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The 25th International Academic Conference hosted by the  
International Institute of Social and Economic Sciences

# IISES 주관 제 25회 국제학술컨퍼런스 참가 결과 보고

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## 1 출장 개요

- 컨퍼런스명 : IISES 25<sup>th</sup> International Academic Conference
  - 기 간 : 2016. 9. 6(화) ~ 9. 9(금)(4일간)
  - 장 소 : 프랑스 파리 OECD Headquarters
- \* IISES(International Institute of Social and Economic Sciences): 전 세계 우수 학계·연구기관 소속 교수 및 연구진들이 Committee와 자문 기구를 구성하고 있으며, 매년 학술 컨퍼런스 장을 통해 최신 연구 동향 및 분석기법, 현안 이슈에 대한 논의와 연구결과를 공유하는 자리임.
- 출장기간 : 2016년 9월 5일 ~ 9월 11일 (5박 7일)
- 출장배경 및 목적
  - 논문 발표(Session I. Business & Economics)
  - 최신 연구동향 및 선진 연구기법을 파악하여 향후 연구과제에 반영하고, 국가통계 개선·개발업무에 활용하고자 함
  - 해당 분야 전문가들과 연구성과를 공유하고, 관련 연구자들과의 네트워크 구축 및 공동연구 가능성 타진

## 2 출장 주요 내용

- 연구 성과 공유 및 Session 1((Business & Economics) 참가
  - 논문(Trust, Economic Growth and Importance of the Institute) 발표(9.7. 09:00~10:50) 및 토론
- 국가통계 및 연구 방법론(Business and Economics,

Quantitative Methods, Environment and Sustainable Development) 관련 최신 연구동향 및 현안 이슈파악을 통해 향후 연구과제 수행을 위한 Insight 습득

○ 컨퍼런스 전경



9.6.(화) 컨퍼런스 등록



9.7.(수) 본 회의



9.8.(목) 세션 참가



9.9.(금) 워크숍

○ 컨퍼런스 키트 구성

- 프로그램 타임테이블
- 컨퍼런스 에코백
- USB

\* Draft of Proceedings는 9월 29일 IISE 홈페이지 게시 예정

○ 프로그램 구성(세부사항은 [붙임 4](#) 참조)

	9.5(화)	9.6(수)	9.7(목)	9.8(금)
07:30 - 09:00		Poster Session	Poster Session	Poster Session
09:00 - 10:50		<b>Session 1.</b> Business & Economics	<b>Session V.</b> Business & Economics	<b>Workshop</b>
11:10 - 13:00		<b>Session 2.</b> Business & Economics	<b>Session VI.</b> Teaching & Education  <b>Session VII.</b> Social Sciences & Humanities	<b>Workshop</b>
14:00 - 15:50	Registration	<b>Plenary Session</b>  <b>Session 3.</b> Business & Economics, Quantitative Methods	<b>Session IX.</b> Health & Welfare, Environment and Sustainable Development, Technology and Science  <b>E-session</b>	<b>Workshop</b>
16:10 - 19:00	Registration  Welcome Party	<b>Session IV.</b> Social Sciences & Humanities, Law in Society	<b>Session VIII.</b> Business & Economics  <b>Session X.</b> Health & Welfare, Environment and Sustainable Development	

## II 컨퍼런스 주요 내용

### 1 논문발표 세션

#### Session 1

- (세션) Business & Economics
- (일시/장소) 2016.9.7.(수) 9:00 - 10:50 (110분) / OECD Headquarters CC 20
- (세션구성) 좌장(1명), 발표자(5명, 각 15분 발표), 질의 응답(각 5~10분)
- (역할) 발표 및 토론

#### ○ 세부구성

역할	성명	소속 / 직위	논문 제목
좌장 Chair	· ARUS KONGRUNGCHOK	태국 SURATTHANI RAJABHAT UNIV./교수	
논문발표자 Presenters	· AEL FRÖMMEL	벨기에 GHENT UNIV./조교수	· DAILY CURRENCY INTERVENTIONS IN EMERGING MARKETS: INCORPORATING RESERVE ACCUMULATION
	· JOHN HOUSTON	영국 GLASGOW CALEDONIAN UNIV./부교수	· ESTIMATING DEMAND FOR NEW GRADUATES IN THE UK 1999 - 2015
	· HEEKYUNG SON	한국 통계개발원 /주무관	· TRUST, ECONOMIC GROWTH AND IMPORTANCE OF THE INSTITUTION
	· RACHID TOUMACH	알제리아 ENSSEA /연구원	· TAYLOR RULES AND THE INTEREST RATE BEHAVIOR IN ALGERIA
	· ARUS KONGRUNGCHOK	태국 SURATTHANI RAJABHAT UNIV./교수	· THE EFFECTIVENESS OF PERSONAL FINANCIAL PLANNING OF RUBBER FARMERS IN THAILAND: CASE STUDY OF SURATTHANI PROVINCE

○ 세션 내용 (요약)

**【DAILY CURRENCY INTERVENTIONS IN EMERGING MARKETS: INCORPORATING RESERVE ACCUMULATION】**

외환시장 개입에 있어서 신흥시장 중앙은행의 국제보유고 관리 방법에 대한 연구이다. 신흥시장 중앙은행은 환율변동에 대한 정책수단으로서 외환개입을 사용하고, 자본흐름의 예기치 못한 중단에 대한 보험수단으로 국제보유고를 축적한다. 이러한 두 가지 정책수단을 설명하기 위해, 오직 환율에만 간헐적으로 개입을 하는 모형을 일일 환율변동을 고려한 GDP 대비 국제보유고에도 개입하는(international reserves-to-gross domestic product (GDP) ratio at the daily frequency)모형으로 확장하고, 그 비율의 일일 값(Daily values of the ratio)을 혼합데이터샘플링(Mixed Data Sampling (MIDAS))을 이용하여 추정하였다. 기본모형(benchmark model)과 비교했을 때, MIDAS모형이 GDP 대비 국제보유고율 예측에 더 우수하였고, 특히 미달러 구매 예측에 있어 보다 더 나은 결과를 보였다.

**【ESTIMATING DEMAND FOR NEW GRADUATES IN THE UK 1999 - 2015】**

영국 노동시장에 있어서 신규졸업자에 대한 수요를 추정하는 것을 다룬 논문으로, 1999년에서 2015년 기간 동안 영국의 GDP, 총자본형성, 연령 및 자격조건을 토대로한 여타 노동시장 정보에 대한 거시경제 데이터를 이용하여 신규 졸업자의 노동수요를 추정하는 것으로, 다이내믹 콕-더글라스 함수(dynamic Cobb Douglas Function)를 사용하였다. 그 결과, 신규졸업자 노동에 대한 한계생산성의 영향(difference)을 추정하고, 이 정보를 4년과 5년의 시간단위로 신규 졸업자에 대한 각각의 수요를 추정하는데 사용했다. 졸업생들의 각각의 노동수요곡선을 결합함으로써, 신규졸업자들에 대한 수요가 지난

16년 동안 어떻게 변모했는지에 대한 살펴볼 수 있었고, 우리가 관측할 수 있는 수요곡선의 이동이 주어진다면, 임금 및 고용가능성에 대한 잠재적 결과에 대한 가정을 할 수도 있게 되었다. 그 결과, 불황기에 고용주들의 행동에 대한 일반적 예측이 가능하게 되었고, 현재 영국은 더 이상 과거만큼 노동수요가 높지 않으며, 노동시장이 이미 과도한 졸업생들로 이미 포화상태에 이르렀음을 보여주었다.

## **【TRUST, ECONOMIC GROWTH AND IMPORTANCE OF THE INSTITUTION】**

경제가 발전하기 위해서는 물적·인적 자본만이 아니라 사회적 자본 축적 또한 중요하다는 인식이 확산되면서, 사회적 자본의 대표적 구성요소인 신뢰에 대한 경제학적 관심이 높아지고 있다. 본 연구는 신뢰라는 사회적 자본 특히 공적인 신뢰를 경제학적 변수로 도입하여 신뢰가 경제성장에 미치는 영향과 신뢰수준을 변동시키는 요인이 무엇인지를 분석했다.

정치적 안정, 법질서 수준, 부패통제여부, 경제적 자유 등 구체화된 제도변수들을 이용하여 공적 신뢰수준을 변동시키는 거시요인을 실증 분석한 결과, 부패 통제, 법질서 확립, 정부의 질 향상 등 다양한 제도적 요인들이 존재함을 확인하였다. 이러한 제도적 측면들은 사회적으로 신뢰를 증가시키는 중요한 요소가 되므로, 제도 개선이 사회적 신뢰를 향상에 상당히 중요한 요소이므로 경제성장을 촉진하기 위해서는 신뢰라는 사회적 자본축적이 필요하고, 그 선결조건으로 부패척결을 위한 노력이 선행되어야 하며, 법적 제도의 엄격한 보호와 함께 경제적 자유에 대한 허용이 필요함을 시사한다.

## **【TAYLOR RULES AND THE INTEREST RATE BEHAVIOR IN ALGERIA】**

거시경제의 안정성을 확보하는 통화정책을 입안하는데 있어, 테일러



준칙(Taylor rule)은 중앙은행의 가이드라인을 제시하므로, 추정된 테일러 준칙과 맥칼럼 준칙(McCallum rule) 추정은 중앙은행이 통화정책 결정시 준수해야할 명시적 벤치마크 공식으로 간주된다. 테일러 준칙은 통화당국의 의사결정의 핵심이며, 가격안정성을 담보하는 단기 이자율 수준을 결정한다. 테일러 준칙율과 관측율 간의 차이는 인플레이션 타게팅(inflation targeting)과 산출 차이 타게팅(output gap targeting)에 대한 적합한 통화정책 지표로써 사용된다. 이 연구에서는 1996년에서 2011년 기간동안의 분기 데이터를 이용하여, 알제리 중앙은행 단기금리가 다른 유형의 테일러 준칙과 일치하는지 여부를 평가하였고, 여러 유형의 추정치들은 테일러 준칙이 알제리 이자율의 적절한 예측치로서 역할을 수행함을 보여준다.

## 【THE EFFECTIVENESS OF PERSONAL FINANCIAL PLANNING OF RUBBER FARMERS IN THAILAND: CASE STUDY OF SURATTHANI PROVINCE】

태국의 고무 농가가 열악한 개인금융상황에 직면해 있는 요인을 파악하기 위한 연구로, 태국 Suratthani 지역의 391개 고무농가에서 설문(Cronbach's alpha 0.914 기준)하여 모은 데이터를 사용하여 다양한 통계적 기법을 통해 분석하였다. 그 결과, 타이 고무농가는 비연속적인 고무수확으로 인한 비정기적 수입, 미래에 대한 명확한 목표 부족, 체계적 투자 부족, 부적절한 부채관리 능력 등으로 인해 소득 대비 지출이 매우 비효율적으로 이루어지고 있어, 태국의 다른 농가 대비 고무농가가 보다 심각한 개인금융 위기에 봉착해 있는 실태를 확인할 수 있었다. 이러한 결과를 태국 정부에 송부했고, 태국농가 특히 고무농가의 근본적 빈곤문제를 해결하기 위한 정책입안의 기초자료로 사용될 예정이다.

## 2 참가 세션

### ○ Business & Economics 세션 주요 내용

#### **【FRIEND OR FOE? A CONCEPTUALISATION OF THE EFFECTS OF TELEWORK ON THE WORK ENVIRONMENT by ROBERT A. LEWIS from LES ROCHES GRUYÈRE UNIVERSITY OF APPLIED SCIENCES, SWITZERLAND】**

근로 환경에서 재택근무 사용의 개념적 효과에 대한 연구로, 재택근무자, 동료 그리고 고용주의 3가지 관점에서 실증분석하고 있다. 이 연구에서 재택근무는 전통적인 근무지(traditional workplace)에서 멀리 떨어져서 살기 때문에 특정 유형의 정보기술(IT)을 사용하여 수행하는 업무로 정의하고, 재택근무가 근로(work)에 대한 인식을 변화시킬 수 있다고 논의하고 있는데, 이는 조직적인 구성에 있어 근로 공간, 근로 시간 그리고 지각 가치(perceived value)에 대한 전통적인 인식을 재형성하고 있기 때문이다. 재택근무자들의 비재택 동료들의 관점에서보면, 재택근무는 팀원들간의 직접적인 상호작용이 줄어들기 때문에, 팀 단위의 업무에 대한 인식과 형평성에 대한 이해(understandings of equity)를 변화시켰다. 고용주 입장에서는, 재택근무는 위계체계와 조직문화에 대한 인식을 변화시킨 것으로 파악된다.

#### **【DOES IT PAY TO STUDY ABROAD? EVIDENCE FROM POLAND by JACEK LIWINSKI from UNIVERSITY OF WARSAW, POLAND】**

3차 교육의 순 등록률이 1990년에 9.8%에서 2009년에 40.9%까지 증가한 바가 시사하듯이, 폴란드에서 제3차 교육(중등학교에 이어지는 대학 및 직업 교육 과정의 총칭)은 노동시장에서 성공의 핵심 결정 변수로 간주된다. 그러나 3차 교육의 인기가 점점 더 증대됨에 따라,

이는 더 이상 이전만큼 기량있는 노동력이라는 것을 나타내지 못한다. 인지 및 비인지적 측면에서 국제학생들의 스킬은 평균 이상이기 때문에, 고용주들은 국제교환프로그램에 참여한 학생을 새로운 신호발송 수단으로 간주하는 것 같다. 교환프로그램에 참여하는 학생들은 자기개발 측면에서 해외유학에 대한 긍정적인 영향을 강조한다. 신호발송이론과 인적 자본 이론 측면에서 해외유학과 임금 간에 양(+)의 상관관계를 가진다고 예측한다. 평균적으로 유럽 학생들의 16%는 그들의 소득에 있어 Erasmus 교환프로그램 참여의 긍정적인 영향이 있다고 응답하였고, 폴란드 학생을 포함하여 CEE 국가 학생들은 더욱더 높은 양의 상관관계가 있다고 응답하였다. 적어도 한 학기 이상의 해외유학이 폴란드 고학력 졸업자들의 임금에 영향을 미치는지 여부를 파악하기 위해, OLS를 이용하여 확장된 Mincer 임금 방정식(Mincer wage equation)을 추정하였다. 기초 데이터는 2007년 실시된 폴란드 졸업생 추적 조사 자료를 이용하였고, 고학력 졸업자들의 첫 직장에서의 순 시간당 임금율(hourly net wage rate)이 종속변수로 사용되었다. 선택 바이어스(selection bias)를 줄이기 위해, 학생들의 능력과 기술을 설명하는 3개의 변수가 모형에 사용되었다. 분석결과에 따르면, 적어도 1학기 이상 유학한 폴란드 학생들은 졸업 후 첫 직장에서 35%의 임금 프리미엄을 누릴 수 있었고, 임금 프리미엄은 학사 학위 졸업생(48%)의 경우 석사학위 졸업생(26%)보다 더 높았다.

**【SEX WORK VS. SEXUAL EXPLOITATION: ASSESSING GUESSTIMATES FOR PROSTITUTION IN THE EUROPEAN UNION by PHILIPPE ADAIR from UNIVERSITY PARIS-EST CRÉTEIL (UPEC), FRANCE】**

EU-28개 국가에서 성매매 제도는 금지, 규제 그리고 폐지되었다. 경제학적 문헌에서는 이러한 유형을 자발적인 성 노동(free sex work)과 강압적인 노동력 매매(forced labour trafficking)의 두 가지 관점에서 다루고 있다. 성 매매 시장(sex market)의 규모와 성 노동자들의 비공식적

고용을 측정하기 위해서, 수요측면과 공급측면에서 데이터 원천을 검토하고, 이러한 원천을 토대로 1A와 1B를 추정하여 계산하였다. 그리고 세계보건기구(WHO)의 성 노동자 사이에서의 HIV 유병률을 토대로 2A와 2B를 추정하였다. 마지막으로 UNODC와 Eurostat 자료를 토대로, 성 착취 매매(sexual exploitation trafficking)의 희생자들로부터 추정치 3을 계산했다. 1인당 GDP, 입법제도, 공급 및 수요측면의 변수들을 이용하여 EU-28 국가들에서의 5개의 성매매 추정치를 테스트하기 위해 OLS 모형을 만든 후, 어떤 추정치가 2010년 불법 생산과 소비 지출에 대한 국민계정 조정에 있어서 GDP 증대와 관련하여 가장 최적의 추정치인지를 평가하였다. 그 결과 거시경제 정책을 위한 벤치마크로써 사용될 지도 모르는 하한 추정치(lower bound Estimate)를 도출해냈다.

## ○ Business & Economics, Quantitative Methods 세션 주요 내용

### 【UNTANGLING FIXED EFFECTS AND CONSTANT REGRESSORS by RUTGER TEULINGS from UNIVERSITY OF AMSTERDAM, THE NETHERLANDS】

패널 데이터 모형에서 고정효과들(FE)은 서로 서로 중복되고, “상수” regressors의 영향 식별을 어렵게 한다. 시간 고정효과(FE)가 있는 국가별-시계열 패널에서 국가들의 상수 regressor를 생각해 보면, 전통적인 접근법은 그 영향을 0으로 정규화함으로써, 일부 고정효과(FE)와 상수 regressor를 제거하는 것이다. 고정효과(FE)와 상수 regressor를 직교화하는 것을 의미하는 “정규화 해법(untangling normalization)”을 소개한다. 분리된 고정효과들(untangled FEs)은 더 이상 서로 중첩되지 않고 각각의 고정효과들의 편차를 알 수 있기 때문에, 분리된 고정효과들(untangled FEs)은 훨씬 더 해석하기 용이하다. 그러므로 상수 regressor의 영향은 추정될 수 있고, 분리된 고정효과들(untangled FEs)은 추정치가 실제값을 반영하는 범위를 나타낸다. 분리된 추정치들(untangled estimates)은 전통적인

0으로 정규화된 추정치의 선형변형이므로, 이 접근법을 OECD 국가들의 대미 수출을 위한 중력모형(gravity model)에 적용했다. 일정한 regressors(미국 GDP, 전세계 GDP, 미국 유효환율)들은 시간 고정효과의 90%를 설명했고, 시간 고정효과는 충분하지 않다는 것을 입증하기 위해 F-test를 사용했으며, 그 결과 일정한 regressors의 추정영향은 실제로 실제값을 반영한다는 것을 보였다.

**【PROTECTION OF PRIVACY FOR RESPONDENTS IN A RANDOMIZED RESPONSE SURVEY WITH A CONTINUOUS RESPONSE VARIABLE by MAUSUMI BOSE from INDIAN STATISTICAL INSTITUTE, INDIA】**

일부 사회경제 조사에 있어, 조사관은 민감하거나 사실상 수치감을 줄 수 있는 조사문항에 대한 정보를 수집해야 할 때가 있다. 예를 들어, 응답자의 범법 행위나 범죄경력, 조세당국에 신고하지 않은 소득 수준, 주량 또는 불법마약 그리고 사회경제적으로 관련된 유사범죄 문제 등에 대해 질문해야 할 수도 있다. 면접관은 불응이나 부정확한 응답에 대한 우려로 이러한 이슈들에 대한 직접적인 질문을 할 수 없을 수도 있다. 이러한 조사에서 선호되는 옵션은 임의추출 응답 기법을 사용하는 것으로, 무작위 추출 장치를 통해 조사를 실시하여 응답자의 프라이버시를 보호할 수 있다. 본 연구에서는 무작위추출 응답 기법 사용을 통해 응답자에 따라 프라이버시 보호의 양 측정(a measure for the amount of privacy protection)을 제안한다. 프라이버시 보호의 희망 수준이 주어지면, 주어진 보호 수준에서 무작위 추출 방식의 파라미터를 선택하고, 관심 파라미터의 효율적인 추정치를 입수할 수 있다. 일정 수준의 프라이버시 보호가 보장될 수 있다면, 이러한 민감한 조사에 참여하고자 하는 응답자도 증가할 것으로 기대한다.

○ Social Sciences & Humanities 세션 주요 내용

**【CASH-FOR-CARE POLICY IN SWEDEN: A STUDY OF ITS CONSEQUENCES ON FEMALE EMPLOYMENT by ANN-ZOFIE DUVANDER from UNIVERSITY OF STOCKHOLM, SWEDEN】**

2008년에 스웨덴은 공적 양육 보조금을 지급하지 않는 1세에서 3세 사이의 자녀를 가진 부모에게 지자체가 부담하는 정률 지급식의 양육수당을 도입했다. 부모의 “선택의 자유”를 증대하는 것이 주요 목적이었던 이 정책은 성 평등(gender equality)과 어머니 고용(mothers' employment)에 대한 잠재적인 부정적 효과 때문에 비난 받았다. 그러므로 스웨덴에서 여성고용에 대한 양육수당 효과에 중점을 두고 진행된 이 연구는 이러한 정책 시행이 비록 시골 지역에 국한된 현상이었지만, 여성고용에 있어 부(-)의 효과를 가진다는 것을 보여 주었고, 결국 2016년에 스웨덴에서 양육수당은 폐지되었다. 정책시행 기간 동안 여성고용에 대한 정책 효과를 평가하는 것은 중요한데, 이는 유사 정책이 再 도입 될 경우 어떠한 일이 발생할 수 있을지 시사하기 때문이다.

## 1 통계개발원의 홍보 효과

- 정규세션에서의 연구성과 발표 및 Proceedings 출간을 통해 국제 사회에서의 한국 통계청 및 통계개발원을 홍보할 수 있는 기회의 장으로 활용
  - Proceedings(ISSN:2336-5617)는 10월 9일 출간 예정
- 국외 전문가 및 정책입안자들과 인적 네트워크 구축 및 향후 공동연구 가능성 타진을 통해 통계청 및 통계개발원 위상 제고

## 2 연구역량강화를 위한 기회로 활용

- 통계개발원 직원들의 국제무대의 활발한 활동을 독려하고, 다양한 경험을 통해 연구성과를 공유하고 논의할 수 있는 수 있는 인적 역량 강화의 기회로 활용할 필요가 있음
- 각 분야 연구전문가들과의 Insight를 공유하고, 최신 연구 동향 파악 및 선진 연구기법을 Benchmarking하여 향후 연구 Quality 향상에 기여



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27 June 2016

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Dear Ms. SON,

We are pleased to inform you that your submission has been peer-reviewed by the Program Committee. Based on the recommendation of the reviewers and on the decision of the conference chair your above paper **has been accepted** for oral presentation at the **25th International Academic Conference, OECD Headquarters, Paris** organized by the International Institute of Social and Economic Sciences in **06 September 2016 to 09 September 2016 in Paris, France.**

You are invited to participate in the conference.

Your full paper **will be published in the Conference Proceedings with ISBN. The Conference Proceedings are indexed in RePEc, Google Scholar, Research gate and Research Bible.**

If you need visa, present this letter to the embassy. We advise not to buy air ticket until you have visa.

The registration fee does not include food and lodging.

Sincerely,

Professor Robert Holman  
Conference Chair



# Trust, Economic Growth and Importance of the Institution

Heekyung SON  
Statistics Korea

## 1. Introduction

Nowadays, the gap in Korean economy between the rich and the poor has been getting much bigger and bigger. On top of that, Korean economy has had difficulties in the sustainable growth due to the mounting calls for economic democratization. To keep making economic development continuously, there is a newly widespread awareness that it is definitely important to accumulate not only the physical and human capital but also the social capital. Many people have been paying attention to the trust which is one of the most representative factors in the social capital from an economic point of view as there are increasing empirical evidences to demonstrate pretty convincingly that the social capital significantly contributes to the economic growth.

The form of social capital to promote cooperation of members of society is broadly composed of the network, the norm and the trust. Among them, the trust is used the indicator measuring the social capital directly. In addition, a lot of researchers have started to conduct researches since the late of 1990s as the trust is stressed as a factor affecting the economic growth concretely. Trust which represents the social capital consists of the private trust and the public trust. But I selected the public trust in this paper since it was definitely difficult to measure the private trust and analyzed the economic growth based on the public trust. First of all, I introduced social capital denoting the trust, especially the public trust as the economic variable and analyzed how the trust has an impact on the economic growth and what kind of factors make the level of trust changed after scrutinizing closely existing researches and checking out the role of trust as the social capital and the importance of trust for the economic development. As for the analysis of the variable factor for the level of trust, I made use of detailed institutional variables such as the political stability, the level of law and order, whether corruption is controlled or not, economic freedom and so on so that I could analyze them empirically and deduce implications from its findings.

## 2. Existing researches

According to findings from existing researches about the social capital, The fact is that social trust is one of the main factors which causes the economic growth since it exerts a significant effect on economic activities.

Arrow(1972) denoted that most of the economic backwardness around the world ultimately can be explained by the lack of mutual trust since almost all of business transactions contain the factor which means trust. It is sufficiently possible to insist that a lot of developing countries all over the world have a great difficulty in developing their economies due to the lack of mutual trust.

Putnam et al(1993) suggested that the social capital is even more important than physical and human capital for the economic growth as it can hasten economic activities through various channels.

Fukuyama(1995) pointed out that trust is the essential factor to determine the economic achievement and the level of trust that a society indigenously has in a country decides a country's welfare or competitiveness. Social capital has such characteristics of the public goods that people who do not participate in building the social capital directly can take advantage of it. Furthermore, social capital gets still bigger and bigger when the more members of society positively take part in setting up social capital, the more they exploit actively. After all, social capital has a positive externality as the more we use it, the bigger personal and social utility get. A country that accumulates social capital from this kind of characteristics of social capital can reduce costs for information and transactions so that it is able to boost its economy more and more. In other words, people living in the society that has high level of trust do not depend on legal regulations or contracts of employment but cut down on costs for companies through mutual trust among staff working together. And trust also has a positive effect on the economic growth indirectly by increasing the human capital and the real investment.

Knack and Keefer(1997) and Zak and Knack(2001) also described that there has a positive correlation between the economic growth rate or the level of income and the level of trust with empirical analysis using data from the World Value Survey. They made use of Barro's investment and growth regression and analyzed 29 market countries so that they proved there is positive correlation between trust and the economic growth. Especially, Knack and Keefer(1997) applied to the issue of Fukuyama(1995) for the empirical analysis and showed that the more a country that accumulates social capital, the higher economic growth rate is.

Zak and Knack(1998) extended the sample used in the model of Knack and Keefer(1997) and indicated that the low level of trust reduces the economic growth and investment.

Knack(2001) suggested that there is positive correlation which is statistically significant between social trust taking advantage of 2SLS with hierarchical religion used as the Instrument Variable. Whiteley(2001) exploited the growth model of the neo-classical

school and analyzed cross-sectional data from 34 countries from 1970 to 1992 with the growth rate of GDP per capita and found that there is the relation between trust and the economic growth. Depending on the result, all of the indicators of trust have a positive correlation and they affect as significantly as the human capital on the economic growth.

### 3. Analysis on the Trust and Economic Growth

#### 1) Description of Data

In a variety of research regarding the social capital, Data from the World Value Survey is used as the way to measure the trust. But there has been various issues related to the specific meaning of trust and its accuracy about trust dealt in this survey. Among them, Johnson and Mislin(2012) showed that the result of measuring the trust in the World Value Survey did not have any correlation with trustworthiness which means whether you can trust other people but had a strong correlation with the experimental trust which means whether you have an intention or a mind to trust other people.

Therefore, I picked the Corruption Perception Index(CPI)<sup>1</sup> up as the indicator representing the "trust" instead of using data from World Value Survey since I could let me compare its CPI with those of other countries and analyzed data of the CPI from 34 OECD member countries from 2001 to 2013 so that I looked empirically into what kind of the correlation between the level of trust and the economic growth there is.

Examining variables used to estimate the rate of economic growth, I regarded the CPI as the variable of trust in this paper so that I regress it on the growth rate of real GDP per capita that is the major independent determinant.

Barro(1999) pointed out several variables as the factor as followings to determine the growth rate of real GDP per capita. I adopted the explanatory variables by taking the natural log of the investment as a portion of the GDP. In addition, I measured the economic openness with the enrollment rate of the primary schools, the enrollment rate of the secondary schools and the sum of the export and import over the GDP getting all of the related data from the WDI database<sup>2</sup>

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1 Transparency International(<https://www.transparency.org>) has been compiling and announcing the indicator of trust in the public area that measures the level of corruption perception from 0(highly corrupt) to 100(Very clean) on a annual basis.

2 <http://databank.worldbank.org/data/home.aspx>

< Table1> Basic Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
gdp_rate	overall	1.23	2.99	-14.57	11.07	N=416
	between		1.06	-0.45	4.40	n= 32
	within		2.80	-17.74	7.89	T= 13
cpi	overall	71.20	18.03	29.71	99.00	N=416
	between		17.88	34.29	93.97	n= 32
	within		3.84	59.52	86.06	T= 13
ln_gdp	overall	0.43	0.86	-3.35	2.40	N=416
	between		0.44	-0.24	1.55	n= 32
	within		0.75	-2.86	1.93	T= 13
gov_f	overall	18.97	4.03	9.95	28.06	N=416
	between		3.94	10.97	25.64	n= 32
	within		1.11	15.73	23.06	T= 13
invest	overall	22.70	3.93	11.77	39.36	N=416
	between		2.82	17.73	30.94	n= 32
	within		2.77	12.49	36.51	T= 13
open	overall	89.55	54.69	20.26	371.44	N=416
	between		54.29	26.65	313.60	n= 32
	within		11.38	32.52	147.39	T= 13
edu1	overall	89.67	33.74	0.00	121.58	N=416
	between		9.81	60.49	99.17	n= 32
	within		32.33	-9.50	129.23	T= 13
edu2	overall	92.51	36.56	0.00	159.15	N=416
	between		15.54	54.98	128.02	n= 32
	within		33.20	-35.51	141.61	T= 13
internet	overall	60.03	23.14	0.00	96.55	N=416
	between		17.31	23.30	86.74	n= 32
	within		15.63	5.07	88.07	T= 13
ecofree	overall	70.80	7.05	50.60	83.10	N=416
	between		6.84	58.42	81.59	n= 32
	within		2.08	62.98	76.58	T= 13

## 2) Estimated Model

I exploited the model of Barro(1991, 1996) in order to analyze empirically how trust affects the economic growth and the equation is as follows.

$$\nabla Y_{i,t} = \beta_0 \log y_{i,0} + \beta_1 X_{i,t} + \beta_2 Z_{i,t} + \varepsilon_{i,t} \quad (1)$$

In this equation,  $\nabla Y_{i,t}$  means the real growth rate of GDP per capita,  $\log y_{i,0}$  is the initial GDP per capita,  $X_{i,t}$  is the growth factors used in the growth model of Solow which consist of the set of variables such as investment, government expenditure, human capital and so on but it is considered as the public trust. However, It contains that there might be possibility to have endogeneity between the variables which are the real growth rate of GDP per capita and trust. Therefore, I scrutinized the Two Stage Least Square(2SLS) to control endogeneity between the variables.

## 3) Analysis Result

<Table 2> is the estimated result to analyze empirical data using the equation (1) of the Barro's economic growth. It shows that the estimated result of the Pooled OLS only used one independent variable, the CPI as the trust variable and those of panel data(Fixed Effect Estimator).

< Table 2> Estimated Result between the level of public trust and the growth rate of the GDP per capita

	(1)	(2)	(3)
VARIABLES	Pooled OLS	RE	FE
cpi	0.00673 [0.00671]	0.00673 (0.00671)	-0.0458* (0.0264)
ln_gdp	1.955*** [0.130]	1.955*** (0.130)	1.815*** (0.136)
gov_f	-0.0664** [0.0289]	-0.0664** (0.0289)	-0.543*** (0.0964)
invest	0.197***	0.197***	0.341***

	[0.0291]	(0.0291)	(0.0420)
edu1	-0.00152	-0.00152	-0.0210**
	[0.00816]	(0.00816)	(0.00943)
edu2	0.00267	0.00267	0.0212**
	[0.00778]	(0.00778)	(0.00921)
open	-0.000725	-0.000725	0.0317***
	[0.00198]	(0.00198)	(0.00914)
Constant	-3.356***	-3.356***	3.354
	[1.010]	(1.010)	(3.010)
Observations	416	416	416
R-squared	0.484		0.544
Number of idcode		32	32

Standard errors in brackets  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Considering some of existing studies which depend on the OLS estimation using mean data from the long periods, It is a little bit new try to analyze data with the panel analysis. In other words, Some estimated results were not consistent from the point of significance or directionality since they took an average of data from the duration of specific waves. So I decided to do the panel analysis instead of using OLS estimation so as to solve this problems and also estimated data by picking up the 2SLS with the instrument variable in order to avoid the possibility of the endogenous problem.

The Hausman Test suggests that it is suitable to choose the estimator of the Fixed and found out that there is no reason to regard the variable of the level of trust as having endogeneity. Furthermore, shown as the table 2, the estimators of the level of public trust and the growth rate of GDP per capital are statistically significant at the level of 10%..(Refer to the Appendix 1)

Therefore, I adopted the Fixed Effect OLS and it said that all of the variables are statistically significant from 2001 to 2013, especially the government expenditure and investment as the portion of the GDP and the economic openness highly significant. In addition,  $R^2$  which mean the fitness of the model was 0.54 and relatively significant compared to those of other models.

By the way, the Fixed Effect Estimator shows the negative correlation between the level of public trust and the growth rate of the GDP per capita, while those of other OLS

methods represented the positive correlation between them. This kind of phenomenon denoted that the results of the Fixed Effect Estimator was statistically significant since they reflect the characteristics of data but those of other OLS had a tendency to be overestimated. That is, having the high level of the corruption perception represents that the member of society set up a lot of institutional restrictions to avoid the corruption initiatives, which means that the OECD member countries is composed of advanced countries so that effects of future initiative institutions were reflected to the CPI.

## 4. Variable Factors of Public Trust

Until now, I looked into the correlation between the public trust and the economic growth. So from now on, I would like to study what kind of factors can make the public trust to be changed. Berggren and Jordahl(2006) is one of the prominent theses and it analyzed variable factors of the social trust by making use of ways of institutionalism. In this paper, they focused and analyzed the variables of economic freedom and its components. They admitted that it was not sufficient to do some analysis including economic variables and variables of the policy but there are some findings to analyze models including inequality of the income or the law and order in existing researches.

### 1) Model and Data

To set the model to analyze the level of social trust and figure out what kinds of factors makes it change, I set up the model as below adopting the institutional variable used in Knack and Keefer(1997) and Knack and Zalk(2002).

$$Trust_{i,t} = \alpha + \delta_1 B_{i,t} + \psi_2 + Z_{i,t} + \epsilon_{i,t} \quad (2)$$

$Z_{i,t}$  is the institutional variables<sup>3</sup> including the political stability(Political\_Stability), the rule of law(Rule\_law), the control of corruption(control\_corruption) and the economic freedom(ecofree).

$Trust_{i,t}$  is the variable which presents the level of trust and it is used CPI already exploited to analyze what kind of the effect the public trust have on the economic achievement.

$B_{i,t}$  is the social economic condition which consist of the unemployment and poverty and it means the indicator of an evaluation of pressure that might put a pressure on the government policy and cause social discontent. So  $B_{i,t}$  describes that the bigger this

<sup>3</sup> <http://knoema.com/>

indicator gets, the worse the social economic condition is. The social distance is internet density which means the number of using the internet per 100 people and it indicates that the social distance gets smaller as the number gets more. Lastly,  $Z_{it}$  is a institutional variable and is regarded as the political stability, the rule of law, the control of corruption and the economic freedom.

## 2) Analysis Result

Quoting the empirical analysis method from the Knack and Zack(2002) in order to avoid the multi-collinearity among variables, I could analyze the macro-economic variable factors about the level of the social trust based on the variable of a social economic condition, the variable of a social distance and so on with a variety of institutional variables substituted stepwise,

<Table 3> Result to analyze determinants of the level of the public trust

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
econ	- 0.387*** [0.0803]	- 0.369*** -0.0795	- 0.368*** -0.0792	- 0.360*** -0.0807	- 0.410*** -0.0813	- 0.375*** -0.0824	- 0.358*** -0.082
internet	-0.0158 [0.0132]	0.0301** -0.0137	0.0283** -0.0137	0.0282** -0.0137	-0.0112 -0.0146	0.000414 -0.0153	0.00108 -0.0152
ecofree	0.396*** [0.0977]	0.362*** -0.0971	0.352*** -0.0969	0.358*** -0.0977	0.369*** -0.0967	0.339*** -0.0972	0.280*** -0.099
control_corruption		1.437*** -0.446	3.408*** -1.112	3.271*** -1.139	4.301*** -1.173	5.686*** -1.321	5.838*** -1.312
Government_Effectiveness			-2.277* -1.177	-2.408** -1.201	0.262 -1.458	1.516 -1.556	2.172 -1.564
Political_Stability				0.498 -0.888	0.904 -0.887	1.663* -0.946	2.109** -0.954
Regulatory					- 4.808*** -1.525	-3.360** -1.65	-1.488 -1.787
Rule_law						-4.902**	-3.278



						-2.195	-2.265
Voice							-
							5.219***
							-1.996
Constant	46.94***	48.27***	49.29***	48.76***	48.19***	49.80***	53.97***
	[6.802]	-6.733	-6.729	-6.8	-6.724	-6.727	-6.863
Observations	416	416	416	416	416	416	416
R-squared	0.123	0.147	0.155	0.156	0.177	0.188	0.203
Number of idcode	32	32	32	32	32	32	32

Standard errors in brackets  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Checking out the level of the public trust for how the institutional variable influences, It is statistically significant that Improving the economic and social condition is increasing the public trust. As for the variable of the number of using the internet per 100 people is statistically significant in some of equations, equation (2), equation (3) ad equation (4), which means that it got to improve partially the public trust to reduce the social distance.

The estimators of the economic freedom and the control of corruption are also statistically significant in all of the equations above, which shows that efforts to control corruption and the economic freedom play an important role in improving the trust. Furthermore, the Voice and Accountability, the Government Effectiveness, the Political Stability and Absence of Violence/Terrorism, the Regulatory Quality and the Rule of Law are statistically significant in some models as shown in the <Table 3>.

### 5. Conclusion

As discussed above, I analyze the correlation between the public trust and the economic growth and variable factors of the public trust. The CPI has a positive correlation with the growth rate of the real GDP per capita in the pooled OLS and random effect panel analysis while it has a negative correlation with them in the fixed effect panel analysis, which means there are a variety of regulations to control corruption and the more members of society put even more efforts to abide by social norms, the more negative the growth rate of the real GDP per capita gets as time goes by. I think that's why almost all of advanced countries already built such enough social norms and standards that they do not play any significant role in economy. From this empirical analysis, I could check out that there are various factors such as the

control of corruption, the law and order, the government effectiveness and so on and this kind of institutional things play really important roles in increasing the trust. Therefore, It is no doubt that there is a significant correlation between trust and the economic growth and it is definitely important to accumulate the social capital, trust and to reduce corruption.

## Appendix. Panel Analysis between the public trust and the economic growth

### ■ Pooled OLS estimator

```

Random-effects GLS regression           Number of obs   =       416
Group variable: idcode                 Number of groups =        32

R-sq:  within = 0.4705                 Obs per group:  min =        13
      between = 0.6914                   avg =       13.0
      overall = 0.4845                   max =        13

corr(u_i, X) = 0 (assumed)             Wald chi2(7)    =    383.44
                                         Prob > chi2     =     0.0000
    
```

gdp_rate	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
cpi	.006733	.0067138	1.00	0.316	-.0064258	.0198917
ln_gdp	1.954898	.1302212	15.01	0.000	1.699669	2.210127
gov_f	-.0664079	.0289204	-2.30	0.022	-.1230908	-.009725
invest	.1969005	.0291063	6.76	0.000	.1398533	.2539478
edu1	-.0015174	.0081578	-0.19	0.852	-.0175065	.0144717
edu2	.0026697	.0077758	0.34	0.731	-.0125706	.0179099
open	-.000725	.0019769	-0.37	0.714	-.0045998	.0031497
_cons	-3.355744	1.010323	-3.32	0.001	-5.335941	-1.375548
sigma_u	0					
sigma_e	1.9855988					
rho	0	(fraction of variance due to u_i)				

## ■ Between estimator

```

Between regression (regression on group means)   Number of obs   =   416
Group variable: idcode                         Number of groups =   32

R-sq:  within = 0.3899                          Obs per group:  min =   13
        between = 0.8075                          avg =   13.0
        overall = 0.4413                          max =   13

                                                F(7,24)         =   14.39
sd(u_i + avg(e_i.))= .5309072                  Prob > F         =   0.0000
    
```

gdp_rate	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
cpi	.0094031	.0070309	1.34	0.194	-.005108	.0239142
ln_gdp	2.101887	.2474609	8.49	0.000	1.591153	2.612621
gov_f	-.0109681	.0287556	-0.38	0.706	-.0703168	.0483805
invest	.0667851	.0384474	1.74	0.095	-.0125665	.1461368
edu1	.019617	.0156889	1.25	0.223	-.0127634	.0519973
edu2	-.0111711	.011767	-0.95	0.352	-.0354569	.0131147
open	-.001297	.001843	-0.70	0.488	-.0051008	.0025067
_cons	-2.270415	1.595115	-1.42	0.168	-5.562571	1.02174

## ■ Fixed estimator

```

Fixed-effects (within) regression               Number of obs   =   416
Group variable: idcode                         Number of groups =   32

R-sq:  within = 0.5438                          Obs per group:  min =   13
        between = 0.2982                          avg =   13.0
        overall = 0.2666                          max =   13

                                                F(7,377)        =   64.19
corr(u_i, Xb) = -0.8242                        Prob > F         =   0.0000
    
```

gdp_rate	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
cpi	-.0458259	.0263937	-1.74	0.083	-.0977231	.0060713
ln_gdp	1.815328	.1358542	13.36	0.000	1.548201	2.082455
gov_f	-.5429157	.0963792	-5.63	0.000	-.7324238	-.3534076
invest	.3406905	.0419793	8.12	0.000	.2581475	.4232335
edu1	-.0210363	.0094348	-2.23	0.026	-.0395878	-.0024849
edu2	.0211834	.009206	2.30	0.022	.0030817	.039285
open	.0317197	.009136	3.47	0.001	.0137559	.0496835
_cons	3.353828	3.010298	1.11	0.266	-2.56525	9.272906
sigma_u	3.095159					
sigma_e	1.9855988					
rho	.7084437	(fraction of variance due to u_i)				

```

F test that all u_i=0:      F(31, 377) =      3.51      Prob > F = 0.0000
    
```

## ■ Random effect estimator & MLE

```

Random-effects GLS regression                Number of obs   =   416
Group variable: idcode                     Number of groups =   32

R-sq:  within = 0.4705                    Obs per group:  min =   13
        between = 0.6914                  avg =   13.0
        overall = 0.4845                  max =   13

corr(u_i, X) = 0 (assumed)                Wald chi2(7)    =   383.44
                                           Prob > chi2     =   0.0000
    
```

gdp_rate	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
cpi	.006733	.0067138	1.00	0.316	-.0064258	.0198917
ln_gdp	1.954898	.1302212	15.01	0.000	1.699669	2.210127
gov_f	-.0664079	.0289204	-2.30	0.022	-.1230908	-.009725
invest	.1969005	.0291063	6.76	0.000	.1398533	.2539478
edul	-.0015174	.0081578	-0.19	0.852	-.0175065	.0144717
edu2	.0026697	.0077758	0.34	0.731	-.0125706	.0179099
open	-.000725	.0019769	-0.37	0.714	-.0045998	.0031497
_cons	-3.355744	1.010323	-3.32	0.001	-5.335941	-1.375548
sigma_u	0					
sigma_e	1.9855988					
rho	0	(fraction of variance due to u_i)				

```

Random-effects ML regression                Number of obs   =   416
Group variable: idcode                     Number of groups =   32

Random effects u_i ~ Gaussian              Obs per group:  min =   13
                                           avg =   13.0
                                           max =   13

Log likelihood = -907.04205                LR chi2(7)     =   275.72
                                           Prob > chi2     =   0.0000
    
```

gdp_rate	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
cpi	.0054741	.0083566	0.66	0.512	-.0109045	.0218528
ln_gdp	1.922613	.1348561	14.26	0.000	1.6583	2.186926
gov_f	-.0956926	.0454319	-2.11	0.035	-.1847375	-.0066477
invest	.2365423	.0444218	5.32	0.000	.1494771	.3236075
edul	-.007222	.009659	-0.75	0.455	-.0261534	.0117094
edu2	.0075453	.0090908	0.83	0.407	-.0102723	.0253629
open	.0000577	.0026474	0.02	0.983	-.0051312	.0052465
_cons	-3.606253	1.162055	-3.10	0.002	-5.883839	-1.328667
/sigma_u	.5114186	.2641454			.1858381	1.407402
/sigma_e	2.094642	.0817351			1.940417	2.261125
rho	.0562583	.0566229			.0051296	.2719254

Likelihood-ratio test of sigma\_u=0: chibar2(01)= 1.63 Prob>=chibar2 = 0.101

Variable	GLS	MLE
#1		
cpi	0.0067	0.0055
	0.0067	0.0084
ln_gdp	1.9549	1.9226
	0.1302	0.1349
gov_f	-0.0664	-0.0957
	0.0289	0.0454
invest	0.1969	0.2365
	0.0291	0.0444
edu1	-0.0015	-0.0072
	0.0082	0.0097
edu2	0.0027	0.0075
	0.0078	0.0091
open	-0.0007	0.0001
	0.0020	0.0026
_cons	-3.3557	-3.6063
	1.0103	1.1621
sigma_u		
_cons		0.5114
		0.2641
sigma_e		
_cons		2.0946
		0.0817

legend: b/se

### ■ Between/Fixed/Random effect estimator

Variable	be_model	fe_model	re_model
cpi	.0094	-.0521	.00673
ln_gdp	2.1***		1.95***
gov_f	-.011	-.652***	-.0664**
invest	.0668*	.449***	.197***
edu1	.0196	-.0116	-.00152
edu2	-.0112	.014	.00267
open	-.0013	.0305***	-.00073
_cons	-2.27	4.13	-3.36***

legend: \* p<.1; \*\* p<.05; \*\*\* p<.01

## ■ Hausman Test

```
.
. hausman fe re, sigmamore
```

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
cpi	-.0458259	.006733	-.0525588	.0280051
ln_gdp	1.815328	1.954898	-.1395703	.0708201
gov_f	-.5429157	-.0664079	-.4765078	.1011062
invest	.3406905	.1969005	.14379	.0353676
edu1	-.0210363	-.0015174	-.0195189	.006279
edu2	.0211834	.0026697	.0185137	.006359
open	.0317197	-.000725	.0324447	.0097704

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

```
chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          = 72.60
Prob>chi2 = 0.0000
```

=> Null hypothesis was rejected at the level of 1% significance since the p value is smaller than 0.01.  
 Therefore, it is proper to choose not the random effect model but the fixed effect model as the estimator of  
 the random effect model is not a consistent estimator

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일자	세션	내 용
9.6 (화)		Registration
		Welcome Party
9. 7 (수)	<b>Session 1.</b> Business & Economics	<ul style="list-style-type: none"> <li>▪ DAILY CURRENCY INTERVENTIONS IN EMERGING MARKETS: INCORPORATING RESERVE ACCUMULATION</li> <li>▪ ESTIMATING DEMAND FOR NEW GRADUATES IN THE UK 1999 - 2015</li> <li>▪ TRUST, ECONOMIC GROWTH AND IMPORTANCE OF THE INSTITUTION</li> <li>▪ TAYLOR RULES AND THE INTEREST RATE BEHAVIOR IN ALGERIA</li> <li>▪ THE EFFECTIVENESS OF PERSONAL FINANCIAL PLANNING OF RUBBER FARMERS IN THAILAND: CASE STUDY OF SURATTHANI PROVINCE</li> </ul>
	<b>Plenary Session</b>	<ul style="list-style-type: none"> <li>▪ Welcome Address: Robert Holman Conference Chair and Director of the ISES</li> <li>▪ RECOVERY PATTERNS FROM THE GREAT FINANCIAL CRISIS ANDREAS WÖRGÖTTER UNIVERSITY OF TECHNOLOGY, AUSTRIA</li> </ul>
	<b>Session 2.</b> Business & Economics	<ul style="list-style-type: none"> <li>▪ FRIEND OR FOE? A CONCEPTUALISATION OF THE EFFECTS OF TELEWORK ON THE WORK ENVIRONMENT</li> <li>▪ EFFECTS OF LOGISTICS CAPABILITIES ON EFFICIENCY OF AUTOMOTIVE PARTS INDUSTRY IN THAILAND</li> <li>▪ FACTORS AFFECTING SUCCESS OF KNOWLEDGE MANAGEMENT IN THAI AGRIBUSINESS ORGANIZATIONS</li> <li>▪ PERSONAL FACTORS AFFECTING TO THE SAVING BEHAVIOR OF PEOPLE IN BANGKOK METROPOLITAN REGION, THAILAND</li> <li>▪ STRENGTHENING BUSINESS ECOSYSTEMS BY BRIDGING SOCIAL CAPITAL: AN APPROACH FOR SOCIAL ENTREPRENEURS</li> <li>▪ EXPLORING THE RELATIONSHIP BETWEEN SKILLS DEVELOPMENT TRANSFER AND ORGANISATIONAL COMMITMENT, A CASE OF FREES</li> <li>▪ THE POSSIBLE EFFECTS OF BREXIT TO THE SOUTH AFRICAN ECONOMY</li> </ul>
	<b>Session 3.</b> Business & Economics, Quantitative	<ul style="list-style-type: none"> <li>▪ THE EFFECT OF LOGISTIC BUSINESSES' GREEN WAREHOUSE MANAGEMENT PRACTICES ON BUSINESS PERFORMANCE</li> <li>▪ ENTREPRENEURIAL LEADERSHIP: A THEORETICAL RESEARCH</li> <li>▪ PROTECTION OF PRIVACY FOR RESPONDENTS IN A</li> </ul>

일자	세션	내 용
	Methods	RANDOMIZED RESPONSE SURVEY WITH A CONTINUOUS RESPONSE VARIABLE <ul style="list-style-type: none"> <li>■ UNTANGLING FIXED EFFECTS AND CONSTANT REGRESSORS</li> </ul>
	<b>Session IV.</b> Social Sciences & Humanities, Law in Society	<ul style="list-style-type: none"> <li>■ LEGAL IMPROVEMENT ON PUBLIC-PRIVATE PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT OF BASIC INFRASTRUCTURES IN CLMV COUNTRIES</li> <li>■ INDONESIA'S EFFORTS TOWARDS MALAYSIA'S CULTURE CLAIM</li> <li>■ HOW WAS CREATED A SOUL</li> </ul>
9. 8 (목)	<b>Session V.</b> Business & Economics	<ul style="list-style-type: none"> <li>■ RESPECT DIFFERENCES: ROLE OF NATIONAL CULTURES IN SUBSIDIARY AUTONOMY IN GLOBAL PRODUCT DEVELOPMENT</li> <li>■ THE ELEMENTS OF EVENT SPORTS TOURISM MANAGEMENT OF FOOTBALL CLUBS IN THAI PREMIER LEAGUE</li> <li>■ ECONOMIC GROWTH IN IRAN THROUGH LABOR PRODUCTIVITY GROWTH</li> <li>■ RELATIONSHIP BETWEEN FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN TURKEY AFTER THE GLOBAL FINANCIAL CRISIS</li> <li>■ ECONOMIC TRANSITION IN ALGERIA: A REVIEW IN WAKE OF THE RECENT OIL CRISIS</li> <li>■ THE CHALLENGES OF INDIA ECONOMY IN CURRENT INTERNATIONAL ECONOMICS ENVIRONMENT</li> </ul>
	<b>Session VI.</b> Teaching & Education	<ul style="list-style-type: none"> <li>■ INTELLIGENT COACHING SYSTEMS IN HIGHER-ORDER APPLICATIONS: LESSONS FROM AUTOMATED CONTENT CREATION BOTTLENECKS</li> <li>■ WHAT DO EDUCATIONAL SUPERINTENDENTS THINK ABOUT MATHEMATICS REFORM IN TURKEY?</li> <li>■ RESPONDING TO RECENT STUDENT PROTESTS AT SOUTH AFRICAN UNIVERSITIES THROUGH CURRICULUM DEVELOPMENT</li> </ul>
	<b>Session VII.</b> Social Sciences & Humanities	<ul style="list-style-type: none"> <li>■ THE MANUFACTURING OF PROGRAMS- AN OVERVIEW OF INDIAN MEDIA</li> <li>■ NATION BUILDING IN FRAGILE STATES</li> <li>■ GENDERING UTOPIA: A FEMINIST LITERARY ANALYSIS OF MARGE PIERCY'S WOMAN ON THE EDGE OF TIME</li> <li>■ THE IMPACT OF SECURE-BASE LEADERSHIP ON JOB SATISFACTION: THE ROLE OF LEADERSHIP EFFECTIVENESS</li> <li>■ CASH-FOR-CARE POLICY IN SWEDEN: A STUDY OF ITS CONSEQUENCES ON FEMALE EMPLOYMENT</li> </ul>
	<b>Session IX.</b> Health & Welfare,	<ul style="list-style-type: none"> <li>■ ECONOMICS OF PIPELINES: THE UNITED KINGDOM CONTINENTAL SHELF (UKCS) AND THE CASE FOR GOVERNMENT INTERVENTION</li> <li>■ THE PREVALENCE OF SUICIDALITY DURING THE 2008</li> </ul>

일자	세션	내 용
	Enviroment and Sustainable Development, Technology and Science	ECONOMIC CRISIS IN PORTUGAL, ITALY, IRELAND, GREECE AND SPAIN. ■ SUSTAINABLE URBAN DEVELOPMENT IN THE COASTAL AREA OF VOULIAGMENI IN ATTICA ■ DESIGNING TAX POLICY TO PROMOTE AGRICULTURAL COOPERATIVES AND ENVIRONMENTAL PROTECTION IN CHINA ■ THE POTENTIAL FOR DEVELOPING NEW MATERIALS FOR A SUSTAINABLE BIOECONOMY
	<b>Session VIII.</b> Business & Economics	■ THE IMPACT OF MARKET ORIENTATION, BRAND IMAGE AND INTERNAL MARKETING ON BRAND ORIENTATION AND STRENGTHENING BR ■ APPLICATION OF IMPORTANCE PERFORMANCE ANALYSIS IN ASSESSING THE SERVICES QUALITY OF PASSANGER FERRY SERVICES ■ THE INFLUENCE OF DIVIDEND PAYMENTS, PROFITABILITY, LIQUIDITY AND FIRM SIZE FOR CASH HOLDINGS – CASE OF INDONESIAN MANUFACTURING COMPANIES ■ THE EFFECT OF CORPORATE REPUTATION ON COMMITMENT, TRUST, AND LOYALTY AND ITS IMPACT ON CUSTOMER BEHAVIOR OF GARUDA INDONESIA AIRLINE PASSENGERS IN BANDA ACEH, INDONESIA ■ THE EFFECT OF EARNINGS PER SHARE, BOOK VALUE AND SYSTEMATIC RISK ON EQUITY VALUATION IN MANUFACTURING COMPANY LISTED ON INDONESIAN STOCK EXCHANGE FOR THE YEAR 2011-2014
	<b>E-session</b>	■ THE ORGANIZATION ACQUIRING FOREIGN DIRECT INVESTMENT BY POLAND ■ A STUDY ON TRAVEL BLOGS AND WORD OF MOUTH COMMUNICATION ■ PROTECTION OF STEP CHILDREN IN THE TURKISH CIVIL LAW ■ USING THE SOCRATIC METHOD TO ENHANCE STUDENT ENGAGEMENT AND REDUCE THE BME ATTAINMENT GAP ■ THE ROLE OF GOVERNING BOARDS IN DEVELOPING HEIS: THE CASE OF KAZAKHSTAN
	<b>Session X.</b> Health & Welfare, Enviroment and Sustainable Development	■ MODELING AND SIMULATION OF DETERGENT REMOVAL FROM WASTEWATER USING ADVANCED OXIDATION PROCESS ■ POTENTIAL OF USING NZVI AS A DYE REMOVAL METHOD IN THE CONTEXT OF BANGLADESH ■ AN ASSESSMENT OF THERMAL COMFORT PREFERENCE IN OPEN LAY OUT BUILDING IN WARM-HUMID ACEH, INDONESIA
9. 9 (금)	<b>Workshop</b>	■ EVALUATION OF THE LEVEL OF A COURIER SERVICES BY INDIVIDUAL CUSTOMERS ■ THE USE OF IT SYSTEMS IN THE DISTRIBUTION OF COURIER

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		<p>SERVICES AND CUSTOMER SERVICE</p> <ul style="list-style-type: none"> <li>▪ DISRUPTIONS OF THE FLOW OF INFORMATION IN BUSINESS MANAGEMENT</li> <li>▪ HOW NETWORKS MODERATE RETURN ON SALES IN A LOGISTICS ENTERPRISE - CASE STUDY OF UPS</li> <li>▪ MANAGEMENT TRANSPORT AT USING INNOVATIVE FORWARDING TOOLS</li> <li>▪ SOCIAL HOUSING ASSOCIATIONS AS AN EXAMPLE OF SOCIAL HOUSING MANAGEMENT – CASE STUDY</li> <li>▪ BUILDING THE ATTRACTIVENESS OF THE SECTOR BASED ON SOLID CO-OPERATION RELATIONS</li> <li>▪ NETWORK STRUCTURES AS A FACTOR STIMULATING INNOVATIVE CHANGES IN ENTERPRISES</li> <li>▪ INNOVATIVE PROCESSES IN MANAGING THE PRODUCTION ENTERPRISE</li> </ul>



**CERTIFICATE OF PRESENTATION**

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**TRUST, ECONOMIC GROWTH AND IMPORTANCE OF THE  
INSTITUTION**

at the 25th International Academic Conference, OECD  
Headquarters, Paris, France From 06 September 2016 to 09  
September 2016

A handwritten signature in blue ink, appearing to read 'Robert Holman', is written over a faint circular stamp.

Professor Robert Holman  
Chair of the Organizing Committee  
Director of IISES