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PEOPLE
   RESEARCH ASSISTANTS
   AFFILIATED MEMBERS
   PART-TIME INSTRUCTORS
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INTRODUCTION

This document contains a short introduction to the activities of Middle East Technical University, Science and Technology Policies Research Center (METU–TEKPOL). It provides information about academic programs and the project portfolio, past and present from 2009 to 2013. This document aims at showing the depth and diversity of capabilities that exist within METU–TEKPOL. Further information on any aspect of our research center can be supplied upon request.

ABOUT THE LOGO

The logo of METU-TEKPOL symbolises an alert owl. The western cultures associate owls with wisdom. The goddess of the Athens in the Ancient Greek, Athena had the owl as a symbol. Back in the Indo-European cultures the owl symbolised dignity, wisdom and dedication. The logo was inspired by Prof. Hasan Ünal Nalbantoğlu of Department of Sociology who unfortunately passed away in 2011.

BACKGROUND INFORMATION

Aim

Recent developments in science and technology hailed the onset of a new era. The information age is opening up new horizons that offers prospects for the development of a knowledge-based economy and society. But it creates new challenges as well. Turkey is about to face new challenges due to the ever-expanding technological capabilities in terms of both equipment and highly-skilled manpower. To foster sustainable development and increase competitiveness Turkey has to invest in qualified human resources and Research and Development (R&D) in the forthcoming decade. However, the process of technological change that would lead us to a sustainable development path should best be managed by carefully-designed science, technology and innovation policies.

The lack of qualified personnel in charge of designing and implementing science and technology policies is a major concern for public institutions. Indeed, policy makers in today’s world have to familiarize with a diverse set of innovation theories and have to carry out multi-dimensional tasks that the information society demands. This requires, in turn, an ability to formulate and implement relevant policies aimed at fostering domestic scientific and technological capabilities in response to the accelerating pace of technological progress.

Stimulating R&D in private and public sectors has always been an integral part of the five-year development plans that have been implemented in Turkey since 1963. From 2005 onwards the national budget
includes resources aiming explicitly to promote R&D activities. Since then public institutions were re-designed and given new roles to support R&D and innovative activities. The Ninth Five-Year Development Plan (2007-2013) highlights the importance of R&D under the strategic objective of “increasing the competitiveness” to contribute to the economic and social development of Turkey.

As such science, technology and innovation policy has recently started to play an important role in shaping the economic policy agenda in Turkey. The present government took measures in order to increase R&D expenditures and develop a sound base for research, innovation and entrepreneurship. In 2012, the government allocated about €1550 million for the promotion of R&D activities in the public and private sectors. However current total spending on R&D as a percentage of Gross Domestic Product (GDP) is still short of the 1% threshold (currently 0.86%).

METU-TEKPOL was founded on January 1st, 1997 at the Middle East Technical University with the explicit objective to contribute to the aforementioned crucial issues.

Mission

METU-TEKPOL has a multidisciplinary approach to the analysis of the economic, social and political factors that drive technological change and innovation. Our research and training programs span an extensive domain in close relation to recent policy questions concerning national and international regulations of science, technology and innovation, with a particular focus on the networks of inter-organizational relations on the side of knowledge management issues.

Today more than 80 percent of the world population lives in the middle and low-income countries, some of whom in extreme poverty. We aim to analyze the contribution of science and technology to sustainable economic growth. Such an endeavor requires, in turn, an in-depth understanding of how knowledge is created in the public and private sectors, how it is diffused throughout the economy, and how it is utilized efficiently by economic actors. Determinants of innovation and the economic and social implications of these innovation activities are naturally part of our research agenda.

Another important issue on our research agenda is the analysis of strategies that can enable the development of technological capabilities in emerging economies in order to take advantage of the present wave of globalization through building faster growth policy options for these countries, thus reduce the present gaps in per capita income levels.

Furthermore, our research focuses on the evolving economic, political, regional and cultural landscape so far as they can influence how knowledge production and learning processes can be managed within the context of systemic arrangements and development strategies and achieve sustainable economic development.

Finally, our research agenda coincides with recent trends in science and technology policy making around the world, as well as with interests of the public and private research institutions, private sector and the civil society organizations.
ACADEMIC PROGRAMS

M.Sc. Program

As a key to understand the knowledge-based society, the M.Sc. Program in “Science and Technology Policy Studies” is designed to equip students with the necessary know-how in economic and social policy-making as well as theoretical approaches to understand technological change. It aims to deal with economic, social, cultural and philosophical challenges of today’s knowledge-based economy and society.

Modern science and technology has evolved to such a degree of complexity that calls for appropriate policies which can no longer be formulated adequately within the matrix of any single discipline. In order to match this level of complexity recent policy issues require a multi-disciplinary approach. By encouraging both curiosity-driven and rigorous applied interdisciplinary research in science and technology, METU-TEKPOL aims at preparing students towards tackling theoretical and applied issues. The graduates of the program will be qualified to work in technology and research-oriented organizations in the public sector, as well as industry and universities. The success of the program can be judged by placement of its students to similar reputable programs in the United States and Europe for further studies such as, Technology and Policy Program of MIT; Sussex Policy Research Unit (SPRU) of Sussex University, UNU-MERIT of Maastricht University; Innovation, Management and Policy Department of Manchester University and CIRCLE of Lund University and Institute of Innovation and Entrepreneurship, University of Gothenburg.

Program Structure

Students enrolled in the program are required to take 4 core courses which aim to provide students with the basic knowledge to understand historical, theoretical and institutional aspects of scientific and technological processes and practices. Students lacking the necessary background in their chosen field of specialization may be asked to take a maximum of three additional undergraduate courses upon the consent of the chairman of the program.

Students enroll to the non-thesis M.Sc. program but depending on the success in the course work in the first year the students have the option to write a thesis. The non-thesis program consists of 4 must courses and 6 elective courses. In total the students have to complete 10 courses and write a term project within two-year time period. Students who proceed to write a thesis have to complete 7 courses in total (4 must and 3 elective courses).

M.Sc. with thesis (4 must, 3 electives and M.Sc. Thesis)

FALL SEMESTER (1ST YEAR)

STPS 501: History of Science and Technology
STPS 507: Research Methods in Science and Technology Studies
ELECTIVE COURSE

SPRING SEMESTER (1ST YEAR)

STPS 503: Economics of Science, Technology and Innovation
STPS 505: Knowledge, Science and Technology in the Information Age
ELECTIVE COURSE
FALL SEMESTER (2ND YEAR)

STPS 500: Pro-thesis Seminar in STPS (non-credit)
STPS 599: M.Sc. Thesis (non-credit)

ELECTIVE COURSE

SPRING SEMESTER (2ND YEAR)

STPS 599: M.Sc. Thesis (non-credit)
M.Sc. without thesis (4 must, 6 electives and term project)

M.Sc. without thesis (4 must, 6 electives and Term Project)

FALL SEMESTER (1ST YEAR)

STPS 501: History of Science and Technology
STPS 507: Research Methods in Science and Technology Studies

ELECTIVE COURSE

SPRING SEMESTER (1ST YEAR)

STPS 503: Economics of Science, Technology and Innovation
STPS 505: Knowledge, Science and Technology in the Information Age

ELECTIVE COURSE

FALL SEMESTER (2ND YEAR)

ELECTIVE COURSES

SPRING SEMESTER (2ND YEAR)

STPS 500: Pro-thesis Seminar in STPS (non-credit)
STPS 589: Term Project (non-credit)

ELECTIVE COURSES

Doctoral Program

Understanding technological change entails developing a comprehensive interdisciplinary approach which is critical in designing and implementing appropriate science and technology policies. Ph.D. Program in Science and Technology Policy Studies is supported by various disciplines such as economics, administrative sciences, engineering, sociology, history, philosophy, communication and cultural studies.

Recent developments in the knowledge intensity of economic activity and rapid technological advancement have significant socio-economic repercussions at the level of nation states, regions, industries, markets, and firms. In this context the program aims to confront the challenges by providing several concentration areas for policy making.

The mission of the Science and Technology Policy Studies Ph.D. program is to encourage scientific research and policy making particularly in the fields of technological change and innovation processes that
are indispensable elements for understanding the structural changes occurring in the current economic and social life. Consequently, the program creates a new set of opportunities for those who are at the early stages of their careers to pursue research training in a challenging and important area of inquiry.

**Program Structure**

The program consists of 3 required must courses and 4 elective courses. After completing the coursework, the students have to take the qualifier exam in the 5th semester of the program. Upon successfully passing the qualifier exam, the student advances to write a PhD thesis. The program offers courses on a wide range of areas by focusing on both the theoretical and policy foundations of technology such as economics of innovation, political economy of technological change, general purpose technologies such as nano-technology, bio-technology and information and communication technologies, clustering of innovative activity, technology policy and impact assessment, technology and work organisation.

**PhD. program (4 must, 3 electives, qualifier exam and a PhD thesis)**

**FALL SEMESTER (1ST YEAR)**

**STPS 601**: Innovation, Technology and Economic Development  
**STPS 602**: Technology and Industrial Strategy

**SPRING SEMESTER (1ST YEAR)**

**STPS 603**: Technology, Society and Culture  
**STPS 605**: Research Methods and Analytical Techniques

**FALL SEMESTER (2ND YEAR)**

**STPS 800-899**: Special Studies  
**STPS 699**: Ph.D. Thesis  
**ELECTIVE COURSES**

**SPRING SEMESTER (2ND YEAR)**

**STPS 800-899**: Special Studies  
**STPS 699**: Ph.D. Thesis  
**ELECTIVE COURSES**

**FALL SEMESTER (3RD YEAR)**

The students have to take the qualifier exam in the fifth semester. If successful, the student proceeds to writing a PhD thesis.
### Elective Courses Available for both M.Sc. and Ph.D. Programs

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>STPS 510</td>
<td>Systems of Innovation</td>
</tr>
<tr>
<td>STPS 512</td>
<td>Technological Change in Developing Countries</td>
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<tr>
<td>STPS 514</td>
<td>Agent-based Simulation Models in Economics of Technological Change</td>
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<tr>
<td>STPS 515</td>
<td>Innovation Policy and Governance: Trends and Challenges</td>
</tr>
<tr>
<td>STPS 516</td>
<td>Science and Technology Places</td>
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<tr>
<td>STPS 517</td>
<td>Innovation and SMEs</td>
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<tr>
<td>STPS 519</td>
<td>R&amp;D Policies and Evaluation Methods</td>
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<tr>
<td>STPS 521</td>
<td>Technology and Work Organization</td>
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<tr>
<td>STPS 522</td>
<td>Technology and Corporate Strategy</td>
</tr>
<tr>
<td>STPS 524</td>
<td>Information and Communications Technologies: Socioeconomic and Regulatory Issues</td>
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<tr>
<td>STPS 526</td>
<td>Technological Change and the Labor Process</td>
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<tr>
<td>STPS 531</td>
<td>Intellectual Property Rights and Regulation I</td>
</tr>
<tr>
<td>STPS 532</td>
<td>Intellectual Property Rights and Regulation II</td>
</tr>
<tr>
<td>STPS 543</td>
<td>Recent Trends in Science and Technology Policy Making</td>
</tr>
<tr>
<td>STPS 547</td>
<td>Introduction to Information Network Security</td>
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<tr>
<td>STPS 548</td>
<td>Managing Information Technology: Policies And Standards</td>
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<tr>
<td>STPS 549</td>
<td>IT Governance</td>
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<tr>
<td>STPS 550</td>
<td>New Economy: Impacts and Applications</td>
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<tr>
<td>STPS 552</td>
<td>Globalization And Technology Management</td>
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<tr>
<td>STPS 554</td>
<td>Management of Technological Innovation</td>
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<tr>
<td>STPS 560</td>
<td>Seminar in New Technologies</td>
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<tr>
<td>STPS 590</td>
<td>Social Science Aspects of Innovation</td>
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<tr>
<td>STPS 611</td>
<td>Topics in Applied Econometrics I</td>
</tr>
<tr>
<td>STPS 612</td>
<td>Topics in Applied Econometrics II</td>
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</table>
# Departmental Elective Courses that are available for STPS students

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ADM 570</td>
<td>Political Economy of Communication</td>
</tr>
<tr>
<td>ADM 5258</td>
<td>Advances in Organisational Theory</td>
</tr>
<tr>
<td>ARC 517</td>
<td>Principles of Universal Design</td>
</tr>
<tr>
<td>BA 4111</td>
<td>Managing Technology and Innovation</td>
</tr>
<tr>
<td>BA 5516</td>
<td>Knowledge Management and Organisational Learning</td>
</tr>
<tr>
<td>EE 710</td>
<td>Electricity Trading</td>
</tr>
<tr>
<td>ECON 454</td>
<td>Economics of Regulation and Antitrust</td>
</tr>
<tr>
<td>ECON 480</td>
<td>World Economy</td>
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<tr>
<td>ECON 451</td>
<td>Industrial Economics</td>
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<tr>
<td>ECON 642</td>
<td>Technology, Growth, and Development</td>
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<tr>
<td>ECON 644</td>
<td>National Systems of Innovation</td>
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<tr>
<td>IE 491</td>
<td>Industrial Networks and Clusters</td>
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<tr>
<td>IS 785</td>
<td>Social Network Analysis</td>
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<tr>
<td>PHIL 515</td>
<td>Philosophy of Technology I</td>
</tr>
<tr>
<td>PHIL 516</td>
<td>Philosophy of Technology II</td>
</tr>
<tr>
<td>PHIL 522</td>
<td>History of Science II</td>
</tr>
<tr>
<td>RP 532</td>
<td>Methods of Regional Analysis</td>
</tr>
<tr>
<td>RP 534</td>
<td>Changing Economic and Political Structure</td>
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<tr>
<td>SOC 442</td>
<td>Sociology of Science and Technology</td>
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<tr>
<td>SOC 643</td>
<td>Advanced Issues in the Sociology of Knowledge</td>
</tr>
</tbody>
</table>

## Graduate Dissertations in the PhD Program

The graduate dissertations can be reached via the Middle East Technical University Library. Dissertations in post 2000 era can also be reached in soft copy format available from the library (http://www.lib.metu.edu.tr/en/). The graduate thesis can also be obtained electronically from the Higher Education Council Dissertation Bank (http://tez2.yok.gov.tr/).

### 2013

**GÜLER, Hüseyin** “Does Participation in International R&D Networks Enhance Local Dynamism? Researcher Level Aspects from Turkey” (Advisor: Prof. Dr. Erkan ERDİL).

**GÜRSOY, Serkan** “Codification of Social Capital: The impact of ICT” (Advisor: Prof. Dr. Erkan Erdil)
FINDIK, Derya “ICT Adoption, Software Investment and Firm Efficiency in Turkey” (Advisor: Prof. Dr. Aysıt TANSEL).

SATIK, Erdoğdu “The Crossroads of Knowledge and Financialization” (Advisor: Prof. Dr. Erkan ERDİL).

2012


2011

TANDOĞAN, Vedat Sinan “Impact Analysis of Industrial Research and Development Subsidy Programs in Turkey: An Appraisal of Quantitative Approaches” (Advisor: Assoc. Prof. Dr. Teoman PAMUKÇU).


Graduate Dissertations in the M.Sc. Program

The graduate dissertations can be reached via the Middle East Technical University Library. Dissertations in post 2000 era can also be reached in soft copy format available from the library (http://www.lib.metu.edu.tr/en/). The graduate thesis can also be obtained electronically from the Higher Education Council Dissertation Bank (http://tez2.yok.gov.tr/). About 90 M.Sc. theses have been completed since 1999. A full list of M.Sc. thesis is available at our website http://stps.metu.edu.tr/completed-ms-theses. Below we present completed M.Sc. theses in the last five years.

2013

DÖNMEZ, Pınar “Use of Technology in Non-Profit Organizations and A Model for Efficient Technology Management in These Organizations” (Advisor: Prof.Dr. Erkan ERDİL)

2012

BOZTAŞ, Ömer “Determining a strategy for favorable acquisition and utilization of complex technologies: flight simulation training devices (FSTD)” (Advisor: Prof. Dr. Erkan ERDİL).

DURTAŞ BAŞPINAR, Canan Pelin “Financial Strategic Planning and Knowledge Management: A Comparative Case Study on Turkish Banking Sector” (Advisor: Prof. Dr. Nusret GÜÇLÜ).

EVSEL, Gülsevim “Controversial Issues Related to Reproductive Biotechnology: An Empirical study” (Advisor: Prof. Dr. Erkan Erdil, Co-advisor: Prof. Dr. Hayriye ERBAŞ).

EMİROĞLU, Sinem “Information Society: National Science and Technology Policies in Turkey and South Korea” (Advisor: Prof. Dr. Erkan Erdil, co-advisor, Doç. Prof. Dr. Funda Başaran ÖZDEMİR).
KARAOĞUZ, Hüseyin Emre “Varieties of Capitalism and National Systems of Innovation: A New Perspective on the Convergence Debate” (Advisor: Prof. Dr. Eyüp ÖZVEREN).

ÖZTÜRK, Ayşen “Structural Analysis and Functional Dynamics of National Innovation System in Turkey and Germany: Lessons for Turkey” (Advisor: Prof. Dr. Erkan ERDİL).


2011

YASAN, Nehir “Exploring the Research Assistants’ Opinion Regarding the Effects of Graduate Course on Their Research Skills and Science Perceptions” (Advisor: Prof. Dr. Soner YILDIRIM).


2010

CEYHUN, Murat “Dynamics of knowledge production and the social formation of the university” (Advisor: Ass. Prof. Dr. Çağatay TOPAL).

ÇOLAK, Erdem “Software size estimation performance of small and middle size firms in Turkey” (Advisor: Prof. Dr. Erol TAYMAZ).

EREN, İlke “An Analysis of Innovation and R&D Activities of Firms in Turkish Medical Devices Sector” (Advisor: Assoc. Prof. Dr. Teoman PAMUKÇU).


KÜRKÇÜ, Esin Aytaç “Examination of Lean Production with Regards to Occupational Health and Safety: A Case Study in an Automotive Plant” (Advisor: Dr. Burçak ÖZOĞLU POÇAN).


TÜRKCAN, Seçkin “Use of ICT for Energy in Turkish Consumer Electronics Sector” (Advisor: Assoc. Prof. Dr. Erkan ERDİL).

YAPAR, Osman Oğuz “International Knowledge Transfer in European Research and Development Programmes: Turkish Case” (Advisor: Assoc. Prof. Dr. Erkan ERDİL).
ÇETİN, Can “Determinants of Technology Transfer in Developing Economies: The Case of Turkish Manufacturing Industries” (Advisor: Assoc. Prof. Dr. M. Teoman PAMUKÇU).

GÜNEL, Ayşegül “Evaluation of Innovation Indicators: The Turkish Case as A Developing Country” (Advisor: Assoc. Prof. Dr. Teoman PAMUKÇU).

SAKINÇ, Mustafa Erdem “Finance of the Software Industry in Turkey” (Advisor: Assoc. Prof. Dr. Funda BAŞARAN ÖZDEMİR).

<table>
<thead>
<tr>
<th><strong>RESEARCH PROJECTS</strong></th>
</tr>
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<tbody>
<tr>
<td><strong>ERA-WATCH COUNTRY REPORT TURKEY</strong></td>
</tr>
<tr>
<td><strong>2013</strong></td>
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<tr>
<td>This report consolidates the recent developments in Turkey regarding science, technology and innovation. The current innovation climate and the policy status are explained in detail using secondary data obtained from the ministries and government agencies.</td>
</tr>
<tr>
<td><strong>Funding Agency</strong>: European Commission, Brussels.</td>
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</table>

| **SHARING KNOWLEDGE ASSETS: INTER-REGIONALLY COHESIVE NEIGHBORHOODS (SEARCH)** |
| **2013** |
| The EU has experienced successive enlargements in recent years with the incorporation of new countries. These have changed the EU map, broadening frontiers and thus appearing new neighbouring countries. The integration of them offers new opportunities but also implies some risks. Even though the ENP has demonstrated to be an integration tool, which has provided an effective and clear framework to establish cooperation links within neighbouring countries, some are important areas with considerable potential for further progress. SEARCH will focus attention on some areas which so far have been neglected in the analysis of the impact of the ENP but which are of central interest in the economic literature on cohesion. METU-TEKPOL is responsible for the WP5 that is designed to investigate the current status of the social, cultural and institutional environment in the European countries and regions. For further details see the project website at http://www.ub.edu/searchproject/ |
| **Funding Agency**: FP7 Project, European Commission, Brussels. |

| **DOES GOVERNMENT SUPPORT FOR INNOVATION MATTER? THE EFFECTIVENESS OF PUBLIC SUPPORT FOR PRIVATE INNOVATION** |
| **2013** |
| The aim of the project is to analyze in a comparative perspective the government support for innovation by first examining the main existing instruments of financial support for innovation in Turkey and Poland, and secondly to assess their effectiveness by applying recent econometric techniques to firm-level data for both countries obtained from the Community Innovation Survey (CIS). To this end, the same econometric methodology is applied to the Turkish and Polish 2008-2010 editions of the Community Innovation Survey for manufacturing firms. Two models are estimated: one following the now classical CDM model and assessing the role of innovation expenditure, but assuming government support exogenous; and another controlling for the endogeneity of support but assuming a simplified version of the innovation performance equation. The evidence indicates that government support contributes to higher innovation spending by firms and this in turn improves their chances to introduce product innovations. The positive impact remains valid even when a possibly non-random selection of firms for government support programs is controlled for. In particular, the support from local government proved inefficient or less efficient than the support from central government or European Union. |
| **Funding Agency**: Euro-Mediterranean Forum of Economic Institutes (FEMISE Network), Project No FEM 35-18 |

<p>| <strong>LABOR MARKET DYNAMICS IN TURKEY: JOB AND WAGE POLARIZATION AND THE INCREASED IMPORTANCE OF OCCUPATIONS</strong> |
| <strong>2013</strong> |
| Recent literature has identified three trends in the labor markets of the industrialized countries: (i) employment share of services sector has increased, (ii) employment share in low and high skilled occupations has increased (job polarization), (iii) and similarly wages in the low and high skilled occupations have increased relative to middling jobs (wage polarization). In this project, we investigate the existence of such findings in the Turkish labor market using a unique dataset on vacant positions of one of the biggest job placement companies and the Labor Force Survey data. We found evidence for wage polarization. Job polarization is observed to an extent but the pattern is not statistically significant. |
| <strong>Funding Agency</strong>: BAP-METU |</p>
<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Description</th>
<th>Funding Agency</th>
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<tr>
<td>2012</td>
<td>ERA-WATCH COUNTRY REPORT TURKEY</td>
<td>This report consolidates the recent developments in Turkey regarding science, technology and innovation. The current innovation climate and the policy status are explained in detail using secondary data obtained from the ministries and government agencies.</td>
<td>European Commission, Brussels.</td>
</tr>
<tr>
<td>2012</td>
<td>KAZAN, ANKARA DEFENSE AND AEROSPACE CLUSTER FEASIBILITY REPORT</td>
<td>Turkish Aerospace Industry (TAI) is a major player in Turkish Defense Industry. Recently the government planned to establish a cluster of firms in defense and aerospace industry in the vicinity of TAI. The establishment of a synthetic cluster should be carefully designed and the first step is to map the defense industry in Turkey to see whether firms are willing to participate in such a cluster. This feasibility project is commissioned by the Undersecretariat of Defense and aims to investigate the potential of a defense and aerospace cluster in the Kazan region in Ankara.</td>
<td>Undersecretariat of Defense, Ankara.</td>
</tr>
<tr>
<td>2011</td>
<td>ANALYSIS AND EVALUATION OF METU RESEARCH CENTERS</td>
<td>This project maps the current academic, research and funding situation in the Research Centers organised under the METU Rectorate. The project team visited 14 Research Centers and conducted interviews with the Center heads. A detailed report is delivered to the Rectorate and a summary report on the Research Centers in general is delivered to the Ministry of Development.</td>
<td>METU Rectorate, Ankara</td>
</tr>
<tr>
<td>2011</td>
<td>INNOVATION ACTIVITIES IN TURKEY IN THE AGE OF SCIENCE AND TECHNOLOGY</td>
<td></td>
<td>EU Cost Action; Scientific and Technological Research Council of Turkey (TUBITAK)</td>
</tr>
<tr>
<td>2011</td>
<td>STRATEGIC ANALYSIS OF INNOVATION CAPACITY IN ANKARA ICT SECTOR</td>
<td>This project aims to map the ICT sector in Ankara. As a result of this mapping exercise the potential strengths and weaknesses of the sector is determined. The project covers the firms established in five different Technoparks in Ankara. At the end of the project a detailed policy analysis is put forward.</td>
<td>Ankara Development Agency, Ankara</td>
</tr>
<tr>
<td>2010</td>
<td>THE ANALYSIS OF R&amp;D ACTIVITIES OF FOREIGN FIRMS IN TURKEY</td>
<td>This project aims to analyze the activities of FDI-based firms in general and the nature of their R&amp;D activities in particular. It outlines the global trends yet the specific focus is on Turkish economy. The ultimate target is to present the FDI policy environment together with R&amp;D environment for foreign firms. The study starts by using secondary data but the data is enriched with a SWOT analysis and live interviews with the local CEOs of foreign firms.</td>
<td>International Investors Association (YASED)</td>
</tr>
<tr>
<td>Year</td>
<td>Project Title</td>
<td>Description</td>
<td>Funding Agency</td>
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<tr>
<td>2010</td>
<td>CLUSTERING, INTERNATIONAL NETWORKS AND PERFORMANCE OF FIRMS: SOME COMPLEMENT APPROACHES FOR MENA’S CONVERGENCE</td>
<td>First objective of this project is to study if networks effectively ameliorate the TFP of firms and to compare international networks (imports of intermediate and capital goods, vertical or horizontal cooperation) and local networks (experience at exporting and producing of other firms at the regional level). The second objective of this report is to verify if the proximity of other exporting firms increases the probability of a firm to become an exporter. The project uses micro-econometric techniques using data on a sample of Spanish and Turkish firms to investigate the above issues. In the third part of this study, we use experimental economic technique to study how trust among business partners is affected by the information about the residence’s country of the partner. To investigate this issue we benefit from experimental economics techniques.</td>
<td><em>Funding Agency: Euro-Mediterranean Forum of Economic Institutes (FEMISE Network)</em></td>
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<tr>
<td>2009</td>
<td>ICT-RTD TECHNOLOGICAL AUDIT</td>
<td>Aim of this project, as announced by European Commission/DG Information Society and Media, is to carry out a Technological Audit on information and communication technologies (ICT) research capabilities in Turkey in order to identify a number of elements that include: (a) The ICT RTD policy environment and the opportunities and barriers it presents; (b) The status of the ICT RTD activities (publication, patent, framework programmes participation) identifying the centres of excellence and centres with development potential per FP7 ICT Theme Challenge and Objective; (c) The actions that need to be taken at national and European level to increase the participation of organisations carrying out ICT RTD in both the private and public sector supported with the data obtained by Live interviews, 2-round Delphi and SWOT analysis.</td>
<td><em>Funding Agency: Directorate General INFOSOC, European Commission</em></td>
</tr>
<tr>
<td>2009</td>
<td>SUGGESTIONS FOR TECHNOLOGY POLICIES IN MODELING AND SIMULATION REALM OF TURKEY</td>
<td>Nowadays, new improvements in Information Technologies including software and hardware applications create new opportunities and application areas for modelling and simulation. Especially in defence sector; all developed countries, including the members of NATO, increase their efforts in modelling and simulation. Therefore, determination of technology policies and strategies in this area are becoming more important. The need for such a kind of policy-making effort from Tukish Military-METU Modelling and Simulation Research and Application Center (MODSIMMER), as a part of their 3 year-long project for establishment of “Modelling and Simulation Information Sharing and Cooperation Platform” in Turkey; has created strong collaboration efforts with METU-TEKPOL. MODSIMMER and METU-TEKPOL are starting a project called “Suggestions for Technology Policies in Modelling and Simulation Realm of Turkey”. The main objective of the project is “the preparation of a proposal for national policies, strategies and roadmaps for modelling and simulation realm for policy makers.</td>
<td><em>Funding Agency: The Scientific and Technological Research Council of Turkey (TUBITAK)</em></td>
</tr>
<tr>
<td>2009</td>
<td>THE EFFECTS OF HEALTH BIOTECHNOLOGY AND SERVICES: THE SOCIO-ETHICAL RISKS AND PROSPECTS</td>
<td>The world has witnessed extraordinary advances in science over the last few decades. Biotechnology - one such area of growth - is a term covering a broad range of scientific activities used in many sectors, such as food, health and agriculture. It involves the use of living organisms or parts of living organisms to provide new methods of production and the making of new products. On the ethical issues concerning the related biotechnology and gene technology, The key aim of the BELS Network is to facilitate multidisciplinary, this project aims to investigate deeply the collaboration network between scholars and professionals concerned with the ethical, legal and social implications of biotechnology ethics.</td>
<td><em>Funding Agency: BAP-METU</em></td>
</tr>
</tbody>
</table>
THE PRODUCTIVITY EFFECTS OF FOREIGN DIRECT INVESTMENT IN THE TURKISH MANUFACTURING SECTOR

Many developing country governments set policies in order to attract inward foreign direct investment (FDI) by supporting policies of the potential benefits of FDI including the possibility of productivity spillovers from foreign- to domestic-owned plants. In this respect, this project aims at estimating the within-productivity effects of foreign investment in Turkish manufacturing plants by contributing to the existing literature by analyzing whether Turkish FDI structure differs from other FDI assets of the rest of the world.

Funding Agency: BAP-METU

THE ACADEMIC RESEARCH NETWORKS AND COLLABORATIONS IN TURKEY: APPLIED RESEARCH ON MIDDLE EAST TECHNICAL UNIVERSITY ACADEMIC RESEARCH NETWORKS

The recent ‘scientification’ of commercial technology has brought the interface between universities and industry into sharp focus. In particular, academic research networks has been discussed in different variety of ways in which academics take direct part in the research collaborations facing major researches. In the course of this project, we aim to research extensive academic networks of interaction between colleagues and universities with the other forms of research cooperation, involving joint research projects, etc. starting the Middle East Technical University as an initial research area.

Funding Agency: BAP-METU

THE ASSESSMENT OF TECHNOLOGY TRANSFER POLICIES FOR DEVELOPING COUNTRIES: THE CASE OF TURKEY

As involved in moving a technology developed for one organization or environment into a commercial operation by capitalizing on the investment in research and development, this research aims to investigate econometrically whether which knowledge is transferred from institutions of higher education to useful applications depending upon the type of knowledge being transferred and the mechanisms that have been established for transferring such knowledge.

Funding Agency: BAP-METU
OTHER RESEARCH PROJECTS OF TEKPOL MEMBERS

2013

▷ National Information Society Strategy, Ministry of Development
▷ National Electronic Communication Infrastructure and Broadband Strategy, Ministry of Transport, Maritime Affairs and Communications

2012

▷ Workgroup on building a composite index for Technology Development Zones, Ministry of Science, Industry and Technology, Ankara.

2011

▷ Analysis of Knowledge and Technology Transfer by Multinational Companies to Local Suppliers in the Turkish Automotive Industry, TUBİTAK

2009

▷ An Investigation on Causality between Military Expenditures and Economic Growth
▷ Medical Biotechnology Products/Services: The Ethical Problems and Risks on Society
▷ Academic Research Networks and Collaboration in Turkey: A Comparative Study on METU Academicians
▷ Advisor to National Electrics and Electronics Technology Platform
▷ Economic Growth, and Physical and Human Capital Complementarity with Nutritional Level
SELECTED PUBLICATIONS OF FULL-TIME MEMBERS


ORGANIZATION OF CONFERENCES

THE 11th GLOBELICS INTERNATIONAL CONFERENCE: ENTREPRENEURSHIP, INNOVATION POLICY AND DEVELOPMENT IN AN ERA OF INCREASED GLOBALISATION

**DATE:** September 11th-13th, 2013

**HOSTED BY:** METU-TEKPOL, YBU-REKMER, Ankara Development Agency and GLOBELICS

**VENUE:** Faculty of Economic and Administrative Sciences, Building B, METU, Ankara, TURKEY

**OFFICIAL CONFERENCE WEBSITE:** http://www.globelics2013.org

DESIGN AND EVALUATION OF INNOVATION POLICY IN AN EMERGING ECONOMY CONTEXT (DEIP)

**DATE:** December 6th-10th, 2010

**HOSTED BY:** UNU-MERIT, TÜBİTAK, METU-TEKPOL

**VENUE:** TUSSIDE, TÜBİTAK Gebze Campus

**OFFICIAL CONFERENCE WEBSITE:** http://www.tubitak.gov.tr/home.do?sid=468&cid=20792

14TH ANNUAL INTERNATIONAL CONFERENCE ON ECONOMICS AND SECURITY

**DATE:** June 17th-18th, 2010

**HOSTED BY:** EKOLIDER, Izmir University of Economics, Izmir, TURKEY, and METU-TEKPOL

**VENUE:** Izmir University of Economics, Izmir, TURKEY

**OFFICIAL CONFERENCE WEBSITE:** http://ekolider.ieu.edu.tr/eab/DEFENCE2010/

WORKSHOP ON INTERNATIONALISATION OF R&D ACTIVITIES

**DATE:** May 25th-26th, 2010

**HOSTED BY:** METU-TEKPOL and Institute for Prospective Technological Studies (IPTS), Seville

**VENUE:** Faculty of Economic and Administrative Sciences, Building B, METU, Ankara, TURKEY

4TH INTERNATIONAL CONFERENCE ON TECHNOLOGY AND ECONOMIC DEVELOPMENT: INDUSTRIAL DYNAMICS, INNOVATION POLICY AND GROWTH

**DATE:** May 21st-22nd, 2010

**HOSTED BY:** EKOLIDER, Izmir University of Economics, Izmir, TURKEY, and METU-TEKPOL

**VENUE:** Izmir University of Economics, Izmir, TURKEY

**OFFICIAL CONFERENCE WEBSITE:** http://ekolider.ieu.edu.tr/eab/TED2010/index.html
3RD INTERNATIONAL CONFERENCE ON TECHNOLOGY AND ECONOMIC DEVELOPMENT: INNOVATION, TECHNOLOGY AND KNOWLEDGE ECONOMICS

**DATE:** June 24th-26th, 2009

**HOSTED BY:** METU-TEKPOL

**VENUE:** Faculty of Economic and Administrative Sciences, Building B, METU, Ankara, TURKEY
NETWORK

International Cooperation

Through joint-projects, organization of conferences and alumni of the STPS M.Sc. and PhD programs, METU-TEKPOL is linked to many reputable international universities, research institutes and organizations such as,

▷ European Commission, Brussels, Belgium
▷ UNU-MERIT, Maastricht University, Maastricht, The Netherlands
▷ IPTS, The Institute for Prospective Technological Studies, Joint Research Center of the European Commission, Seville, Spain
▷ GLOBELICS, Global Network for Economics of Learning, Innovation, and Competence Building Systems, Sweden
▷ FEMISE, Euro-Mediterranean Forum of Economic Research Institutes, Marseille, France.
▷ Economic Research Forum, Egypt
▷ Telecom Ecole de Management, Paris, France
▷ Department of Technology Management, Eindhoven University, The Netherlands

National Cooperation

METU-TEKPOL is a national hub on science, technology and innovation related debate. It is the only research center in Turkey that can coordinate research and education concurrently. This unique expertise in both education and research has broadened the scope of national network of METU-TEKPOL. Through joint-projects, organization of conferences, consultancy activities and alumni placement METU-TEKPOL is a central node in the national network of science, technology and innovation policy. The research center is linked to:

▷ Ministry of Science, Industry and Technology
▷ Ministry of Development
▷ Ankara Development Agency
▷ Izmir Development Agency
▷ Çukurova Development Agency
▷ Fırat Development Agency
▷ TPE, Turkish Patent Institute
▷ TUBITAK, The Scientific and Technological Research Council of Turkey
▷ TTGV, Technology Development Foundation of Turkey
▷ KOSGEB, Small and Medium Enterprises Development Organization
▷ Undersecretariat of Defence
Higher Education Council
Defence Science Institute, Turkish Armed Forces
TAI, Turkish Aerospace Industry
ASELSAN, Turkish Armed Forces Association
METUTECH, Technology Development Zone at METU
Cyberpark, Technology Development Zone at Bilkent University
IVEDIK Industrial District
OSTIM Industrial District
Technopolis Turkey Office
YASED, International Investors Associations of Turkey
Bursa Chamber of Commerce and Industry
E-BILTEM, Ege University
Center for Innovation and Competition Based Development Studies, Bosphorus University
EKOLIDER, İzmir University of Economics
PEOPLE

Erkan Erdil, Chairman of METU-TEKPOL (METU/Economics): B.S., M.S. METU; Ph.D. Universiteit Maastricht

Fields of specialisation: Labor Economics, Economics of Technology, Agricultural Economics, Applied Econometrics, Economics of Information and Uncertainty, Human Resources Management

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Research Assistants

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Uğur Gürsad Yalçın, B.S., M.S. METU

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