

Middle East Technical University
STPS 553
Technology, Globalization and Labor
Fall 2015-2016
Monday, FEAS A F104 13:40 -16:30
Semih Akçomak
akcomak@metu.edu.tr
Office hours: Mondays 14:00 – 17:00.

This course is designed as an interdisciplinary complement to the existing STPS courses in the sense that it touches briefly on two popular recent topics: The impact of technology and globalisation on labour, work organization and firm organisation.

During the course, the participants are expected to acquire: *(i)* understanding how ICT can change work organization; *(ii)* ICT and labour, who benefits from ICT? *(iii)* social aspects of innovation; *(iv)* the policy implications of the two literatures, how to deal with labour issues as a result of work organization and the localization versus globalisation debate.

And at the end of the course, the participants are expected to possess: *(i)* the ability to analyse the implications of the globalization process. Firms and production are becoming globalized; *(ii)* the ability to compare and contrast localization issue with globalization of production, *(iii)* the ability to examine the appropriate policy tools that stems from the localization versus globalization issue.

Course Outline:

Week 1: Introduction: ICT, skills and labour market implications

Week 2: Technology, globalisation and labour

Autor, Katz, Krueger (1998), Computing inequality have computers changed the labour market?, *Quarterly Journal of Economics*, 113 (4), 1169-1213.

Autor, D. H., Katz, L.F. ve Kearney, M.S. (2006), The polarization of the U.S. labor market, *American Economic Review*, 96(2), 189-194.

Autor, D. H., Levy, F. and Murnane, R.J. (2003), The skill content of recent technological change: An empirical exploration, *Quarterly Journal of Economics*, 118(4), 1279-1333.

Baldwin, R. (2009), Integration of the North American economy and new-paradigm globalisation, CEPR Discussion Paper No: 7523.

Baldwin, R. And Martin, P. (1999), Two waves of globalisation: Superficial similarities, fundamental differences, NBER WP 1050.

Goos, M., Manning, A. ve Salomons, A. (2009), Job polarisation in Europe, *American Economic Review*, 99(2), 58-63.

Week 3: Measurement issue: Globalization of production, outsourcing and offshoring.

Akçomak, İS. (2012), İş gücü piyasasındaki güncel dinamikler: Teknoloji, küreselleşme ve ithal girdi kullanımı, STPS-WP 12/02

Feenstra, Robert C. and Gordon Hanson (1996), Globalization, outsourcing and wage inequality, *American Economic Review*, 86(2), 240-245.

Feenstra, R. (1998), Integration of trade and disintegration of production in the global economy, *Journal of Economic Perspectives*, 12(4), 31-50.

Herrigel, G. and Zeitlin, J. (2010), Inter-firm relations in global manufacturing: Disintegrated production and its globalisation, in Whitley, R., Pedersen, O.K., Crouch, C., Campbell, J.L. and Glenn, M. Eds., *The Oxford Handbook of Comparative Institutional Analysis*, Oxford University Press.

Week 4: Offshoring and labour

Akçomak, S., Borghans, L. and ter Weel, B. (2011), "Measuring and interpreting trends in the division of labour in the Netherlands", *De Economist*, 159(4), 435-482

Blinder, A. S. (2009), How many U.S. jobs might be offshorable, *World Economics*, 10(2), 41-78.

Firpo, S., and Fortin, N. ve Lemieux, T. (2009), Occupational tasks and changes in the wage structure, <http://client.norc.org/jole/SOLEweb/fortin.pdf>

Goos, M., Manning, A. and Salomons, A. (2011), Recent Changes in the European employment structure: The roles of technology, globalization and institutions. İnternet kaynağı adres: <http://www.econ.kuleuven.be/public/n06022/EUpol-20111115.pdf>

Grossman, G. M. and Rossi-Hansberg (2006), The rise of offshoring: It's not wine for cloth anymore, Presentation at the Kansas Fed, Jackson Hole conference <http://www.kc.frb.org>

Grossman, G. M. ve Rossi-Hansberg, E. (2008), Trading tasks: A simple theory of offshoring, *American Economic Review*, 98(5), 1978-1997.

Week 5: local forces, agglomeration

Leamer, E. (2007), A flat world, a level playing field, a small world after all, or none of the above? A review of Thomas L. Friedman's *The World is Flat*, *Journal of Economic Literature*, 83-126.

Maskell, P. And Malmberg, A. (1999), Localised learning and industrial competitiveness, *Cambridge Journal Of Economics*, 23, 167-185.

Porter, M.E., (2000), Location, competition and economic development: local clusters in a global economy, *Economic Development Quarterly*, 14, 15-34.

Week 6: The death of distance?

Akcomak, S. and ter Weel, B. (2009), Social capital, innovation and growth. Evidence from Europe, *European Economic Review*, 53(5), 544-567.

Morgan, K. (2004), The exaggerated death of geography: learning, proximity, and territorial innovation systems, *Journal of Economic Geography*, 4, 3-21.

Laursen, K., Masciarelli, F. and Prencipe, A. (2012), Regions Matter: How localised social capital affects innovation and external knowledge acquisition, *Organization Science*, 23, 177-193.

Week 7: Debate

Debate on two different topics regarding the localisation versus globalisation issue. The debate topics and instructions will be provided one week before the debate.

Globalization versus localization: Macro setting

Two groups. One defends the idea of setting up a so called "bilişim vadisi" (localisation), the other confronts this idea (globalisation)

Globalisation versus localisation: Firms

The CEO of the company is planning an organisational change. Two groups: One defends that a big R&D centre should be established and most of the firm's units should be organised around this center. The other group argues that distance is dead so the company should establish production and R&D centers by looking at knowledge and the costs.

Week 8: Computers, people and firms

Autor, D. H., Levy, F. and Murnane, R.J. (2002), Upstairs, Downstairs: Computers and skills on two floors of a large bank, *Industrial and Labor Relations Review*, 55(3), 432-447.

Bresnahan, T. F., Brynjolfsson, E. and Hitt, L. (2002), Information technology, workplace organization and the demand for skilled labor: Firm-level evidence, *Quarterly Journal of Economics*, 117(1), 339-376.

Borghans, L. and ter Weel, B. (2004), What happens when agent T gets a computer? The labor market impact of cost efficient computer adoption, *Journal of Economic Behavior & Organization*, 54(2), p. 137-151.

Week 9: The effect of globalisation on developing countries labour markets

Goldberg, P. and Pavcnik, N. (2007), Distributional effects of globalisation in developing countries, *Journal of Economic Literature*, 45(1), 39-82.

Hsieh, C.T. and Woo, K.T. (2005), The impact of outsourcing to China on Hong Kong's labour market, *American Economic Review*, 95 (5), 1673-1687.

Kemeny, T. (2011), Are international technology gaps growing or shrinking in the age of globalisation?, *Journal of Economic Geography*, 11, 1-35.

Shandre M. Thangavelu and Aekapol Chongvilaivan (2011) The impact of material and service outsourcing on employment in Thailand's manufacturing industries, *Applied Economics*, 43(27), 3931-3944.

Week 10: Midterm

Week 11: The distinct effects of IT and CT on work organization and production

Bloom, N., Garicano, L., Sadun, R. and van Reenen, J. (2009), The distinct effects of information technology and communication technology on firm organization, NBER Working Paper No: 14975.

Bresnahan, T. F., Brynjolfsson, E. and Hitt, L. (2002), Information technology, workplace organization and the demand for skilled labor: Firm-level evidence, *Quarterly Journal of Economics*, 117(1), 339-376.

Brynjolfsson, E. and Hitt, L. (2000), Beyond computation: information technology, organizational transformation and business performance, *Journal of Economic Perspectives*, 14(4), 23-48.

Week 12: R&D localisation versus internationalisation

Archibugi, D. And Pietrobelli, C. (2003), The globalisation of technology and its implications for developing countries. Windows of opportunity or further burden?, *Technological Forecasting and Social Change*, 70, 861-883.

Carlsson, B. (2006), Internationalisation of innovation systems: A survey of the literature, *Research Policy*, 35, 56-67.

Cantwell, J. and Piscitello, L. (), Accumulating technological competence: Its changing impact on corporate diversification and internationalization, *Industrial and Corporate Change*, 9 (1), 21-51.

Cantwell, J. and Janne, O. (1999), Technological globalisation and innovative centers: the role of corporate technological leadership and locational hierarchy, *Research Policy*, 28, 119-144.

Week 13: Wrap-up

Course Conduct:

The course will be conducted via formal lectures and in class discussion. The participants will be informed about the reading material of the week in advance. All the participants are expected to read the related material before coming to class.

In week 7 students will be assigned to two groups and there will be localization versus globalization debate. There will be a midterm exam in week 10. There will be one term paper assignment, which will be assigned during the 10th week and will be due to the

time of the final exam. The term paper may consist of writing a critical review of the selected two papers among five available.

Grading:

Mid-term exam: 30 points

Two short essays of max 1500 words (10 points each)

Term paper: 30 (15 points for each critical review)

Debate: 10 points

Participation: 10 points