MAER-Net Colloquium University of Cambridge, UK Wolfson College September 16-18, 2011

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Friday, September 16, 2011 {Participants arrive}

1800-2000—Opening Reception-- Wolfson College

Saturday, September 17

0900-0915 Welcome (Lee Hall)

0915-1100

Plenary Session I: Fundamental Dimensions of Meta-Analysis (Lee Hall) (Chair: Tom Stanley)

Julian Higgins— What Makes for a Good Meta-Analysis?

Daniele Fanelli— Unraveling the Nature and Causes of Publication Bias

Ingram Olkin— Heterogeneity

1100-1115

Break

1115-1300 Plenary Session II: Meta-Analysis of International Development (Lee Hall) (Chair: Jacques Poot)

Randall Rosenberger — A Sketch of Meta-Regression Analysis in Economics

Randolph Bruno and Nauro Campos — Foreign Direct Investment and Economic Performance: A Systematic Review of the Evidence Uncovers a New Paradox

Mehmet Ugur — The Impacts of Corruption on Economic Growth in Low-Income Countries: A Systematic Review

1300-1400

Lunch

1400-1545

Plenary Session III (Lee Hall) Systematic Reviews of Econometric Analyses (Chair: Ian Shemilt) (Discussants: Merete Konnerup & Tom Stanley)

Alison O'Mara — Childhood Obesity and Educational Attainment: A Systematic Review

- Hugh Waddington Experiences from 3ie Systematic Reviews of Evidence from Econometric Analyses
- Thillai Rajan A. Impact of Changes in the Transparency on Infrastructure Quality, Costs, and Access

Saturday, September 17th (continued)

1545-1600

Break

1600-17:30 Concurrent Session I-A, *MRA of Fundamental Economic Issues* (Lee Hall) (Chair: J.Heckemeyer)

Kerry Clayton — A Meta-Analysis of Price and Income Elasticities of Residential Water Demand

Jarko Fidrmuc & Katarína Daníšková — Meta Analysis of the New Keynesian Phillips Curve

Mohammed Aminu Aliyu — A Meta-Regression Analysis of the Independence of Irrelevant Alternatives (IIA)

Concurrent Session I-B: International Development (Seminar Room) (Chair: Martin Paldam)

Niels Hermes, Silke Bumann & Robert Lensink — Financial Liberalization and Economic Growth: A Meta-Analysis

Andrés Rius, Diego Aboal & Nelson Noya — Contract enforcement and rates of investment: A systematic review

Sasi Iamsiraroj, Chris Doucouliagos & Mehmet Ali Ulubasoglu — Foreign Direct Investment and Economic Growth: A real relationship or wishful thinking

1900-2100

Dinner: Wolfson College

Sunday, September 18th, 2011

0930-1000 **Open Forum about MAER-Net** (Tom Stanley)

1000-11:45

Plenary Session IV: Standards and Bias (Lee Hall) (Chair: Margaret Giles)

Randall Rosenberger and Robert Johnston — Meta-Analysis for Environmental Policy: Establishing Minimum Standards

Gerta Rucker, James Carpenter, Guido Schwarze— Treatment Effect Estimates Adjusted for Small-Study Effects Via a Limit Meta-Analysis

T.D. Stanley and Chris Doucouliagos — MRA Methods to Accommodate, Identify and Reduce Publication Selection Bias _____

11:45-12:45 Lunch

1245-1445

Concurrent Session II-A: Business, Finance, and Philanthropy?(Lee Hall)(Chair: R.Rosenberger)

Marc van Essen— Antecedents of CEO pay: A Meta-Regression Analysis

Katja Rost & Thomas Ehrmann — Win-Win Philanthropy Research: The Endless Search for a Luminiferous Aether

- Deirdre Reilly, Brian Lucey & Constantin Gurdgiev— Real Estate and the Stock Market A Meta-Regression Analysis
- Michael Hunoldt Factors Influencing International Equity Joint Venture Performance: A Meta-Analysis.

Concurrent Session II-B: Institutions and Government (Seminar Room) (Chair: Geoff Pugh)

Jost Heckemeyer & Ruud De Mooij —Blending Meta-Analysis with Primary Research: Using Mixed Estimation to Explain the Tax Effect on the Financial Policy of Banks

Marek Rusnaky — Why Do Government Spending Multipliers Differ? A Meta-Analysis

Adnan Efendic and Geoff Pugh — A Meta-Regression Guide to Modelling Institutional Effects on Economic Performance

Mekbib Gebretsadik Haile and Geoff Pugh — What Does Meta-Regression Analysis Tell Us About The Effect of Exchange Rate Variability on International Trade?

Sunday, September 18th (continued)

1445-1500

Break

1500-1630 Concurrent Session III-A: International Development II (Lee Hall) (Chair: Rob Johnston)

Edgar Cooke — American Trade Policy Towards Sub Saharan Africa–A Meta-Analysis of AGOA

Kilama Eric Gabin—Remittances and Economic Growth: A Meta-Analysis Benefit

Kolawole Ogundari — The Calorie-Income Elasticity: A Meta-Regression Analysis

Concurrent Session III-B: *Demographics and Economics* (Seminar Room)(Chair: Doucouliagos) 1500-1700

Plenary Session II: *Meta-Analysis of International Development*, 1115-1300, Sat. 17th (Lee Hall) A Sketch of Meta-Regression Analysis in Economics

Randall S. Rosenberger, Oregon State University, USA

Meta-regression analysis (MRA) has been developed for and applied to economics for over 20 years. Its growth has been exponential; each year dozens of economics meta-analyses are conducted, with a total nearing 1,000 papers. This talk will introduce MRA methods to summarize, explain and correct economic, social and medical research. Recently, a consensus has formed about what methods are required to adequately meta-analyze econometric studies. Meta-analysts need to:

- Model heterogeneity using MRA with many coded moderator variables.
- Model and accommodate likely publication bias using MRA.
- Adjust for heteroscedasticity (WLS).
- Allow for within-study dependence by using unbalanced panel (or multilevel) methods.

. Applications include the value of a statistical life and the employment effect of minimum wages.

Foreign Direct Investment and Economic Performance:

Plenary Session III: Systematic Reviews of Econometric Analyses 1400-1545, Sat. 17th (Lee Hall)

Systematic Reviews of Econometric Analyses:

Ian Shemilt, Chair, University of Cambridge, UK

Systematic reviews of evidence for public health, education and international development interventions and policies increasingly encounter evidence from many econometric studies. Statistical methods for synthesizing such evidence are relatively well developed (Stanley 2010, Shemilt 2010). However, preceding stages in the systematic review process that has become the established 'standard' in these applied fields (Higgins 2011) - such as translating research questions into eligibility criteria, locating and selecting studies, extracting data, and assessment of risk of bias/methodological quality - may need to be adapted to accommodate such evidence. This plenary session will present protocol design and methods challenges encountered in the conduct of recent systematic reviews involving econometric analyses.

Childhood Obesity and Educational Attainment: A Systematic Review Alison O'Mara, EPPI-Centre, UK

Experiences from 3ie Systematic Reviews of Evidence from Econometric Analyses

Hugh Waddington, 3ie, UK

This presentation covers some of the issues faced when applying systematic review of effectiveness to the economic development literture, in particular how to identify and synthesise results of studies that use credible methods to attribute impact in the absence of experimental study design (RCTs). Drawing on our experiences from 3ie's reviews programme, the paper overviews causal methods typically used in the econometrics literature, and discusses some of the challenges involved in assessing risk of bias and extracting comparable estimates of effect.

Impact of Changes in the Transparency on Infrastructure Quality, Costs, and Access Thillai Rajan A., ITT, Madras, India

Out of a total of 863 observations, 456 (53%) indicated that the interventions did not have any significant impact on outcome, either positive or negative. Out of the remaining 407 observations which indicated a significant impact on outcomes, the number of positive evidences was more than negative evidences. Positive evidence was found in 33% of the total observations and negative evidence was found in 14% of the total observations. On the access outcome, out of 264 observations, 40% indicated an increase in access as a result of increase in transparency levels whereas only 13% indicated a decrease in access. The proportion of observations that did not show any impact was 47%, which was lower than that of the results of the overall sample. On costs, 45% of the observations indicated a decrease in costs as a result of increase in transparency levels. Only 4% of the observations indicated a negative impact on costs (i.e., costs increased) and about half of the observations did not show any significant impact on costs.

Discussants: Merete Konnerup (Konnerup Consult, Denmark) and Tom Stanley (Hendrix)

Concurrent Session I-A, MRA of Fundamental Economic Issues, 1600-1730, Sat. 17th (Lee Hall) A Meta-Analysis of Price and Income Elasticities of Residential Water Demand

Kerry Clayton, University of East Anglia, UK

The variation in estimated price and income elasticities for residential water demand is large – from -7.47 to 3.5 for the price elasticity and -7.45 to 7.83 for the income elasticity. This large range might be driven by genuine differences in elasticities across geographical location and time and/or could be driven by the wide variety of methodological approaches to modelling water demand. This

Concurrent Session I-B: International Development, 1600-1730, Sat. 17th (Seminar Room)

Financial Liberalization and Economic Growth: A Meta-Analysis

Niels Hermes, Université Libre de Bruxelles, Belgium; Silke Bumann, University of Groningen; and Robert Lensink, Wageningen University

In the meta-analysis, we specifically take into account the following issues. First, we analyze whether studies suffer from a potential publication bias (also sometimes referred to as the file drawer problem), i.e. whether results published provide a biased distribution of effects found, because there may be a tendency not to publish results that show no significant results. Next, we analyze the potential impact of study design on results reported. In particular, we focus on the impact of differences between studies regarding country samples, time periods, and estimation methods. Moreover, we investigate whether the choice of financial liberalization measure has an impact on the results reported in different studies.

Plenary Session IV: Standards and Bias, 1000-11:45, Sun.18th (Lee Hall)

Meta-Analysis for Environmental Policy: Establishing Minimum Standards

Randall S. Rosenberger, Oregon State University, USA and Robert J. Johnston, Clark University, USA

When and how are meta-analyses suitable for direct policy applications, and what might be a reasonable set of minimum criteria for empirical metadata and models? Nelson and Kennedy (2009) propose a set of best practice guidelines to close this gap in future meta-analyses, but do not address additional minimum standards that might be applied for meta-analyses used for policy-relevant value prediction, e.g., for use within benefit transfer. This paper seeks to address this void in the literature, providing guidance for policymakers who use meta-analyses in environmental valuation for use in applied policy assessments following a set of specific criteria for policy applicability, including types of value estimates, welfare and commodity consistency, and inclusion of market, resource, and contextual information. This set of criteria is applied to a sample of meta-analyses published in the past 10 years.

Treatment Effect Estimates Adjusted for Small-Study Effects via a Limit Meta-Analysis

Gerta Rücker, James Carpenter and Guido Schwarzer, University Medical Center Freiburg, Germany

Concurrent Session II-A: *Business, Finance, and Philanthropy*? 1245-1445, *Sun.*18th (Lee Hall)

Antecedents of CEO pay: A Meta-Regression Analysis

Marc van Essen, Utrecht University, School of Economics, Netherlands

Although studies about the influence of CEOs on compensation practices are ubiquitous, the balance of evidence for managerial power theory

simultaneously controlling for other drivers of effect size (e.g., method, publication outlet, theory) and for publication bias. In particular publication biases are expected to alter the results on IJV performance since studies using performance as a dependent variable are often characterized by expressive research traps (March & Sutton, 1997). Our preliminary results based on 58 studies (N=10,882) show that interpartner trust is the most critical factor for IJV performance. Furthermore, the two levels of cultural distance, i.e., the national and organizational level, have a differential effect on IJV performance. Whereas national cultural distance has no impact on IJV performance.

Concurrent Session II-B: Institutions and Government 1245-1445, Sun.(Seminar Room)

Blending Meta-Analysis with Primary Research: Using Mixed Estimation to Explain the Tax Effect on the Financial Policy of Banks

Jost H. Heckemeyer, Centre for European Economic Research, Mannheim, Germany and Ruud A. De Mooij, International Monetary Fund (IMF), USA

Empirical researchers often have a fairly strong prior concerning the sign and general magnitude of the relationship they are trying to estimate. If the researcher's prior is sufficiently strong, inconsistent estimates may not be accepted. *Mixed estimation* makes the incorporation of prior knowledge into the empirical analysis explicit. We apply the mixed estimation technique to assess the tax effect ("debt bias") on the capital structure of banks. Prior information is obtained from a comprehensive meta-analysis of capital structure regressions presented by Feld, Heckemeyer, and Overesch (2011). First results show that using extraneous information can indeed improve the identification and understanding of the relationship between taxes and the debt ratio of banks, whereas empirical identification based exclusively on the sample data turns out to be a challenge.

Why Do Government Spending Multipliers Differ? A Meta-Analysis

Marek Rusnaky, CERGE-EI, Prague

The vast literature that estimates the effects of government spending on output has not come to consensus yet. The relatively big multiplier estimated for the US is not found for other countries: a much lower or no effect is usually reported. We collect more than 800 estimates of the dynamic effects of government spending shocks from a sample of published and unpublished studies and provide the average effect implied by the literature. Next, we exploit the differences between estimates by relating them to the two sources of heterogeneity. First, we test whether there is a systematic influence of different study characteristics such as the type of identification or data characteristics such as the level of government debt, the openness and the size of the economy, or the level of financial development. Our results suggest that the spending multipliers systematically depend on the characteristics of the economy, while the differences in study design play a less important role.

A Meta-Regression Guide to Modelling Institutional Effects on Economic Performance

Adnan Efendic, University of Sarajevo, Bosnia; Geoff Pugh, Staffordshire University, UK This paper applies meta-regression analysis to the empirical literature that investigates the effect of institutions on economic performance. Although st framework used by authors in the meta-regression (probit model). We measure the sensitivity of the estimates to changes and inclusion of the additional explanatory variables. Our preliminary results suggest that authors affiliated to IMF find negative impact of remittances when those of the World Bank are optimists on the growth effect of remittances. We also find that institutional factors as well as financial development are determinants of economic growth effect of remittances. Our proxy for internal quality of a paper is one of the most significant variables of our probit model, illustrating the fact that the best papers (in term of model specification and stability of estimates) find a significant effect of remittances on growth.

The calorie-income elasticity: a meta-regression analysis

Kolawole Ogundari, University of Kiel, Germany

The response of nutrition intake to rising incomes has been quite diverse, depending on many research and economic dimensions. The present paper employed meta-analysis as a tool which allows researchers to combine results of several homogenous studies into a unified analysis that provide an overall estimate. A total of 100 observations from 42 studies were considered for meta-analysis. Our findings revealed that publication bias is not a severe problem by the FAT-MRA model. Furthermore, FAT-PET-MRA reveals a genuine positive and significant effect of income on calorie intake. Other factors found important in this income-calorie relation are: whether a study is published, what type of data is used, region, and sample size.

Concurrent Session III-B: *Demographics and Economics*, 1500-1700, Sun.18th (Seminar Room) Assessing Impact of Age Composition on Aggregate Saving Rates: A Meta-Analysis.

Jacques Poot, University of Waikato, New Zealand; A. Osman Hussein, Applied Analysis; and Stephen Keef, Victoria University, New Zealand

For a long time economists have held different views on the effect of age composition of the population on saving rates. The life cycle hypothesis predicts that people will save when young workers and spend their savings when old. Other economists argue that the retired group in the population might not dissave at the rate predicted by the life cycle hypothesis. In this paper we attempt to reconcile these conflicting views, which both have found some empirical support. We use meta-analysis to determine whether age composition of the population, measured as dependency ratios, has an adverse effect on saving rates. We synthesise 34 studies on saving rates and dependency ratios. We find that dependency ratios do adversely affect the saving rate, which validates the life cycle hypothesis. However, it is not clear whether or not the magnitude of the effect should be of concern.

Is there a Health Kuznets curve? A Meta-regression Analysis of Health Inequalities

Joan Costa Font, LSE, UK; Cristina Hernandez, LSE, UK, and T.D. Stanley, Hendrix College Health inequalities are taken as an important dimension with which to evaluate health care systems. Recently, the WHO set out a ranking of countries depending on a set of performance indicators where the degree of inequality is given an important role. In western countries, a well-known paradox shows that despite significant government interventions, inequalities in health remain constant. In measuring inequalities, significant heterogeneity is found. Often, different inequality indicators are employed although most of them are comparable after being suitably transformed. This paper undertakes an examination of the extent to which inequalities in health are affected by precision and publication biases. Indeed, health inequality may be affected by an ideological component thereby explaining the existence of empirical bias in the reported estimates. A second objective lies in explaining the determinants of health inequalities, particularly institutional and study specific determinants.

Is there a Differential Marriage-Wage Premium? A Meta-Analysis

Katherine Hunter, T.D. Stanley and Megan Leonard—Hendrix College, USA

Leonard and Stanley (2010) presented a meta-analysis of the male marriage wage premium literature at the 2010 MAER-Net Colloquium and found that there is no instantaneous marriage-wage premium. However, the inclusion of a years married variable is the largest single determinant of the size of the estimated premium. The purpose of this paper is to identify whether there is a male marriage wage premium that accrues with each year of marriage. Simple FAT-PET-PEESE-MRAs indicate that there may indeed be an annual premium. However, the small number of models with strictly linear "years married" terms necessitates further investigation. After transforming quadratic estimates into marginal annual estimates, a multivariate MRA model can be estimated. Using this model to correct for misspecifications, there appears to be no remaining differential wage premium for married males, either.

Education and Inequality: A Meta-Regression Analysis

Abdul Jabbar Abdullah, Chris Doucouliagos, and Elizabeth Manning

Deakin University, Melbourne Australia

This paper provides a comprehensive review of the extant econometrics literature through a metaregression analysis (MRA) of 60 empirical studies that collectively report over 600 estimates of the effects of education on inequality. The aims of our MRA are to:

- (1) Assess the effect of education on inequality. Does education increase or decrease inequality, or does it have no effect at all? Under what conditions does education shape inequality?
- (2) Model the heterogeneity in the empirical estimates. What factors explain the wide variation in the estimates of the effect of education on inequality?
- (3) Test for publication selection bias and model misspecification bias.

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