

Course and Examination Fact Sheet: Spring Semester 2020

8,288: Economic Development and Structural Transformation

ECTS credits: 4

Overview examination/s

(binding regulations see below) Decentral - Written examination (75%, 90 mins.) Decentral - Presentation (in groups - all given the same grades) (25%)

Attached courses

Timetable -- Language -- Lecturer 8,288,1.00 Economic Development and Structural Transformation -- Englisch -- <u>Grobovsek Jan</u>

Course information

Course prerequisites

It is assumed that students possess a working understanding of calculus and linear algebra. Although not strictly required, it is helpful for students to have some background knowledge in macroeconomics in general and economic growth theory in particular.

Learning objectives

On completion of this course, the student will have had the opportunity to develop and demonstrate:

- A knowledge and understanding of key concepts, issues and models related to the topic of structural transformation and development, along with empirical evidence on and policy implications of those models and a deeper understanding of recent research activity in some more specialized areas.
- Research and investigative skills such as problem framing and solving, and the ability to assemble and evaluate complex evidence and arguments.
- Communication skills in order to critique, create and communicate understanding and to collaborate with and relate to others.
- Practical/technical skills such as, modelling skills (abstraction, logic, succinctness), qualitative and quantitative analysis.

Course content

This course explores why economies differ in their sectoral composition and why their economic structure changes as they develop. The focus is specifically on the role of three broadly defined sectors and their main characteristics: agriculture, industry and services. One underlying theme is the feedback loop between aggregate productivity (GDP per worker) on the one hand, and sectoral productivity and composition on the other hand.

The course relies on recent theoretical contributions and empirical evidence to cover the following topics: Demand versus supply-driven factors behind structural transformation; Sectoral interdependencies through intermediate and capital goods; The agricultural productivity and wage gap; The substitutability between market and home services; Differences in human capital intensity across sectors; The role of technology and skill-biased technical change in development and structural transformation; Tradeable versus non-tradable goods.

Throughout, the course stresses the use of simple theoretical models and their purpose as analytical and measurement tools. As a result, students will learn the importance of general equilibrium effects in environments featuring multiple sectors and production factors. Students will also learn the basic techniques employed in national accounting and productivity measurements.



Course structure

This course will be delivered as a block in two separate weeks. Each of the two weeks will have courses on two separate days (i.e., altogether four days of courses), with a week-long break in-between.

Course literature

The lecture slides represent the main examinable material. There is no prescribed textbook. The main reading material consists of journal articles on specific topics covered in the lectures. Some of these (as indicated in the lecture slides) will represent examinable material, while others are intended as complementary readings that deepen and clarify the lecture material. Herrendorf, Rogerson and Valentinyi ("Growth and Structural Transformation" 2014) comes closest to a summary article as it covers a number of topics discussed in class.

Additional course information

- -

Examination information

Examination sub part/s

1. Examination sub part (1/2)

Examination time and form

Decentral - Written examination (75%, 90 mins.)

Remark

Examination-aid rule

Extended Closed Book

The use of aids is limited; any additional aids permitted are exhaustively listed under "Supplementary aids". Basically, the following is applicable:

- At such examinations, all the pocket calculators of the Texas Instruments TI-30 series and mono- or bilingual dictionaries (no subject-specific dictionaries) without hand-written notes are admissible. Any other pocket calculator models and any electronic dictionaries are inadmissible.
- In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as notebooks, tablets, PDAs, mobile telephones and others, are inadmissible.
- Students are themselves responsible for the procurement of examination aids.

Supplementary aids

Examination languages Question language: English Answer language: English

2. Examination sub part (2/2)

Examination time and form Decentral - Presentation (in groups - all given the same grades) (25%)

Remark

Examination-aid rule Practical examination



No examination-aid rule is necessary for such examination types. The rules and regulations of the University of St. Gallen apply in a subsidiary fashion.

Supplementary aids

Examination languages Question language: English Answer language: English

Examination content

The examination will consist of two parts. One is a written exam, worth 75% of the final mark. The other part is based on student group presentations, worth 25% of the final mark.

The written exam itself will consist of a problem-solving part (75%) and a short essay (25%). The problem-solving part assesses the students' ability to manipulate simple models explaining various empirical phenomena related to structural transformation. It tests in equal measure the understanding of the specific mathematical framework and the intuition that it conveys. The essay part gives students the possibility to demonstrate their overview and informed opinion on the subject matter.

For the student group presentation, each group of students will be asked to give a short presentation of a research paper. Students will be able to choose from a list of pre-announced papers (see list of "supplementary/voluntary literature" below) on a first come, first serve basis. Students will be able to self-select into groups of roughly equal size. The number of groups will be announced after the first week of lectures. Each group will be marked on the quality of the presentation, namely by how well the group summarizes the content of the research paper and how the paper is relevant.

Examination relevant literature

Examinable literature:

• Comin, Diego, Martí Mestieri, and Danial Lashkari. 2019. "Structural Transformations with Long-run Income and Price Effects," Working Paper available at<u>https://docs.google.com/viewer?</u>

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- Duernecker, Georg, Berthold Herrendorf, and Ákos Valentinyi. 2019. "Structural Change within the Service Sector and the Future of Baumol's Disease." Working Paper available at<u>https://sites.google.com/site/georgduernecker/UBGPaper10.pdf?</u> <u>attredirects=0&d=1</u>
- Gollin, Douglas., Stephen L. Parente, and Richard Rogerson. 2007. "The Food Problem and the Evolution of International Income Levels," Journal of Monetary Economics 54:1230-1255.
- Herrendorf, Berthold, Richard Rogerson, and Ákos Valentinyi. 2013. "Two Perspectives on Preferences and Structural Transformation." American Economic Review, 103(7): 2752-89.
- Lagakos, David, and Michael E. Waugh. 2013. "Selection, Agriculture, and Cross-Country Productivity Differences." American Economic Review, 103(2): 948-80.

Voluntary literature:

- Álvarez-Cuadrado, Francisco and Markus Poschke. 2011. "Structural Change Out of Agriculture: Labor Push versus Labor Pull." American Economic Journal: Macroeconomics 3: 127-158.
- Boppart, Timo. 2016. "Structural Change and the Kaldor Facts in a Growth Model with Relative Price Effects and Non-Gorman Preferences," Econometrica, 2167-2196.
- Buera, Francisco J. and Joseph P. Kaboski. 2012. "The Rise of the Service Economy," American Economic Review, 102: 2540-2569.
- Buera, Francisco J., Joseph P. Kaboski, Richard Rogerson, and Juan I. Vizcaino. 2015. "Skill-Biased Structural Change." Working Paper available at<u>http://www.nd.edu/~jkaboski/BKRV.pdf</u>
- Duarte, Margarida and Diego Restuccia. 2010. "The Role of the Structural Transformation in Aggregate Productivity," Quarterly Journal of Economics, 125: 129-173.
- Duarte, Margarida and Diego Restuccia. Forthcoming. "Relative Prices and Sectoral Productivity," Journal of the European Economic Association. Available at https://ideas.repec.org/p/tor/tecipa/tecipa-628.html
- Duernecker, Georg, and Berthold Herrendorf. 2019. "Structural Transformation and Occupation Employment." Working Paper available at

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https://sites.google.com/site/georgduernecker/OccupationsSTCurrent.pdf?attredirects=0&d=1

- Gollin, Douglas, David Lagakos, and Michael E. Waugh. 2014. "Agricultural Productivity Differences across Countries." American Economic Review: Papers & Proceedings, 104(5): 165-70.
- Gollin, Douglas, David Lagakos, and Michael E. Waugh. 2013. "The Agricultural Productivity Gap." The Quarterly Journal of Economics, 129(2): 939-99.
- Herrendorf, Berthold and Ákos Valentinyi. 2012. "Which Sectors Make Poor Countries So Unproductive?" Journal of the European Economic Association, 10: 323-341.
- Herrendorf, Berthold, Richard Rogerson, and Ákos Valentinyi. 2014. "Growth and Structural Transformation." In Philippe Aghion and Steven N. Durlauf, eds., Handbook of Economic Growth, Vol. 2, Elsevier: 855-941. Available at https://sites.google.com/site/bertholdherrendorf/Home/research-1/selected-publications
- Jorgenson, Dale W. and Marcel P. Timmer, 2011. "Structural Change in Advanced Nations: A New Set of Stylised Facts," Scandinavian Journal of Economics, 113(1), 1-29.
- Kongsamut, Piyabha, Sergio Rebelo, and Danyang Xie, 2001. "Beyond Balanced Growth," Review of Economic Studies, 68: 869-882.
- Ngai, L. Rachel and Christopher A. Pissarides. 2007. "Structural Change in a Multisector Model of Growth," American Economic Review, 97: 429-443.
- Restuccia, Diego, Dennis Tao Yang, and Xiaodong Zhu. 2008. "Agriculture and Aggregate Productivity: A Quantitative Cross-country Analysis," Journal of Monetary Economics 55: 234-250.
- Young, Alwyn. 2014. "Structural Transformation, the Mismeasurement of Productivity Growth, and the Cost Disease of Services." American Economic Review, 104: 3635-67.

Please note

Please note that this fact sheet alone is binding and has priority over any other information such as StudyNet (Canvas), personal databases or faculty members' websites and information provided in their lectures, etc.

Any possible references and links within the fact sheet to information provided by third parties are merely supplementary and informative in nature and are outside the University of St.Gallen's scope of responsibility and guarantee.

Documents and materials that have been submitted no later than the end of term time (CW21) are relevant to central examinations.

Binding nature of the fact sheet:

- Information about courses and examination time (central/decentral) and examination typestarting from the beginning of the bidding on 23 January 2020
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for decentral examinations after the 4th semester week on 16 March 2020
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for central examinations as from the starting date for examination registration on 6 April 2020

Please consult the fact sheet again after these deadlines have expired.