit transfer*, defined as the use of results from extant primary research to predict welfare estimates for other policy sites at which primary valuation estimates are unavailable. This paper seeks to further evaluate possibilities for meta-analysis and transfer of coral reef benefit estimates through the coordinated use of both Bayesian and classical meta-regression models to assess robustness and allay challenges related to small samples and by the supplementation of data from primary studies with information gathered from broader coral reef databases.

## **What Can Meta Analysis Tell Us about Hypothetical Bias in Stated Preference Valuation?**

John Loomis, Colorado State University, USA

Hypothetical bias arises in stated preference valuation studies (e.g., contingent valuation) when respondents report a willingness to pay (WTP) that exceeds what experiments indicate is the actual amount that people are willing to pay using their own money. While this bias is not found in all stated preference surveys, hypothetical WTP typically exceeds the actual value by a factor of two to three. Unfortunately, there is no widely accepted general theory of respondent behavior that explains hypothetical bias. Therefore, we review the current hypotheses about the causes this overstatement of WTP as well as two meta-analyses of hypothetical bias. Meta-regression analysis (MRA) can be used to calculate calibration factors, tailored to adjust WTP to the specific valuation circumstances. The resulting 'calibration function' is more accurate than any simple across-the-board correction based on aggregate averages.

## **Publication Selection of Recreation Demand Price Elasticity: A Meta-Analysis**

Randall S. Rosenberger, Oregon State University, USA

T. D. Stanley, Hendrix College, USA

A meta-regression analysis (MRA) of own-price elasticity of recreation demand estimates in the U.S. shows significant publication selection bias based on simple and multivariate MRA tests. While the simple average of past reported research results exhibits nearly a unitary elasticity (-0.997), this average estimate is likely to be several times too elastic. Our results are based on nearly 600 estimates of own-price elasticity drawn from the recreation demand literature. There is a high degree of heterogeneity in the recreation demand literature. We confirm Smith and Kaoru's (1990) general conclusions that researcher modeling decisions and assumptions, along with theoretical expectations, do indeed matter. However, a multivariate MRA, which captures variations in elasticity estimated due to their standard errors and weights the data according to these standard errors, reveals that many of the moderator variables change in sign and/or significance.

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**Concurrent Session I-A** (Mills Library)—1315-1445 Friday October 1

### **Constraints on Exchange Rate Flexibility in Transition Economies:**

#### **a Meta-Regression Analysis of Exchange Rate Pass-Through**

Igor Velickovsky, National Bank of the Republic of Macedonia

Geoff Pugh, Staffordshire University, UK

This article uses Meta-Regression Analysis (MRA) to investigate exchange rate pass-through to domestic prices, highlighting differences between transition and developed economies. A total of 23 studies yielded 575 coefficients measuring exchange rate pass-through to import prices and consumer prices for 23 developed and 12 transition economies. The MRA results confirm the finding of many particular analyses that exchange rate pass-through is less than complete. In addition, exchange rate pass-through is higher to import prices than to consumer prices; and exchange rate pass-through is higher in the long run than in the short run. Regarding transition and developed economies, MRA suggests that there is no statistically significant difference in exchange rate pass-through to import prices. Yet, exchange rate pass-through to consumer prices is significantly and substantially higher in transition than in developed economies. This finding is consistent with the caution of many monetary authorities in transition economies regarding exchange rate flexibility.

### **Forensic of Aid Effectiveness: A Bayesian Meta-analysis of conditional aid effectiveness**

Kilama Eric Gabin, Université d'Auvergne, France

Development aid is meant to contribute to the economic development of poor countries. This is certainly a very noble and desirable purpose. However, some authors think that the correlation between the share of development aid and economic growth is essentially zero. The zero correlation result is highly undesirable, and many have also found it implausible and search for a model that tells a “nicer” story. The amount, magnitudes and variability of the data for aid and growth driven by this challenge generated an aid effectiveness literature of almost 100 papers. The present paper is a Bayesian meta-analysis of a part of the AEL. It goes beyond the publication bias in the conditional aid effectiveness literature to find empirical evidence of aid effectiveness and gives useful comment for future research in the aid effectiveness literature.

### **Disentangling Ownership Concentration and Firm Performance in Emerging Markets**

Kun Wang, The Australian National University, Australia

Greg Shailer, The Australian National University, Australia

The relation between ownership concentration and firm performance has attracted much interest, yet yielded many inconsistent empirical results. It is still not known that whether there exists a common population correlation between ownership concentration and firm performance in countries with similar ownership structures and institutional environments. Using meta-analysis, we construct a comprehensive database of 313 correlations and their corresponding study characteristics obtained from 27 primary studies, which investigate the relation between ownership concentration and firm performance in emerging markets. Our results indicate that study characteristics are sufficient to explain a large portion of the heterogeneity of results in our sample. Differences within- and between-regions, sample selection, (under)specification of models contribute to the heterogeneity of empirical findings. We find evidence of publication bias due to the selective publication of papers with statistically significant results. Our findings reveal that using fixed effects model to control for endogeneity generate a stronger a relationship, countering the widely used argument that the relation between ownership structure and firm performance will diminish after controlling for endogeneity.

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**Concurrent Session I-B** (Murphy House, Hendrix campus)—1315-1445 Friday October 1

### **Which Foreigners are Worth Wooing? A meta-analysis of vertical spillovers from FDI**

Tomas Havranek, Czech National Bank, Prague

Zuzana Irsova, Charles University, Prague

The most pronounced argument for the provision of incentives to foreign investors is the assumed technology spillovers owing from foreign affiliates to local firms. Using 3,626 estimates from 57 studies on between-sector spillovers, we present a meta-analysis of the empirical literature. Our results suggest that negative estimates are largely due to misspecifications. Net of misspecification and publication bias, the unconditional effect of foreign affiliates on supplier sectors is positive and economically significant, while the effect on customer sectors is insignificant. Investors from distant countries with mild technology advantage over local firms generate the highest spillovers. Such investors are likely to source more locally because of expensive imports from home countries and sufficient quality of local inputs. Moreover, spillovers are stronger in countries that are open to international trade.



## **Trade impact of EU preferential policies: A meta-analysis of the literature**

Maria Cipollina, University of Molise, Italy

Filomena Pietrovito, University of Molise, Italy

It is generally asserted that preferential trade agreements (PTAs) positively affect the trade growth between countries or group of countries involved. The aim of this paper is to use a Meta-analysis approach in order to provide a survey of a range of estimated coefficients of the impact of EU PTAs highlighted in the literature using gravity equations. In our analysis, we distinguish between papers using dummy variables and papers using quantitative indicators to measure EU preferences. We provide pooled estimates, obtained from fixed and random effects models of the PTAs' effect size on EU imports: the hypothesis that there is no effect of PTAs on trade is robustly rejected at standard significance levels. The information collected on each estimate allows us to test the sensitivity of the results to alternative specifications and differences in the control variables considered, as well as the impact of the publication selection process. Finally, we adopt a probit specification that investigates the factors influencing whether the estimated effects are positive and significantly different from zero.

## **The Effect of FDI on Growth and Investment in Low Income Countries:**

### **A meta-regression analysis**

Randolph Bruno; University College London, UK

Nauro Campos; Brunel University, UK

The conventional wisdom is that low income countries tend to receive less foreign direct investment than they should and that the little FDI they receive has limited impact because it is concentrated in the natural resources sector. The objective of this paper is to take stock of the aggregate as well as firm level evidence on FDI in low income countries and use it to confront, re-assess and gauge such preconceptions by carrying out a comprehensive meta-regression analysis exercise. Our paper tries to offer three main contributions: (1) it focuses on both the micro and macro evidence; (2) it exploits a much higher number of "data-points" with respect to previous meta-analyses investigations on FDI in developing countries; and (3), as a consequence, we are able to exploit a much wider set of explanatory variables and controls. In our preliminary results, we were able to explain more than 60% of the t-statistics variability, our preferred dependent variable. Our findings confirm that there is a more significant positive effect of FDI on growth and investment among the macro evidence studies than in the micro evidence based ones, and more recent data tend to report higher t-statistics (larger and more precisely estimated effects)..

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**Plenary Session III** (Mills Library)— 1450-1530 Friday October 16

### **How to Solve the Price Puzzle? A meta-analysis**

Marek Rusnak; Czech National Bank; Tomas Havranek; Czech National Bank

Roman Horvath; Czech National Bank

The short-run increase in prices following an unexpected tightening of monetary policy constitutes a frequently reported puzzle. Yet the puzzle is surprisingly easy to explain away when all published models are quantitatively reviewed. We collect about 1000 point estimates of impulse responses from 65 articles using vector autoregressions (VARs) and present a simple method of research synthesis for graphical results. Our findings indicate publication selection in favor of the intuitive response of prices to a tightening. Less theory competition for the long-run response is associated with more publication selection. The estimates depend systematically on study design: when misspecifications are filtered out, the price puzzle disappears. The long-run response is driven by the structural characteristics of the economy.

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**Plenary Session IV**, (Mills Library)— 845-1015 Saturday October 2

**Cities and Growth: A Meta-Analysis**

Henri de Groot, VU University, The Netherlands

Jacques Poot, University of Waikato, New Zealand

Martijn Smit, VU University, The Netherlands

Globally, the proportion of the population living in cities continues to grow and sprawling cities remain the engines of regional economic transformation. In the globally-connected knowledge-driven economy, the relevance of agglomeration forces that rely on proximity continues to increase, paradoxically despite declining real costs of information, communication and transportation. This paper revisits the central part of this virtuous circle, namely the Marshall-Arrow-Romer externalities (specialisation), Jacobs externalities (diversity) and Porter externalities (competition) that have provided alternative explanations for innovation and urban growth. We aim to explain variation in estimation results using study characteristics by means of ordered probit analysis. We account for differences in between-study and within-study variance. The evidence in the literature on the role of the specific externalities is rather mixed, although for each type of externality we can identify how various aspects of primary study design influence the outcomes.

**Commerce, Strategic Interests and Aid Allocations**

Martin Paldam, Aarhus University, Denmark

Chris Doucouliagos, Deakin University, Australia

The stated reason for allocating aid is the recipient's humanitarian needs. However, donors might have their own reasons for donating aid, ranging from the desire to eradicate poverty, to their own commercial, military, and strategic interests. The relative importance of these often conflicting motives is an unresolved issue in the development aid literature. In this paper, we apply meta-regression analysis (MRA) to explore the relative contributions of commercial factors: imports, exports, FDI and debt. We also explore the importance of military and strategic interests, ideological agreement, former colony status, and UN voting alignment. The MRA results show that commercial interests are an important criterion for the allocation of aid. The strength of this motive has changed over time, and it varies across countries. MRA also shows that military and strategic interests are more important than commercial ones.

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**Plenary Session V**, (Mills Library)— 1030-1215 Saturday October 2

**Does Intergovernmental Competition Result in a Race to the Bottom in Taxes and Benefits?**

Chris Doucouliagos, Deakin University, Australia

Joan Costa-Font, London School of Economics and Political Science, UK

Filipe De-Albuquerque, London School of Economics and Political Science, UK

Brennan and Buchanan (1980) argue that the decentralization of government results in intergovernmental competition that engenders a so-called "race to the bottom" in public and welfare expenditure. However, the empirical evidence is not clear cut and may be moderated by institutional and country specific features. The aim of this paper is to empirically test the nature of strategic interactions in government spending and taxation using meta-regression analysis. Our data come from 56 studies that combined report 661 estimates on intergovernmental competition. We specifically examine the existence of interactions by specific type of tax revenue and expenditure. Our analysis indicates that races to the bottom are universal and occur more deeply with respect to transparent types of welfare expenditures and on corporate rather than income taxation.

### **Meta-Regression Analysis and the Big Firm Premium**

David Hay, University of Auckland, New Zealand

This paper examines the Big firm premium paid to major audit firms. Whether the small group of very large audit firms (currently the 'Big 4') can charge a fee premium to their clients has been examined in many research papers over thirty years, with mixed results and some controversy. Francis (2004, 352) states "on average, the Big firm premium has been around 20%." Several recent narrative literature reviews of research on auditing include laments that audit research is inconsistent and that it lacks influence over public policy and practice. A funnel plot of the Big firm audit firm premium shows a pattern very similar to those in other research areas in which publication bias was evident. Meta-regression analysis indicates both publication bias and a genuine Big firm premium of approximately 10% ( $p < .001$ ).

### **Pay for Performance and Corporate Governance Reform**

Chris Doucouliagos; Deakin University, Australia

Janto Haman, Monash University, Australia

T.D. Stanley, Hendrix College, USA

Directors' pay and corporate governance continue to generate public outrage and calls for reform. Our meta-regression analysis of all comparable UK pay-for-performance estimates finds little, if any, meaningful association between directors' pay and corporate performance. However, there is evidence of the effectiveness of past 'comply-or-explain' rules, especially the Cadbury Report. Unfortunately, the effects of past reform efforts tend to erode over time. The paper also explores differences between pay-performance estimates, finding that these are largely explained by how pay and performance are measured by a given study.

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**Concurrent Session II-A, (Mills Library) — 1315-1445 Saturday October 2**

### **A Meta-Regression Analysis of the Male Marriage Wage Premium**

Megan de Linde Leonard, Hendrix College, USA

T.D. Stanley, Hendrix College, USA

Several dozen studies in economics have found that married men earn between 10% and 50% higher wages than their single counterparts. The primary explanations for this phenomenon are employer discrimination in favor of married men, the selection of higher ability men into marriage, and increased productivity as a result of greater specialization of labor for married men. A meta-analysis of 50 studies and 403 estimates of the marriage wage premium finds an overall premium of 11-12% with little evidence of publication selection. Like all other meta-regression analyses in economics, many variables are found to affect the reported estimates. Male marriage premiums are found to be about 6% higher in the US, and omitting the number of years married raises the reported premium by another 7%. The fact that wage premiums increase with the number of years married rejects the selection hypothesis but not the specialization of labor view.

## **Unions, R&D Investment and Technology Adoption: A Meta-Analysis**

Hristos Doucouliagos, Deakin University, Australia

Patrice Laroche, University of Nancy, France

Prior meta-analyses have explored the effects of unions on profits, productivity, and physical capital formation. This paper extends this line of research by exploring the effects of unions on investment in intangible capital. Economic theory is ambiguous regarding the effects of labor unions and there is no consensus between empirical studies on the impact of unions on innovation. Drawing upon both econometric and case studies, we show in this paper that it is indeed possible to draw robust conclusions regarding the effects of unions on intangible capital: Unions depress investment in intangible assets in the US but have had no effect elsewhere. We also present a partial meta-analysis of the effects of firm size, physical capital and industry concentration on intangible investments and compare these to the effects of unions.

## **Top Management Team Diversity: A systematic review**

Fabian Homberg, University of Zurich, Switzerland

Empirical research investigating the impact of top management team diversity on executives' decision making has produced inconclusive results. On the one hand there is evidence that diversity improves decision quality due to a larger amount of information that is considered. On the other hand research has found evidence that diversity leads to an increase in the time needed to take decisions. In order to synthesize more generalizable results from this body of literature a meta-analysis is conducted. It focuses on studies investigating top management team diversity and its impact on the quality of executives' decision making as reflected in corporate performance. The analysis contributes to the literature by theoretically discussing and empirically examining the effects of top management team diversity on corporate performance.

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**Concurrent Session II-B**, (Murphy House) — 1315-1445 Saturday October 2

## **Synthesizing Education Production Functions: The application of factored likelihood function**

Meng-Jia Wu, Loyola University, USA

The education production function (EPF) is a regression-like model that demonstrates the relationship between school resources and student achievement while controlling for student or family background characteristics. One major problem regarding synthesizing EPFs that has been ignored in the previous meta-analyses is that these regression models are different in terms of the predictors included. Some models are larger (contain more predictors) than others. When it comes to interpreting the relationship of interest (school inputs and student achievement), the magnitude of the focal relationship is not comparable because the models are not “parallel” and different variables were partialled out. The current study links the scenario of having unparalleled models in the EPF literature to the issue of missing data.

### **Publication Bias in Feldstein and Horioka literature: A meta-analysis for OECD countries**

Yannick Bineau, University Lille, France

This study is a quantitative review of the literature on the Feldstein and Horioka (1980) paradox. I adopt meta-analysis, a methodology still not frequently used in international economics, to build a sample of 112 studies published between 1980 and December 2009. The sample concentrates on the correlation between national savings and investment rates for OECD countries, containing 1032 different saving-retention coefficient values. This sample shows a reduction in the saving-retention coefficient over a long horizon. A publication bias is found in this literature, and I attempt to correct it. Econometric methodologies have a large effect on the saving-investment correlation coefficient. Thus, a broad understanding of the saving-retention relation requires special care and flexibility in accounting for the bias associated with unavoidable methodological choice.

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**Concurrent Session III-A**, (Mills Library) — 1500-1600 Saturday October 2

### **The Reports of the Value of Life Have Been Greatly Exaggerated**

Hristos Doucouliagos, Deakin University, Australia

T.D. Stanley, Hendrix College, USA

Margaret Giles, Edith Cowan University, Australia

The magnitude of the value of a statistical life (VSL) is critical to the evaluation of many public health and safety initiatives. To date, the large and rigorous VSL research literature has not explicitly accommodated publication selectivity bias (*i.e.*, the reduced probability that insignificant or negative values of a statistical life are reported or published). This study demonstrates that doing so is essential. For studies that employ hedonic wage equations to estimate VSL, correction for selection bias reduces the average value of a statistical life by seventy to eighty percent. Our meta-regression analysis also identifies several sources for the wide heterogeneity found among reported VSL estimates.

### **Addressing Dependency in the Sportsfishing Valuation Literature: Implications for meta-regression analysis and in-sample benefit**

Arvin Vista, Oregon State University, USA

Randall Rosenberger, Oregon State University, USA

The sportfishing literature contains about 140 papers with estimates of the access value for fishing in the United States and Canada. This paper examines the implications of addressing dependency in the sportfishing valuation literature using meta-regression analysis (MRA) and the corresponding benefit-transfer (BT) performance. Meta-analysis is applied to various treatments of data dependency in the sportfishing metadata. Results show that the model fit is best achieved when the MRA is based on weighting the 'all-set' or using the 'average-set.' The weighted 'all-set' model resulted in the highest number of significant variables among the models estimated. Changing the underlying structure of the metadata changes the magnitude and sign of the estimated parameters of the fishing environment variables. Results of in-sample BT using a jackknife data splitting technique show median absolute transfer errors of 40% to 48%. The median absolute percentage transfer error is lower for the MRA based on the 'average-set' than the MRA based on 'all-set.' Higher transfer error may be explained by dummy variables that are related to measurement errors and publication selection bias inherent in the primary studies.

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**Concurrent Session III-B**, (Murphy House) — 1500-1600 Saturday October 2

**The Impact of Immigration on International Trade: A meta-analysis**

Murat Genc, University of Otago, New Zealand

Masood Gheasi, VU University Amsterdam, The Netherlands

Peter Nijkamp, VU University Amsterdam, The Netherlands

Jacques Poot, University of Waikato, New Zealand

The rapid growth in the foreign-born population in many high and middle income countries in recent decades has prompted considerable research on the socio-economic impacts of immigration. Econometric studies conducted since the early 1990s suggest that immigration has a statistically significant impact on merchandise trade and that the effect of immigration on imports tends to be somewhat larger than on exports. However, estimated magnitudes of these effects vary considerably across studies. Because most studies have adopted broadly the same specification, namely a log-linear gravity model of export and import flows augmented with the logarithm of the stock of immigrants from specific source countries as an additional explanatory variable, the resulting elasticities are broadly comparable and yield a set of estimates that is well suited to meta-analysis. We therefore compile and analyse in this paper the distribution of pairs of import and export elasticities of immigration across 45 studies that yielded several hundred estimates. The estimates are affected by the choice of covariates, the nature of the data (cross-section or panel) and the estimation technique. The results confirm that immigration boosts trade, but that the export effect is indeed slightly smaller than the import effect.

**The Tax Response of Profits, Internal Trade Volumes and Transfer Prices of Multinational Firms: A meta-study**

Jost Heckemeyer, ZEW Mannheim, Germany

Michael Overesch, University of Mannheim, Germany

It is an empirically well documented fact that multinational companies can take advantage of international tax rate differentials to lower their worldwide tax payments. In this paper, we present a meta-analysis of the diverse literature that has followed in the lines of these seminal approaches. First, we cover direct evidence on the tax sensitivity of reported affiliate earnings before interest and taxes (e.g. Huizinga and Laeven 2008). Second, we look at studies analyzing the tax effect on internal transaction volumes and transfer prices as a major underlying profit shifting mechanism (e.g. Clausing 2003). The meta-dataset contains 348 primary tax effect estimates extracted from 16 studies. Classical meta-analyses show that taxes exert a genuine empirical effect on profits as well as on internal transfer prices and trade volumes. In response to a one percentage point change in the tax rate transfer prices react by 2 %. Trade volumes seem to be more sluggish as their precision-weighted tax response amounts to only 1.4 % and profits decline by 1.1 % according to our full assessment of the empirical evidence.