

## **Draft Agenda Workshop**

### **Training Workshop on Technology Growth and Productivity, including KET.**

**Dates: 18-19 May 2017**

**Location: EIZ**

#### **Day 1:**

Day one will be the academic day with Thomas Zieseemer preparing for lectures and discussions in the morning, and the afternoon will be presentations of papers and research ideas from EIZ researchers.

**Thomas Zieseemer, Department of Economics, Maastricht University, and UNU-MERIT**

#### **Five parts of a lecture series**

- Basics of endogenous growth (60')
- Imperfect international capital movements in the Uzawa-Lucas model with calibration (45')
- Growth with imported capital goods and limited exports: Model, non-linear estimation for Mauritius (45').
- Semi-endogenous growth model with public factors, imported capital goods, and limited export demand: Theoretical model and VECM estimation for Trinidad&Tobago (45')
- Croatia in a Growing World Economy: A look from the outside (30-45')

#### **The purpose is learning to link theory and empirics, and the related problems and limits**

1. Endogenous growth;
2. Growth with public capital,
3. Growth with imported capital goods
4. Growth with public and imported capital goods;
5. Empirical methods

#### **Literature that may help**

*1 Endogenous growth survey* (For technical training use book by Barro/Sala-i-Martin)

Schneider, J., T. Zieseemer "What's New and What's Old in New Growth Theory? Endogenous Technology, Microfoundation and Growth Rate Predictions - A Critical Overview", *Zeitschrift für Wirtschafts- und Sozialwissenschaften* 115, 1995, Nr. 3, 429-472.

2 Emphasis on public and human capital capital:

Ziesemer, T. "Public Factors and Democracy in Poverty Analysis", Oxford Economic Papers, 1990, Special Issue on Public Economics, Vol.42, January, 268-280. Reprinted in: P.J.N. Sinclair and M.D.E. Slater (eds.), Taxation, Private Information and Capital, Clarendon Press, Oxford 1991.

Ziesemer, T. "Endogenous Growth with Public Factors and Heterogeneous Human Capital Producers", Finanzarchiv, Neue Folge, Band 52, 1995, Heft 1, 1-20.

### 3 *Emerging economy growth with imported capital goods: Model and Estimations*

Mutz, Christine; T. Ziesemer. Simultaneous Estimation of Income and Price Elasticities of Export Demand, Scale Economies and Total Factor Productivity Growth for Brazil, Applied Economics, Volume 40, Issue 22 November 2008 , pages 2921 - 2937.

Habiyaremye, Alexis; T. Ziesemer. Export Demand Elasticities as Determinants of Growth: Estimates for Mauritius. Applied Economics, Volume 44, Issue 9, March 2012, pages 1143-1158.

#### 3a Extension to classical theory and application to Prebisch-Singer thesis:

Ziesemer, T. "Economic Development and Endogenous Terms of Trade Determination: Reexamination and Reinterpretation of the Prebisch-Singer Thesis", UNCTAD Review 1995, 17-34. Reprinted in: NEW WORLD ORDER SERIES VOL. XIII, Export-led versus Balanced Growth in the 1990s, edited by Sir Hans Singer, N. Hatti and R. Tandon, B.R. Publishing Corporation Ltd., 1998.

#### 3b Extension to perfect capital movements:

Ziesemer, T. "Growth with Imported Capital Goods, Limited Export Demand and Foreign Debt", Journal of Macroeconomics, Vol. 17, No.1, 1995, 31-53.

#### 3c Extension to imperfect capital movements and the 1982 debt crisis:

Ziesemer, T. "A Prebisch-Singer Growth Model and the Debt Crises", in: "DEVELOPMENT ECONOMICS and POLICY", edited by David Sapsford and John-ren Chen, Macmillan 1998, 300-317.

#### 3d Merging the public and imported capital models and estimates for Trinidad&Tobago:

Jan Simon Hallonsten and Thomas Ziesemer, A semi-endogenous growth model for developing countries with public factors, imported capital goods, and limited export demand, UNU MERIT WP 2016-004.

### 4. *Empirical methods:*

- Nearest neighbor fit incl loess/lowess (also reviews manual; books by Fan and Geibels; or Chambers, Cleveland, Kleiner, Tukey)
- Systems of Regression Equations
- Simultaneous equation system estimation
- Vector autoregressive models
- Nonstationary data, VAR, and VECM basic
- And chapters to understand these; all are (sub-) chapters in
- Greene, Econometric analysis, xth edition, Prentice-Hall.
- Link this literature to the user manual of your preferred software.
- Keep in touch with recent developments through subscription to wp alerts at <http://nep.repec.org>
- and alert e-mails from journal publishers; learn other methods used there.

### **Lunch**

**Afternoon:** Paper Presentations of EIZ researchers

### **Day 2**

Day 2 of the workshop will have a policy focus and have relevant stakeholders invited to the event.

**10:00 – 11:00**

**Opening Presentation by Fernando Vargas Cuevas on: Technology, Growth and Productivity and linking it to policy**

**11:00 – 12:00**

**Presentation by Rene Wintjes on: Policies for advance manufacturing (and address the concept/indicators/policies regarding KETs)**

### **Lunch**

### **Afternoon**

**Presentations by policy maker and/or external researchers**

**Panel discussion** (moderated by EIZ?)