

Annex to the Report

TP WINNET BSR WORKSHOP AND SEMINAR IN SZCZECIN

1st part Presentations November 20th 2014



Gender, Innovation and Sustainable Growth: a research framework

Ewa Ruminska-Zimny, PhD TP WINNET BSR Research Workshop Szczecin, 20 November 2014

Gender: a new research area in economics

- From micro to macroeconomics (1960s late 2000s)
- New Home Economics: family as an economic unit optimizing choices within given resources (*Becker 1965*, 1981); missed power relations within a household
- *Human capital (Shultz 1961,1974); institutionalism role of non-economic factors in market decisions (Veblen)*
- Gender and Macroeconomics (GDP; monetary, fiscal, trade); effects structural (WB/IMF) (Boserup, Beneria; UN Beijing 1995), massive entry of women to labour market
- 2000s Gender in mainstream economics -- "womenomics" ,,female factor ,, (World Bank 2001; 2006; IMF/Stocky 2006; OECD/Jaumotte 2003)
- Gender centers at LSE, Rutgers Univ., American Univ.

Problems with the framework

- Economics is not a gender neutral science (as it claims)
- *Homo economicus* as a central figure: a white middle class male (Robinson Crusoe type)
- Focus on production and finance; reproduction/caring/unpaid work left outside
- Reproduction of labour as a "natural" process
- Mainstream economics (laws, mechanisms and models) does not provide the "right" answer how societies should allocate (scarse) resources to optimize results

Distorted assumptions, GDP calculations, and institutions

- Assumptions: 1) unlimited supply of labour (factor and not a resource which requires investment) 2) automatic adjustments market non-market sphere (reproduction/unpaid care); "buffer" hypothesis: in recession women leave labour market, increase unpaid work (to compensate for cuts in social expenditure) and have more babies (*Folbre 1994*)
- GDP calculations: do not show women's contribution of caring unpaid work (does not go through market/has no price) nor women's priorities how GDP is spent (investments in infrastructure/social expenditure)
- Labour market, fiscal or monetary policies and institutions reflect this view (employment cuts, tax system ect) – but also informal institutions (*North 1990*) --stereotypes on women's role.

Male bias in macroeconomics (Elson and Cagatay 2000)

- **Deflationary bias** the priority given to low inflation and fiscal restraint v. public spending and employment; *priority to financial sector/production over reproduction /(core of IMF policies in 1980s).*
- Male bread winner bias social reproduction covered through a wage (and benefits) paid to male breadwinner; women as secondary earners, depend on men (also policies for ex. joint taxation penalize women's work)
- Commodification bias minimizing public provision; budget deficit covered by cuts/not increase of tax revenues (more unpaid work)
- Other biases such as *creditor bias* : women penalized as risky borrowers (lower income/no collateral results) means more difficult to obtain/more expensive credit (Young et al. 2011)

Demographic arguments

- Demographic trends challenge the assumptions of neoclassical model: reproduction proces is no longer "free of charge" (as unpaid caring work of women)
- Changes in a family model ("dual earner"); new relationship women's employment – fertility; from negative (up to 1980s) to positive correlation (in mid 1980s) . More work –more babies (as in Sweden) and less work – less babies (Poland) (*D'Aggio*, *d'Ercole 2005; Matysiak, Kotowska 2008*)

Care work at the center of sustainable development

- Caring labour is key for well-being but also reproduction of human society (human and social capital)
- Determines limits to sustainable development through birth rates and health
- At macro level unpaid work reduces the cost of labour, the wage fund as well as increases profits and accumulation /without unpaid care work employers would have to pay higher wages
- Care subsidizes not only market but also state provisioning if there is no unpaid care the state should provide more services

Feminist Economics: an alternative to mainstream economics

- Roots: A. Smith (social justice); J.M. Keynes (role of the state); K. Marx (class inequalities); A. Sen (capabilities, human development) also heterodox economics (green economics, sustainable growth
- Critical analysis of the neoliberal agenda; developing an alternative conceptual framework, methodologies and tools
- International Association of Feminist Economists (IAFFE) established in 1992; a journal Feminist Economics www.iaffe.org; 1994 GEM-IWG www. genderandmacro.org) (Elson 1991; Cagatay et al. 1995; Beneria 1995);
- Gender and Macroeconomics GEM –global; GEM-Europe www.gem-europe.eu

Economy/market : mainstream/neoclassical economics



Economy/market: Feminist Economics

Figure 3 National economy through women's eyes, Elson, in Ruyter van Stevenninck & de Groot 1998



Key features of FE

- Gender perspective is central to economic analysis (together with race, ethnicity, class)
- It is holistic, interdisciplinary and has a specific context (micro-meso-macro levels)
- Incorporates markets (production, finanse) and non- market (reproduction, unpaid care)
- Investigates disctributional aspects of economics (growth-who benefits; wealth, resources-- how they are distributed)
- Takes into consideration power relations at micro- meso- and macro levels
- Its tools: time-use budgets; gender budgets

The Purple economy: A call for a new order (*I. Ilkaracan* 2012)

- A response to care crisis (similar to environmental dammage); human needs beyond consumption (ecosystem)
- Accounts for unpaid care work (value of nature); calls to internalize into the economy its costs (costs of environmental dammage)
- Aimes to eliminate (through redistribution) inequalities by gender, class, ethnic minorities (intergenerational inequalities)
- Calls for reordering of priorities from consumption (market) to nurture (non- market) (from GDP growth to sustainable development)

Purple Economy: 4 pillars (Ipek Illkaracan 2012)

- Social infrastructure for universal care provisioning (for children, eldery, dependent family/society members)
- Labour market regulations to enable work –life balance with equal incentives for men and women
- **Public policies** for special care needs for rural communities (where caring labour entails productive/reproductive work dependent on natural resources
- **Regulation of the macroeconomic environment** for nature, nurture and human well-being as core objective of macroeconomic policy

Challenges for WINNET Center of Excellence

- Advancing policy oriented research to include a gender perspective in economic strategies and policies
- Defining a gender sensitive concept of innovative economy based on BSR experience
- Raising awareness, building 4 helix partnerships and policy dialogue at regional, national, local levels
- Identifying gender dissagregated indicators of sucess
- Preparing country specific policy recommendations



Winnet Centre of Excellence and its Research Agenda

Marta Hozer-Koćmiel University of Szczecin, Winnet Centre of Excellence

'Gender, Innovation and Sustainable Growth. Research and Practice' Seminar, 20-21.11.2014, Szczecin

What is Winnet Centre of Excellence and what has already been done?

Why we do that?

Who are the actors involved in the project?

What is in the Research Agenda and when we plan to do that?

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FEM - Female Entrepreneurs Meetings in the Baltic Sea Region,

Baltic Sea Region Interreg III B (August 2004 - July 2007) The aim of FEM was to strengthen the structures that support women's entrepreneurship through co-operation and the exchange of knowledge and best practices

W.IN.NET Europe, Interreg IIIC (2006 - 2008)

The aim was to create WINNET Europe - the European Association of Women Resource Centres

Women In Net 8, WINNET8, Interreg IVC (2010 - 2011)

The objective was contribute to regional growth by improving women's participation in the labour market, focusing on: the lack of women in innovation and technology, the lack of women in entrepreneurship

Thematic Partnership Winnet Baltic Sea Region,

Winnet BSR, Swedish Institute (2013 - 2016)

One of the aim is to create the BSR Partnership Platform for Gender, Innovation and Sustainable Development and the Winnet Centre of Excellence for Gender and Economic Researchers



Winnet Centre of Excellence – the international network of researchers in the Baltic Sea Region for the purpose of doing and promoting policy oriented research on Gender, Innovation and Growth.

Women Resource Centre – the network of practitioners that aims to 1. empower women, 2. be a neutral meeting place for networking groups of women, 3. be a centre for information and documentation, 4. provide women with advice on how to implement their projects or business ideas, 5. mediate contacts with others women's networks.

What is Winnet Centre of Excellence and what has already been done?

Why we do that?

- Who are the actors involved in the project?
- What is in the Research Agenda and when we plan to do that?

1. Because of the lack of policy oriented research on Gender, Innovation and Growth from a macro perspective

2.

Because of the lack of Gender Equity perspective in many economics' faculties across BSR

3.

Because of the need of integration and common training program for Gender & Economics Researchers

> 4. Because of the need of platform linking research (WCE) and business environment (WRC)



What is Winnet Centre of Excellence and what has already been done?

Why we do that?

Why we do that?

Who are the actors

- Who are the actors involved in the project?
- What is in the Research Agenda and when we plan to do that?

Research plan for The Winnet Centre of Excellence

WP Stock taking of existing research on gender, innovation and economic growth/sustainable development (end Dec 2014) Oct 2013, Luleå, Sweden -'Modelling of the relation between gender equality and growth in BSR countries', conference EGI 'Equality, growth and innovation - in theory and practice".

Unpaid work concept included.

The more women's unpaid domestic work the less sustainably developed the BSR country



The more paid/market work for women and men the more sustainably developed the BSR country.

The more men's unpaid work the more sustainably developed the BSR country.

WP Gender analysis of the SMEs in ICT and tourism in the BSR - quantitative approach (end March 2015)

Methods: descriptive statistics, elements of the time series analysis and correlation analysis will be applied

Statistical Portrait of Women in ICT in BSR countries.

In Report 'Baltic Sea Region Conference with focus on Gender ICT', Winnet Sverige, Stockholm, 2012, M.Hozer-Kocmiel and U. Zimoch

Gender analysis of the present situation in Germany, Lithuania and Sweden – labour market, entrepreneurship, cross border exchange in trade and business cooperation.

Winnet Sweden, Region Skane, Malmo, 2012, M. Hozer-Kocmiel, U. Zimoch

7 reasons why women's entrepreneurship is worth promoting in the Mare Balticum countries,

chapter in monograph 'Corporate Social Responsibility and Women`s Entrepreneurship around the Mare Balticu', pod red. M. Hogeforster& P. Jarke, Baltic Sea Academy, Hamburg 2014, M. Hozer-Kocmiel, B.M. Torstensson, S. Misiak

WP The analysis of Women Resource Centers' potential as actors increasing Women's participation in SME, Innovation and Economic Growth (end June 2015)

Number of women inventor/innovator entrepreneurs in Europe is low;
 Only 10 % of patents awarded by the European Patent Office are awarded to women;
 Less that 15 % of high-tech business is owned by women;



WP Pilot survey on women-led SMEs in ICT and tourism (end Dec 2015)

A survey will cover women-led companies from the ICT and tourism sector in order to find factors increasing innovativeness in BSR.

It will be conducted by means of a dedicated questionnaire with the help of the WINNET web platform for woman innovators.

WP The BSR model for Gender Sensitive Entrepreneurship and Innovation Support in ICT and tourism (end June 2016)

A Call of Proposals will be sent to the researchers constituting the Winnet BSR Partnership Platform

A book 'Model for Gender Sensitive Framework, Entrepreneurship and Innovation'

Women could do anything if they only knew what it was.

- Barbra Sher

Thank you for your attention! Marta Hozer-Kocmiel <u>mhk@wneiz.pl</u>





- Jagiellonian University a project promoter
- University of Warsaw
- Østfold University College

INNOGEND	InnoGend	Project
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- Project lasts 36 months from 1st Sep. 2013 to 31st August 2016
- Project fully funded from Norway Grants in the Polish-Norwegian Research Programme operated by the National Centre for Research and Development

INNOGEND Key members of the research team

 Ewa Okoń-Horodyńska – coordinator of the project - Professor of Economics at Jagiellonian University in Krakow, Poland, Head of Economics Department; the Director of the International Network of Women Engineers and Scientists in Central and Eastern Europe; former vice minister of Science; a member of professional bodies: the Polish Economic Association, the Polish Academy of Sciences - Vice President of the Science of Science Committee, European Association for Evolutionary Political Economy, COPE International

INNOCGEND Key members of the research team

• Barbara Liberda - Professor of Economics at University of Warsaw, Poland; head of the Chair of Development Economics; head of Statistics Methodology Commission, Central Statistical Office; founder and expert for Science and Innovations, INVESTIN; president of High Tech Foundation; a member of professional bodies: Economic Association European (EEA); International Association for Research in Income and Wealth (IARIW); International Atlantic Economic Society (IAES); International Association for Feminist Economics (IAFFE); Polish Economic Society – Executive Committee Member (PTE)

INNOCGEND Key members of the research team

• Danuta Tomczak - Associate Professor in Economics at Østfold University College, Norway; Head of International Business Programme; Member of College Board for International Cooperation; Member of Faculty Board for Educ Quality& Internationalization; a member of professional bodies: Norwegian Association of Economists, European Economic Association, Polish Economic Society



INNOGEND Key members of the research team

Rafał Wisła - assistant professor , coordinator of rec economics at Jagiellonian Univveristy; leader, coordinator and participant of research programmes, like: "Establishment of the universal, open, hosting and communication, repository platform for network resources of knowledge to be used by science, education and open knowledge society" (National Centre Research and Developm Research and Development Republic of Poland, 2010-2014); "Design of Scenarios Trends Development of selected Information Society Technologies until 2025" (EU Structural Funds Grant, 2010-2012)

Anna Zachorowska-Mazurkiewicz, assistant professor in economics at Jagiellonian University; a member of GEM-IWG and co-founder of GEM-Europe; a founding member of WINIR; a member of Feminist Think Tank, European Association for Evolutionary I ny, Association Political Economy, for Evolutionary Economics, International Association for Feminist Economics

The InnoGend project focuses on innovative gender, the concept that combines roles of and men with a process of women innovativeness and creativity. In our research we concentrate on specificities of innovative behavior by men and women. Learning about special aspects of female and male innovativeness could result in finding new progress sources of and competitive advantages, also through elimination of the existing barriers.



Diversity of gender is not sufficiently exploited in the context of innovativeness. Insufficient use of gender innovativeness limits social and economic progress and hampers gender equality. Application of innovative gender concept in social and economic policy is a step towards innovation-based growth.

INNOCGEND Project objectives

- to identify and measure the concept of innovative gender as a new dimension of gender mainstreaming
- to examine the role of innovative gender as a contribution to smart growth based on knowledge and innovations
- to identify specificity of innovative gender in shaping better quality of life
- to examine the different types of innovations as a new source of progress from the perspective of gender
- to assess effectiveness of public policies in the context of innovative gender

INNOGEND Workpackages

- Workpackage 1 Statistical profiles of women and men status in the economy, science and society
- Sep 2013 May 2014 WP Leader prof. dr hab. Barbara Liberda
- In the first stage of research status of women and men in the economy, science and society was analyzed. Research concentrated in such areas of human activities, as: labour market, households, science and technology, politics.

Presentations of WP1 results

- Panel at Gender Economics Global Conference Sydney 10-11 June 2014:
- Ewa Okoń-Horodyńska Innovation, innovativeness and gender - approaching Innovative Gender
- Anna Zachorowska-Mazurkiewicz-Women in Transition - Institutional Changes in Poland and the situation of Polish Women
- Rafał Wisła Gender and Industrial Creativity in Poland
- Articles under review to be published in "Contemporary Global Perspectives on Gender Economics"



- Ewa Okoń-Horodyńska: Gender in the Regional Innovation Strategy: the case of Malopolska. Paper presented at Congress of Political Economists International. Zurich 2014.
- Danuta Tomczak: Presentation of InnoGend research project at European Science Foundation (ESF) "Portrait of a Lady", Rome 22-24 September 2013.
- Anna Zachorowska-Mazurkiewicz: Shared concepts of institutional and feminist economics. Paper presented at Inaugural WINIR conference "Institutions that change the World, 11-14 September 2014. University of Greenwich. London.
- Smyk Magdalena, Joanna Tyrowicz, Barbara Liberda: Ageproductivity patterns in talent occupations for men and women, paper presented at Warsaw Economic Meeting, 10-12 July 2014, Warsaw.
- Katarzyna Białek: Determinants of entrepreneurship of women and men. Paper presented at WIEM conference, 10-12 July 2014, Warsaw.

INNOGEND Publications of WP1 results

- Liberda Barbara, Marek Peczkowski (2014), Life-cycle income of women and men in Poland, [In:] Metody ilościowe w badaniach ekonomicznych, vol. XV, pp. 1-16 (in print).
- Smyk, Magdalena, Joanna Tyrowicz, Barbara Liberda (2014), Age-productivity patterns in talent occupations for men and women: a decomposition, Post-Communist Economics 26(3), pp. 401-414.

Publications - Forthcoming book

- Statistical profiles of women and men status in the economy, science and society, Ewa Okoń-Horodyńska, Anna Zachorowska-Mazurkiewicz (eds.)
- Gender as an analitical category in social sciences Magdalena Jaworek, Anna Zachorowska-Mazurkiewicz Gender in economics – Danuta Tomczak
- Taking gender seriously. Present trends and recommendations for scientific environment Marta du Vall, Marta Majorek Gender in Politics. Prospects and recommendations Marta du Vall, Marta Majorek
- Professional situation of women and men in Poland declarations and reality Danuta Kopycińska Entrepreneurship by women and men in Poland - comparative analysis - Katarzyna Białek
- Analysis of time use time alocation between women and men in Poland Katarzyna Mroczek, Anna Zachorowska-Mazurkiewicz
- Contemporary value profiles of women and men Polish pilot survey Anna Dyląg Marcin Szafrański
- Measurement of accomplishments in science, technology and innovative activities criterion of aender Rafał Wisła Creative patent activity of women and men in Polish economy - years 1999 - 2013 - Tomasz
- Sierotowicz Differences in creative activities of women and men in Poland, Hungary, Ireland and Norway – analzsis based on patents declared in EPO in years 1999 – 2013 - Tomasz Sierotowicz Psychological aspects of innovativeness - Magdalena Jaworek, Anna Dyląg

- From Innovation to Innovative Gender Ewa Okoń-Horodyńska

INNOGEND Workpackages

- Workpackage 2 Approaching innovative gender - input of women and men in innovativeness
- March 2014 February 2015 WP Leader prof. dr hab. Ewa Okoń-Horodyńska
- In the second stage of research input of women and men in innovativeness is analyzed in order highlight gender dimensions to of innovativeness. Additionally psycho-social factors influencing innovative gender are defined.



Women & Men in the single genom of innovation (potential commonalities and differences)

- **Work environment**: cooperation, competition, motivation, workload, autonomy
- **Personal qualities:** intuition, perceptiveness, risk propensity, risk aversion, unconventional way of thinking and acting, compliance to rules and regulations
- Abilities, Skills, Competences: ability to persuade, to make decisions, to learn and make use of knowledge, holistic approach (considering externalities), ability to find financial sources, to set goals and draft ways how to achieve them
- Attitudes and values: focus on people, on tasks, calculating person, aspirations, trust
- Roles and behaviors: guiding spirit, leader, negotiator, controller, representative, team member

Stages of innovation process

- 1. Creativity generating ideas
- 2. Accumulation managing ideas
- 3. Prioritization selecting ideas
- 4. Development testing ideas
- 5. Potential innovation managing projects
- 6. Innovation implementing solutions

<text><text><image>

INNOGEND Pilot survey

Questionnaire - ..\..\Badania\Norwegian Fund\WP\WP2\Ankieta

InnoGend\Formularz ankiety InnoGend 01.0 9.docx

21 enterprises:

Krakow (15), Jaroszowiec, Oświęcim, Kielce, Podłęże, Poznań, Pabianice

INNOCEND Workpackages

- Workpackage 3 Institutional support of innovative gender
- February 2015 October 2015 WP Leader prof. Danuta Tomczak
- Scandinavian countries have high standards of gender equity and equality, therefore this part of work will concentrate on examining institutional factors and social relations in Norway. Also the European Union's approach and strategies in the area and the institutional support for innovative gender in Poland will be analysed.

WORKPackages

- Workpackage 4 Assessment of public policies for social progress in the context of innovative gender
- September 2015 April 2016 WP Leader prof. dr hab. Barbara Liberda
- In this stage of the research the effectiveness of public support provided to both men and women will be analysed. Ddifferent behaviour in creation of innovations by women and men should be equally promoted by policy instruments. Policy instruments will be assessed in order to verify their impact on innovative women and men.

INNOGEND Workpackages

• Workpackage 5 - Dissemination of research results and policy recommendations

March 2016 - August 2016

The results of the project: the concept of innovative gender, examples of creative products and services, methods for policy assessment, the model of the influence of innovative gender on social progress and smart growth and policy recommendations will be disseminated in WP 5.



Chosen results of the InnoGend project

- Report on psycho-social factors determining innovative gender
- Model of Integrated Genome of Innovative Gender (IGIG)
- Report on innovative activities in the framework of gender
 Report on policies and good practices in supporting innovative gender in Norway, the EU and Poland
- Methods of policy evaluation
- Model of the influence of innovative gender on social progress and innovation based growth
- Model of efficient policy support for innovative gender to promote smart growth and social progress
- Conference and exhibition of products and services of innovative gender

INNOGEND Contact

- InnoGend website -<u>http://innovativegender.pl/index.php</u>
- Contact <u>ewa.okon-horodynska@uj.edu.pl</u> anna.zachorowska@uj.edu.pl

Mentalność a oczekiwania płacowe kobiet w Polsce

Dyskryminacja czy akceptacja?

Prof. zw. dr hab. Danuta Kopycińska

M.

Główne zagadnienia:

- przeciętny miesięczny dochód kobiet i mężczyzn w Polsce
- zarobki kobiet i mężczyzn w Polsce
- oczekiwania płacowe kobiet i mężczyzn w Polsce

No. Contraction

Przeciętny miesięczny dochód osobisty netto kobiet i mężczyzn w różnych grupach zawodowych <u>przy kontroli wieku</u>

	Mężczyźni	Kobiety	Różnice M-K w zł.	Różnice w %
Pracownicy usług osobistych i sprzedawcy	2 139	1 615	524	25
Robotnicy przemysłowi i rzemieślnicy	2 165	1 585	580	27
Pracownicy biurowi	2 094	1 947	147	7
Technicy i średni personel	2 882	2 222	660	23
Specjaliści	3 587	2 699	888	25
Przedstawiciele władz, wyżsi urzędnicy i kierownicy	4 152	3 574	578	14
				średnia: 20,2

Źródło opracowanie własne na podstawie: T. Panek, J. Czapliński, op. ci. s. 365

AND STOCK

WYDZIAŁ NAUK EKONOMICZNYCH

Przeciętny miesięczny dochód osobisty netto kobiet i mężczyzn wg wieku <u>przy</u> kontroli liczby lat nauki

LATA	Mężczyźni	Kobiety	Różnice M-K w zł.	Różnice w %
do 24 lat	1 413	1 005	408	29
25 - 34	2 029	1 329	700	34,5
35 - 44	2 453	1 874	579	24
45 - 59	2 300	1 680	620	27
60 - 64	2 047	1 610	437	21
				średnia: 20,2

Źródło opracowanie własne na podstawie: T. Panek, J. Czapliński, op. ci. s. 365



Przeciętny miesięczny dochód osobisty "netto" kobiet i mężczyzn przy kontroli poziomu wykształcenia

	Mężczyźni	Kobiety	Różnice M-K w zł.	Różnice w %			
Przedsiębiorcy	3 039	2 564	475	24%			
Pracownicy sektora prywatnego	2 350	1 738	612	26%			
Pracownicy sektora publicznego	2 446	1 889	557	23%			
Uczniowie / Studenci	1 003	781	222	22%			
Bezrobotni	1 177	865	312	27%			
Wskaźnik dyskryminacji zawodowej śred							

Źródło: T. Panek, J. Czapliński, Dyskryminacja społeczna, w: "Diagnoza społeczna", 2013, s. 365

Slajd nr 5



Zarobki - Mediana



Slajd nr



WYDZIAŁ NAUK EKONOMICZNYCH I ZARZĄDZANIA

Oczekiwania płacowe kobiet i mężczyzn w Polsce

OCZEKIWANIA PŁACOWE	Mężczyźni	Kobiety	Różnice M-K w zł.	Różnice w %
Oczekiwania studentów dotyczące wynagrodzenia za pierwszą pracę (brutto) (zł)	4.461	2.942	1.519	34%
Akademia Ekonomiczna 2007; N=185				
Akademia Ekonomiczna 2007; N=185 Wynagrodzenia bezrobotnych absolwentów w Polsce	Mężczyźni	Kobiety	Różnice M-K w zł.	Różnice w %
Wynagrodzenia bezrobotnych	Mężczyźni 1.995	Kobiety 1.692		Różnice w % 15%

WYDZIAŁ NAUK EKONOMICZNYCH I ZARZĄDZANIA

Oczekiwania płacowe studentów Uniwersytetu Szczecińskiego 2014

	Płaca progowa netto		Płaca satysf ne	
	Mężczyźni	Kobiety	Mężczyźni	Kobiety
Studenci ostatniego roku : ekonomia zarządzanie, zarządzanie i inżynieria produkcji	3.240	2.520	10.100	5.200
N=195 (średnia)	2.000 - 6.000	1.500 - 4.000	3.500 - 30.000	2.500 - 15.000
	Różnica	21,2%	Różnica	48,5%

Źródło: badania własne - 2014

us

Slajd nr l



Oczekiwania płacowe słuchaczy studiów podyplomowych

	Płaca progowa netto		Płaca satysfakcjonująca netto	
	Mężczyźni	Kobiety	Mężczyźni	Kobiety
N = 155	4.850	2.200	18.600	8.150
	Różnica 21,2%		Różnica	48,5%

Źródło: badania własne 2011 - 2014

Studium przypadku

us



Menadżerowie 7 lat

WYDZIAŁ NAUK EKONOMICZNYCH I ZARZĄDZANIA

Menedżerowie:77 (kobiety 6%)

M K 71 – wynagrodzenie

6-krotne przeciętne wynagrodzenie - satysfakcjonujące

MM 52 wynagrodzenie

30-krotne przeciętne wynagrodzenie - niesatysfakcjonujące

MM 54 wynagrodzenie

<u>100-krotne przeciętne wynagrodzenie - niesatysfakcjonujące</u> praca doktorska

Slajd nr 10



Dyskryminacja płacowa kobiet a poczucie bycia dyskryminowanym - dyskryminacja subiektywna – odsetek mężczyzn i kobiet czującym się dyskryminowanymi

LATA	Mężczyźni	Kobiety
2005	2	1,5
2007	1,9	1,7
2009	1,8	1,8
2011	2	1,5
2013	1,8	1,8

Źródło: Opracowanie własne na podstawie: T. Panek, J. Czapliński, op. cit. s. 366 i 367

Osoby pracujące o takim samym stażu i wykształceniu



Slajd nr 11



Prof. zw. dr hab. Danuta Kopycińska

Surveys

on women entrepreneurs: the Polish experience

EWA LISOWSKA, Ph.D. Warsaw School of Economics

Reasons for scientific research on women entrepreneurs

- Obtaining knowledge about a new phenomenon
- Comparison between men and women
- Recognition the motivations of women to start a business
- Recognision the barriers

The first surveys in Poland

- Conducted directly after the implementation of the "Balcerowicz Plan" (in the years 1991–1993)
- Self-employed women in large cities, where the number of female business owners was growing at the relatively quickest pace [Gwiazda 1994; Rogut 1994; Ben-Yoseph, Gundry, Masłyk-Musiał 1997]

Survey on motivations & barriers 1995

- Comparing self-employed women's and men's motivations for launching their own companies, as well as the barriers.
- The survey involved 1050 business owners in entire Poland (random sample from the REGON base; stratified sampling; outside agriculture). The questionnaire was answered by 305 people, of which 143 were women.

Others

- 2005 a survey (500 women & 500 men) on barriers, feeling of success and risk
- 2007 a survey on the representative sample of adult Polish females – over a half of them declared that it is better to carry out own economic activity than have a paid job
- 2011 the surveys among women and men entrepreneurs on barriers (PARP – Polish Agency for Entreprise Development)

Methods

- Quantitative
- Qualitative
- Representative sample
- Experiment

The pilot study within the WINNET Project - suggestions

- Method qualitative (interviews with women owners in the tourism and IT); in each country at least 20 interviews
- Questionnaire the same for all countries
- Purpose:
 - Do stereotypes influence women's choice?
 - □ Do women entrepreneurs see motherhood as one of the most significant barrier to starting up and successfully growing a business?
- NGOs as a source of obtaining women to the pilot study and carry out the interviews as well as writing the conclusions

Introduction (1)

Women's situation at the labor market in transition: former GDR and Poland

Dorota Witkowska, University of Lodz Krzysztof Kompa, Warsaw University of Life Sciences

- There is 25 years after the fall of the Berlin Wall and the beginning of transition in former socialist countries.
- These changes have influenced not only domestic condition in transformed states but also international situation, to mention breakup of Yugoslavia, Czechoslovakia and the Soviet Union.
- The different situation was observed in GDR which became a part of united Germany and followed completely different way of transformation than other post-communist states.
- The sudden exposure to competition from developed countries together with a breakdown of traditional export markets, destroyed national economies in all Central and Eastern European states.

Introduction (2)

- After German unification former GDR economy had to compete with West Germany and abroad that caused an unprecedented increase in effective unemployment (Bonin, Zimmermann, 2000).
- Immediately after unification, a complete collapse of productivity and employment in East Germany was avoided only with substantial transfers from West Germany.
- In Poland during the first years of transformation the damage of the state enterprises and deformed privatization process, involving foreign capital were observed. High inflation, unemployment and impoverishment of society caused social unrest.

Introduction (3)

- Due to UNICEF (1999) women's labor market participation has been falling in many transitional economies since 1989. To avoid high unemployment in early transition period the early retirement schemes were introduced in many postcommunist states, like in Poland and East Germany.
- The scale of the collapse in participation during transition period was very large. For example, in Poland, about one and a half million female jobs disappeared between 1989 and 1994 (Newell and Barry 2001) i.e. about 20%.
- Ten years after unification the number of regularly employed in East Germany declined by almost 40%, and official German unemployment rates exceeded 19% of the labor force in former GDR while in former German Federal Republic this rate was less than 10% in 1999.

Labor market before transition (1)

- The socialist countries of Eastern Europe and the former Soviet Union were long committed, at least nominally, to gender equality in the labor market (Brainerd 2000).
- Government policies such as relatively high minimum wages and generous maternity leave and day care benefits encouraged women to work, and female labor force participation rates were high compared with those of other countries.
- While women remained over-represented in areas such as health and education, they fared at least as well as their counterparts in most developed and developing countries in terms of female-male wage differentials.

Labor market before transition (2)

- In the centrally planned economy wages were assigned according to occupational wage scale within each industry. The enterprises operating under no competitive pressure were left with little impact on wage rates and wage differentials.
- There was no unemployment in the sense of joblessness, however efficiency of work was very low and many job positions were completely useless.
- Women were accorded a wide range of rights and privileges at work, such as: fully paid maternity leave, legal protection from overly physical and dangerous work during pregnancy, nursery schools and health care facilities that were located in larger enterprises.
- In terms of occupations and industry branch, women and men were segregated in similar way as in the West.

Labor market before transition (3)

- In many centrally planned economies, women's labor market participation was higher than in Western states. The main reason of that fact was low labor market earning of single employee which was not enough to maintain a basic living standard thus both adults in a nuclear family had to work.
- Therefore relatively few women held senior positions since women undertook a very large share of domestic duties thus incurring a double burden and leaving them less time to pursue a career than men. Also, the revolution in gender relations in the West, which has brought about a slow but fundamental shift in the household division of labor, did not happen in the communist countries.
- Before the collapse of the communist system, more than 80% of women at working age participated in the labor market in GDR, and in Poland this ratio was 72%.

Situation of women in former German Democratic Republic (2)

- In May 2000, female participation rate in East Germany was considerably low compared to the one before unification, it still exceeded the corresponding rate of 62% for women resident in the area of the former German Federal Republic (West Germany) substantially.
- The moderate decline in female labor force participation in East Germany is quite remarkable considering that women have been facing high levels of unemployment since the collapse of employment opportunities at the beginning of unification.
- Ten years after unification official German unemployment rates exceeded 19% of the labor force in former GDR while in former German Federal Republic this rate was less than 10% in 1999.
- The economic transition following thereafter brought the employment rate among working age women to the West German level of 58%. One might expect that enduring low outflow from unemployment to employment would discourage unemployed women from seeking employment. Besides, public policies during the economic transition, like early retirement schemes and the adaptation of the Western tax and transfer system, established incentives to withdraw from the labor market.

Situation of women in former German Democratic Republic (1)

- Women in the GDR were better integrated into the labor market than women of the former German Federal Republic (GFR) where participation rates were low by international standards.
- Due to information given by Krueger and Pischke (1995 p. 419), in year 1988 female labor force participation in GFR was 49.6% and in GDR – 81%.
- Bonin and Euwals (2002) notice that after the unification of the two German states, the share of women resident in the area of the East Germany who participated in the labor market declined, but only gradually.
- In May 2000, 72% of all women at working age in East Germany were employed or, if not, in search of employment.

Demographic structure in Germany and Poland

		Pop		Fertili	ty rate		
Year	grand total in thousands		of which	n female			
				in % of g	rand total		
		East	Poland	East	Poland		Poland
	Germany	Germany		Germany		Germany	
1985	78896.4	16640	37340.5	52.66	51.23	1.46	2.33
1990	80487.2	18262	38073.0	52.28	51.27	1.43	1.99
1995	83147.7	17646	38284.0	51.53	51.34	1.30	1.55
2000	83512.5	17232	38254.0	51.19	51.54	1.35	1.37
2005	83826.0	16740	38157.0	50.95	51.64	1.35	1.24
2010	83017.4	16326	38200.0	50.82	51.72	1.36	1.38
Rates	1.05	0.98	1.02				

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Expectation of life

	Expectation of life at birth (in years)						
	female				male		
Year	Germany	East Germ.	Poland	Germany	East Germ.	Poland	
1985		75.5	74.8		69.6	66.5	
1990		76.2	75.5		69.2	66.5	
1995		78.6	76.4		71.3	67.6	
2000	81.4*	80.8	78.0	75.6*	73.8	69.7	
2005	82.2	81.9	79.4	76.7	75.6	70.8	
2010	83.0	82.6	80.6	78.0	76.8	72.1	
2012	83.3		81.1	79.7	78.6	72.7	
Rates		1.09	1.08		1.10	1.08	
* Data	from 2001						

Education: population with tertiary education attainment ISCED level 5-6 in 2013

	Percentage share of population			Tertiary education graduates
	total	tal males females		women per 100 men
EU 27	25.4	23.8	27.0	143.2
Germany	25.1	26.7	23.6	122.4
Poland	22.6	18.5	26.7	193.9

Economic situation of women

- There are several indicators, such as income, employment, social benefits, that may be examined in order to assess the relative economic situation of women.
- However, wages seem to be the most important determinants of economic well-being and personal success.
- In particular, the male-female pay differential affects the position of women in the labor market as well as the status and power of women within the household.

Labor market situation

	Number of employed in thousand		Un	employment ra	nte
Year	East Germany	Poland	Germany	East Germany	Poland
1985	8937.0	17914.7	8.2*	Full	employment
1990	8789.0	16484.7	6.0	10.27	6.39
1995	7774.0	15485.7	9.2	13.23	14.51
2000	7463.0	15480.0	9.3	16.82	14.86
2005	7188.0	12890.7	11.4	18.34	17.70
2010	7718.0	13809.0	7.1	11.59	12.40
Rates	0.86	0.77	* FRG		

Economic activity rate: total (age: 15-65)



Economic activity rate: males (age: 15-65)



Economic activity rate: females (age: 15-65)



Wage differences

- Gender pay differences in the labor market are important since relatively lower wages for women may generate a wide spectrum of negative consequences.
- First, lower wage rates for women may increase the economic dependence of women on their male partners, which in turn may increase their susceptibility to domestic violence.
- Second, many women are single mothers and they are the sole wage earners in their families. For single mothers, adverse labor market outcomes combined with less accessible child care are likely to enhance the probability that their families live in poverty.
- Third, gender differences at the work place are transformed into inequality after retirement. Since, on average, women live longer than men, and they are more likely to fall into poverty in their old age.

Gender pay gap in transitional countries has been discussed in literature by some authors.

- Newell and Reilly (2001) find low gender wage differential by international standards, although there was evidence of larger gaps in the higher paid jobs relative to the lower paid jobs.
- Simon (2007) claims Female segregation into low-wage while Brainerd (2000), Newell and Reilly (2001) report decline of discrimination against women in the transition period.
- Gender studies for Poland were provided by Grajek (2001), Newell and Reilly (2001), Adamchik and Bedi (2003), Keane and Prasad (2006), Newell and Socha (2007) while the one related to the East Germany in transition – by Hunt (2002), Krueger and Pischke (1995), see also Maier (2007) and Botsch, Maier (2009).

Women employment rate Gender pay gap

	Women employment rate			Gender pay gap		
year	2006	2011	2012	2006	2011	2012
EU 27	61.2	62.3	62.5	17.7	16.2	16.4
Poland	53.1	57.2	57.5	7.4	5.5	6.4
Germany	65.0	72.4	72.2	22.7	22.2	22.4
Source: own elaboration based on Eurostat data						

GDP in Western and Eastern part of Germany

Source	Year	West	East	West	East	Source	Year	West	East
of data		Monthl	y	Hourly		of data	Yearly		
		Gross v	vage				Full-tin	ne gross	
Curent	1991	34.9	22.5	26.7	21.1	IABS	1993	23.8	7.0
wage data	2004	28.3	22.6	23.7	21.6		2001	23.1	5.5
		Fu	Ill-time g	gross wa	ige		Ful	l-time g	ross
GLS	1990/ 1992 (East)	38.1	25.5	26.0	22.1	SOEP	1993	25.4	5.1
	2001	32.7	28.5	22.7	17.7		2003	23.3	9.8

Gender Pay Gap for different labor market segments in Germany

	Salaried employ	yees	Workers		
Year	West	East	West	East	
1991	34.9	22.5	26.7	21.1	
2004	28.8	22.6	23.7	21.6	
2005	28.4	21.9	25.4	22.1	

The unadjusted GPG in 2012 by NACE economic activity

NACE economic activity	Germany	Poland
Business Economy (B to N)	25.6	15.6
Manufacturing (C)	26.4	21.4
Electricity, gas, steam and air conditioning supply (D)	21.1	7.2
Construction (F)	13.1	-10.3
Financial and insurance activities (K)	30.0	36.9
Public administration and defence; compulsory social security (O)	7.4	17.6
Education (P)	7.9	1.6
Arts, entertainment and recreation (R)	21.2	8.3
Other service activities (S)	22.3	30.6

The unadjusted GPG in 2012 by working profile and sector

Working profile	Germany	Poland
Part-time	11.7	13.5
Full-time	20.6	6.2
Sector	Germany	Poland
Public	14.0	3.7
Private	25.7	16.1

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Relation of average wages in selected EU member states in 2014

State	Relatio	n to average	e in EU	Relation to average in Germany			
or region	Total	Males	Females	Total	Males	Females	
EU 27	100.00	100.00	100.00	79.42	79.26	80.66	
Germany	125.91	126.16	123.98	100.00	100.00	100.00	
Poland	33.26	32.15	35.03	26.42	25.48	28.25	
Denmark	178.68	179.62	182.67	141.91	142.37	147.34	
Bulgaria	15.01	14.43	16.05	11.92	11.44	12.95	

Wage differences between East and West Germany

Percentage relation			Collective	re	gulated
East gross wages to Wes	East gross wages to West wages				all-time
full-time monthly West=100%			monthly gross w	ages (in e	uro)
Source of data and year	Women	Men	Occupations		East
Current wage data 2004	81.4	74.9	Unskilled shop assistant	1035	863
IABS 2001	86.5	70.4	Florist (skilled)	1294	948
SOEP 2003	79.0	67.1	Cleaner (skilled)	1380	978

Median of hourly wage Germany (SES 2006)

	Men	Women
Median of hourly wage Germany	18.68	16.37
Median of hourly wage East Germany	17.73	15.41
Count of respondents	226693	292737
Percentage share of all respondents	16.57	20.04

Percentage relation of average wages in Poland (LFS)

Relation	2001	2003	2006	2009					
Women's average wages / average wages	91.20	90.99	89.31	90.33					
Men's average wages / average wages	107.85	108.43	109.72	108.64					
Women's average wages / men's average wages	84.57	83.91	81.40	83.15					
GPG	15.43	16.09	18.60	16.85					
Source: own calculation on the basis of d	ata from PLFS	Source: own calculation on the basis of data from PLFS							

Employment by industry branches in 2013 as percentage of employment

Employment in	industry				services	8
State or region	total	men	women	total	men	women
EU 27	22.4	32.1	11.2	72.5	61.8	84.9
Germany	24.7	35.9	12.2	73.8	62.2	86.7
Poland	30.3	41.8	14.3	57.7	45.3	73.1
State or region		agriculture	•			
EU 27	5.1	6.1	4.0			
Germany	1.5	2.0	1.1			
Poland	12	12.9	10.9			

Employment by job contract (as percentage of employment) and unemployment rate in 2013

	Part-time employment			Temporary employees			
State or region	total	men	women	total	men	women	
EU 27	19.0	8.2	31.8	12.8	12.2	13.4	
Germany	26.2	9.2	45.8	11.6	11.3	11.9	
Poland	6.9	4.2	10.2	26.4	26.8	26.0	
State or region	Self	employn	nent	Unemployment rate			
EU 27	15.5	18.8	11.6	10.8	10.8	10.8	
Germany	10.9	13.5	7.9	5.3	5.6	5.0	
Poland	22.1	24.6	18.9	10.3	9.7	11.1	

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Comparison of average women's and men's wages by NACE in Poland (LFS)

	NACE codes	2001	2003	2006	2009
1	Private farms in agriculture	100.50	99.80	78.00	76.2
2	Agriculture, forestry and fishing, excluding (1)	118.60	125.20	100.40	89.1
3	Mining and quarrying	89.80	79.80	76.40	86.8
4	Manufacturing	75.80	82.10	76.80	79.5
5	Electricity, gas and water supply	108.70	90.20	75.90	95.3
6	Construction	86.20	105.90	102.90	102.2
7	Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods	74.00	72.20	80.70	77.4
8	Transport, storage and communication	97.90	82.50	94.50	88.0
9	Accommodation and food service activities	93.50	95.50	88.30	74.5
10	Financial intermediation	137.70	79.40	67.00	81.7
11	Real estate, renting and business activities	85.20	90.40	80.00	92.2
12	Public administration and defense, compulsory social security	85.80	83.70	81.20	80.9
13	Education	115.40	91.30	84.90	92.0
14	Health and social work	78.50	83.40	81.30	83.5
15	Other community, social and personal service activities	67.60	77.70	77.50	79.6

Source: own calculation on the basis of data from PLFS

Share of women empolyed in NACE branches in Poland (LFS)

	NACE codes	1995	2000	2005	2010
1	Agriculture and forestry	47.0	49.7	43.6	25.8
2	Fishing	11.8	9.7	13.0	
4	Manufacturing	35.4	33.8	32.0	32.1
6	Construction	11.3	11.4	10.7	12.1
7	Wholesale & retail trade, repair of motor vehicles, motorcycles & personal and household goods	52.0	51.9	51.5	53.8
8	Transport, storage and communication	30.2	29.2	27.1	29.4
9	Accommodation and food service activities	66.8	66.1	64.5	65.3
10	Financial intermediation	73.8	69.8	67.8	70.3
11	Real estate, renting and business activities	45.8	44.5	45.5	48.1
12	Public administration and defense, compulsory social security	40.9	44.9	45.8	62.5
13	Education	73.0	73.2	76.3	77.5
14	Health and social work	82.7	82.5	80.5	82.8
15	Other community, social and personal service activities	50.5	53.1	53.3	57.6
So	urce: own calculation on the basis of data from PLFS				32

Comparison of average women's and men's wages by level of education in Poland (LFS)

Level of education	2001	2003	2006	2009
Tertiary	95.5	71.3	70.4	83.4
Post-secondary and vocational secondary	69.6	79.1	76.6	68.4
General secondary	104.1	86.0	78.6	64.1
Basic vocational	70.3	74.2	68.6	50.0
Lower secondary, primary and incomplete	75.8	83.1		
primary			78.5	47.8

Source: own calculation on the basis of data from PLFS

CONCLUSIONS (1)

- Poland and Germany face similar demographic problems such as decreasing fertility rate, at present it is below the replacement fertility rate and ageing of the society.
- The education level of women has been increasing, especially in Poland where women, in general, are better educated than men. It was estimated that GPG in Poland is underestimated by 8-10% points since their wages are higher because of men 's lower level ofeducation.
- Gender pay gap is very high in Germany, although it is lower in the Eastern part i.e. former GDR.
- Level of life in Germany is much higher than in Poland, although in Eastern lands lewel of incomes is still lower than in the Western part of germany.
- There are certain differences in GDP between Poland and Germany taking into consideration economic activity, working profile and sector.
- In Germany and Poland, as well as in EU 27 women earn much less than men. The main reason is the low proportion of women in highly paid groups. In Germany 70% of all low paid employees are women. In Poland they work in low paid public sectors as education and health care.

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CONCLUSIONS (2)

- To conclude, when market reforms were introduced women in former GDR and Poland lost their jobs and their maternity and child-care benefits. They lost the form of equality that communism had brought and the first years of transformation were extremely difficult for them because they were loosing they job more often than men that was often argued that they should be more domesticated and somehow more docile.
- Comparing women's situation in both states we found out that the economic activity rates have been higher for females in East Germany than for the whole Germany and Poland. Bennhold 2010 says: "Eastern women are more self-confident, better-educated and more mobile, recent studies show. They have children earlier and are more likely to work full time. More of them are happy with their looks and their sexuality, and fewer of them diet. If Western women earn 24 percent less than men, the pay gap in the East is a mere 6 percent (though overall levels of pay are lower)." However one may also find opinions that in former GDR "women are the losers of the reunification".

Thank you for your attention

THE UNIVERSITY OF SZCZECIN FACULTY OF ECONOMICS AND MANAGEMENT Institute of Econometrics and Statistics

Modelling the Growth of Nations. Is Gender Equality an Important Factor of the Long-Run Economic Growth?

> dr Christian Lis Institute of Econometrics and Statistics Department of Statistics

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- 1. Divergence or convergence.
- 2.Long-run economic growth theories.
- 3. Growth sources.
- 4. How to measure gender equality?





The Stylized Facts of Growth

- 1. Output per worker grows continuously, with no tendency for the rate of growth of productivity to decline (Kaldor).
- 2. The capital-labour ratio shows continuous growth (Kaldor).
- 3. The rate of return on capital is stable (Kaldor).
- 4. The capital-output ratio is stable (Kaldor).
- 5. The shares of labour and capital in GDP remain stable (Kaldor).
- 6. We observe significant variation in the rate of growth of productivity across countries (Kaldor).

The Stylized Facts of Growth (cont.)

- 7. In a broad cross-section of countries the average growth rate is uncorrelated with the level of per capita income (Romer).
- 8. Growth is positively correlated with the volume of international trade (Romer).
- 9. Growth rates are negatively correlated with population growth (Romer).
- 10. Growth accounting research always finds a 'residual'; that is, accumulation of factor inputs alone cannot account for growth (Romer).
- 11. High-income countries attract both skilled and unskilled workers (Romer).

Source: N. Kaldor, Capital Accumulation and Economic Growth, in F.A. Lutz and D.C. Hague (eds), The Theory of Capital, New York: St Martin's Press, 1961;

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Source: P.M. Romer, Capital Accumulation in the Theory of Long-Run Growth, in R.J. Barro (ed.), Modern Business Cycle Theory, Cambridge, MA: Harvard University Press, 1989;



The Stylized Facts of Growth (cont.)

- 12. There is enormous variation in income per capita across countries (Jones).
- 13. Growth rates for the world as a whole, and for individual countries, vary substantially over time (Jones).
- 14. The relative position of any country in the world distribution of income can change (Jones).
- 15. There is positive correlation between GDP *per capita* and gender equality both across countries and over time.

rce: C.I. Jones, Introduction to Economic Growth, 2nd edition, New York: W.W. Norton., 2001

Long-run economic growth theories

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1. Neoclassical growth theory.

Adelman model, Harrod-Domar model, Solow (Solow-Swan) model, Cobb-Douglas model, Solow-Minhas-Arrow-Chenery (SMAC) model, Brown-de Cani model (CES), Inada model, Uzawa model, R. Sato model, K. Sato model, Takayama model, Ramsey-Cass-Koopmans model (RCK), Mankiw-Romer-Weil model (MRW) and many others;

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2. Endogenous growth theory.

Uzawa model (宇沢弘文 Hirofumi Uzawa), Shell model, K. Sato model, P.M. Romer model, R.E. Lucas model, Uzawa-Lucas model, Heckman model, Rosen model, Grossman-Helpman model, Aghion-Howitt model, Jones model, Jones-Kortum-Segerstrom model, Eicher-Turnovsky model, Barro model and many others;

3. Real business cycle theory.

F.E. Kydland, E.C. Prescott, C.R. Nelson, C.I. Plosser, O.J. Blanchard, S. Fischer, and others

4. Sustainable development theory.



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The particular case of the Solow model

 Original Cobb-Douglas model
 (C.W. Cobb, P.H. Douglas, A Theory of Production, The American Economic Review, Vol. 18, No. 1, Supplement, Papers and Proceedings of the Fortieth Annual Meeting of the American Economic Association, American Economic Association (Mar. 1928), p. 139- 165)

 $P^{'} = bL^{k}C^{1-k}$ (Original notation has been kept)

Modified Cobb-Douglas model (inconstant elasticity of substitution)

$$Y_{t} = \alpha_{0} K_{t}^{\alpha_{1}} L_{t}^{\alpha_{2}} e^{U_{t}}, \quad (\alpha_{0} > 0; \quad 0 < \alpha_{1}, \alpha_{2} < 1)$$

· Modified Cobb-Douglas model with exogenous technological progress

$$Y_t = \alpha_0 K_t^{\alpha_1} L_t^{\alpha_2} e^{\gamma t} e^{U_t}$$



Uzawa model - an endogenous model of economic growth

The aggregate production function at each moment of time t can be written as follows:

 $Y_t = F(K_t, A_t \cdot L_{p_t}),$

where the state of technological knowledge at time t is represented by the efficiency in labour ${\cal A}_t.$

It is assumed that various activities in the form education, health, construction and maintenance of public goods, etc., which results in an improvement in labour efficiency A_t , are put together as one sector to be referred to as the educational sector.

Uzawa proposed the model y = f(k) for output *per capita* y = Y/L, that is related to the capital-labour ratio k = K/L, namely

$$f(k_t) = \frac{F(K_t, L_t)}{L_t} = F(k_t, 1),$$

where the function y = f(k) is continuous, twice-differentiable, positive, increasing and concave.



Uzawa model (cont.)

Labour allocation to the productive and educational sector has to be estimated.

It is assumed that the higher fraction of labour in the educational sector, the higher level of production in the economy.

Everyone can not be employed in the educational sector.

The problem is to find a time path of the economy over which the discounted sum of consumption *per capita*

$$\int_{-\infty}^{\infty} \frac{C_t}{L_t} e^{-\delta t} dt = \int_{0}^{+\infty} (1 - s_t) y_t e^{-\delta t} dt$$

is maximized among all feasible paths resulting from the given initial capital stock K_0 and labour efficiency ${\rm A}_0.$

The problem can be solved thanks to Pontryagin's Maximum Principle*.

* L.S. Pontryagin, V.G. Boltyanskii, R.V. Gamkreildze, E.F. Mishchenko, The Mathematical Theory of Optimal Processes, Interscience Publishers, New York, London 1962; H. Uzawa, Optimum Technical Change in An Aggregative Model of Economic Growth, International Economic Review, Vol. 6, No. 1. (Jan., 1965), s. 21

I. Adelman model

The production function can be expressed as equation:

$$Y_t = f(K_t, N_t, L_t, A_t, S_t),$$

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where:

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- K_t capital stock, N_t - natural resources (geography),
- L_t represents labour resources,
- A_t denotes an economy's stock of applied knowledge,
- S_t represents what Adelman calls the 'sociocultural milieu', (and Abramovitz (1986) more recently has called 'social capability').







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Variables selection

- 4. Gender equality variables:
 - GDI Gender-related Development Index X_{32i};
 - GEM Gender Empowerment Measure X_{33i};
 - Difference in life expectancy between men and women (in years) - X_{34i};
 - At-risk-of-poverty rate, males X_{35i};
 - At-risk-of-poverty rate, females X_{36i};
 - Relation between avarage wage for women and men (%) X_{37i} ;
 - Difference in healthy life years for women and men X_{38i} ;

Country	X 32/	X 33/	X 34/	X 25/	X 36/	X 271	X 38i
Belgium	0.948	0.874	5,5	13.6	15,9	86.5	0.4
Bulgaria	0,839	0,613	7,3	19,8	22,9	87,1	3.6
Czech Republic	0,900	0.664	6,5	8.0	10,1	75.7	2,1
Denmark	0.947	0.896	4.5	11.7	12,0	78.7	-1.6
Germany	0,939	0.852	5.0	14.2	16.2	76,9	1.6
Estonia	0.882	0.665	10.8	16.5	22,0	68.7	4.5
Ireland	0.948	0,722	4,8	14,5	16.4	76.1	1,8
Greece	0.936	0,677	4,7	19,6	20,7	76.2	0,4
Spain	0.949	0.835	6.3	18.3	21,0	79,7	-0.5
France	0.956	0.779	7,2	12.7	14.0	81.8	1.8
Italy	0.945	0,741	5,5	17,1	20,1	82,1	-0,9
Cyprus	0,911	0,603	4,6	14.0	18,3	74,9	0,6
Latvia	0,865	0,648	10,8	23,1	27,7	83,8	2,6
Lithuania	0,869	0,628	11,3	17,6	22,0	79,7	4.7
Luxembourg	0,943	0,721	5,0	12,5	14,3	88,2	-0.6
Hungary	0.879	0.590	8.3	12.4	12.4	84.6	3,4
Malta	0.895	0.531	5.3	13.7	15.5	86.0	3.2
Netherlands	0.954	0.882	4.0	10.5	10.4	75.0	-2.6
Austria	0.930	0.744	5.5	11.2	13.5	72.8	1.5
Poland	0.877	0.631	8.8	17.0	16.7	80.8	4.2
Portugal	0,907	0,753	6,2	17,9	19,1	88,7	-1,8
Romania	0,836	0,512	7,5	22,4	24,3	91,9	2,6
Slovenía	0,927	0.641	7,1	11.0	13,6	91.1	1,5
Slovakia	0,877	0.663	8,1	10.1	11,5	73.6	0,5
Finland	0,954	0.902	6,8	12.7	14,5	78.1	0,8
Sweden	0.956	0.909	4.1	11.3	13.0	85.3	-0,5
United Kingdom	0.943	0.790	4.2	17,5	20,1	72.4	1.2

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	THE UNIVERSITY OF SZCZECON FACULTY OF ECONOMICS AND MANAGEMENT Institute of Economatrics and Statistics	THE UNIVERSITY OF SZCEREN FACULTY OF ECONOMICS AND MANAGEMENT Institute of teorometrics and Statistics
Taxonomic methods		Taxonomic measure of gender equality (TMGE) 1. Variable normalization (by standardization) $x_{ii} - \overline{x}_{i}$
the classic Hellwig's a	of standard of living (TMSL) – pproach; e measure (GDM) – Walesiak's	$z_{ij} = \frac{x_{ij} - x_j}{S_j}$ where:
proposal;		\overline{x}_j - arithmetic mean for each <i>j</i> variable (<i>j</i> = 1, 2,, <i>m</i>); S_j - standard deviation for each <i>j</i> variable (<i>j</i> = 1, 2,, <i>m</i>);
 Taxonomic measure c Taxonomic measure c 		2. Euclidean distance measure is given as:
	1 (0)	$d_{i0} = \sqrt{\sum_{j=1}^{k} (z_{ij} - z_{0j})^2 w_j}$ where: z_{0j} - normalized values of the artificial object (economy) that have the best possible values for each variable;

Slide 19

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Taxonomic measure of gender e	quality (TMGE)	Results			
· · · ·			Rank EU Coutries	TMGE	
			1 Sweden 2 United Kingdom	0,873	
3. Taxonomic measure of	gender equality (TMGE) is		3 Denmark	0,805	
	8		4 Finland	0,794	
determined as follows:			5 Netherlands	0,791	
	d		6 Luxembourg	0,755	
$TMGE_i$ =	$-1 u_{i0}$		7 Austria	0,709 0,704	
$IMGE_i$	=1		8 Cyprus 9 Ireland	0,704	
	d_0		10 Slovenia	0,684	
where:	0		11 France	0,669	
where:			12 Belgium	0,657	
d_{i0} - the Euclidean metrics for	arch given economy:		13 Germany	0,656	
α_{i0} - the Euclidean metrics for	each given economy,		14 Spain 15 Czech Republic	0,604	
—			16 Malta	0.599	
$d_0 = \overline{d}_{i0} + 3 \cdot S(d_{i0})$			17 Portugal	0,530	
$a_0 - a_{i0} + 5 - 5 (a_{i0})$			18 Italy	0,506	
-			19 Greece	0,452	
d_{i0} - average Euclidean metric	cs measured by countries.		20 Poland 21 Estonia	0,439 0,394	
ill - average Euclidean metric	ts measured by countries,		21 Estonia 22 Slovakia	0,394	
-()			23 Hungary	0.352	
$S(d_{i0})$ - standard deviation of	Fuclidean metrics		24 Bulgaria	0,345	
	Euclidean menics.		25 Lithuania	0,288	
			26 Romania	0,261	
			27 Latvia	0,147	
	Slide 23				Slide 24



Slide 26

Next directions of activities

- To prove empirically that the 15th stylized fact is true.
- To determine Taxonomic Measure of Gender Equality (using current data and revising the diagnostic variables set).
- To use TMGE as an exogenous variable in growth models.

THANK YOU FOR YOUR ATTENTION!

Financial possibilities for WCE and WRC – national perspective 2014-2020



Operational programs in Poland with ESF component in 2014-2020 perspective

National perspective: OPERATIONAL PROGRAM - KNOWLEDGE EDUCATION DEVELOPMENT 2014-2020 (Program Operacyjny Wiedza Edukacja Rozwój – POWER 2014-2020)

Regional perspective: 16 REGIONAL OPERATIONAL PROGRAMS - one for each Voivodship

Operational programs in Poland with ESF component – "POWER 2014-2020" financing structure

II - Effective public policies for labour market, economy and education € 1 182 500 000,00 23,149 III - Higher education for economy and development € 1 351 400 000,00 26,459 IV - Social innovations and supranational cooperation € 710 500 000,00 13,919 V - Technical support € 160 700 000,00 3,159				
II - Effective public policies for labour market, economy and education € 1 182 500 000,00 23,149 III - Higher education for economy and development € 1 351 400 000,00 26,459 IV - Social innovations and supranational cooperation € 710 500 000,00 13,919	POWER Total	€	5 109 300 000,00	100,00%
II - Effective public policies for labour market, economy and education € 1182 500 000,00 23,149 III - Higher education for economy and development € 1351 400 000,00 26,459	V – Technical support	€	160 700 000,00	3,15%
II - Effective public policies for labour market, economy and education € 1182 500 000,00 23,149	IV - Social innovations and supranational cooperation	€	710 500 000,00	13,91%
	III - Higher education for economy and development	€	1 351 400 000,00	26,45%
I - Young people on labour market (ESF/YEI) € 1 704 200 000,00 33,359	II - Effective public policies for labour market, economy and education	€	1 182 500 000,00	23,14%
	I - Young people on labour market (ESF/YEI)	€	1 704 200 000,00	33,35%

Operational programs in Poland with ESF component – "POWER 2014-2020" financing structure



Operational programs in Poland with ESF component – "RPO WZ 2014-2020" financing structure

RPO WZP Total	€	1 882 001 695,00	100,00%
ERDF	€	1 357 131 082,00	72,11%
ESF - IX. Technical support	€	74 981 412,00	3,98%
ESF - VIII. Education	€	107 442 142,00	5,71%
ESF - VII. Social exclusion	€	142 564 706,00	7,58%
ESF - VI. Labour market development	€	199 882 353,00	10,62%



Operational programs in Poland with ESF component – "RPO WM 2014-2020" financing structure

ERDF	€	1 544 686 317,00 2 087 870 466.00	73,98% 100,00%
ESF - IX. Technical support	€	72 991 719,00	3,50%
ESF - VIII. Education for regional development	€	153 274 638,00	7,34%
ESF - VII. Social adaptation support and poverty counteraction	€	155 821 626,00	7,46%
ESF - VI. Labour market development	€	161 096 166,00	7,72%

Operational programs in Poland with ESF component – "RPO WM 2014-2020" financing structure

WRC and WCE – financing in Poland

POWER 2014-2020 and RPO WZ 2014-2020

Examples of priorities, objectives and actions that can be used for WRC and WCE ideas.

WRC and WCE – financing in Poland

RPO WZ 2014-2020 Priority VI. Labour market development IP 8.7: Self-employment, enterpreneurship and job creation

Actions:

Self-employment, enterpreneurship and job creation support (granting start-up enterprises through refundable and non-refundable aid)

WRC and WCE – financing in Poland

RPO WZ 2014-2020

Priority VI. Labour market development IP 8.8: Gender equality and connecting of business and private life

Actions:

Supporting of creation and existence nursery schools and child care centres for children up to 3 years old. Financing of child care for children up to 3 years old. Implementing flexible employment forms.

WRC and WCE – financing in Poland POWER 2014-2020

AXIS I Young people on labour market IP 8.6: Increasing entrepreneurship of young people up to 29 years of life with refundable grants

Action: Refundable grants for starting business

WRC and WCE – financing in Poland

POWER 2014-2020

AXIS I Young people on labour market

IP 8.8: Equality of men and women in all areas including labour market access, career development, integration of business and private life and equal salary

Actions:

Preparing and implementing changes in a scope of gender equality on legislation level.

WRC and WCE – financing in Poland

POWER 2014-2020

AXIS I Young people on labour market

IP 8.8: Equality of men and women in all areas including labour market access, career development, integration of business and private life and equal salary

Actions:

Preparing and implementing model programs of discrimination counteraction and gender equality in a place of work. Supporting of intersection cooperation development for gender equality.

WRC and WCE – financing in Poland

POWER 2014-2020 AXIS IV Social innovations and supranational cooperation

Actions:

Finding a new solutions and their implementation in cooperation with foreign partners.

Import, export of new solutions - their adaptation and implementation.

WRC and WCE – financing in Poland

POWER 2014-2020

AXIS IV Social innovations and supranational cooperation

Actions: Exchange of information and experiences. Parallel creation of new solutions. Supporting of cooperation networks.

What's most important AXIS IV refers to all of POWER IP's

WRC and WCE – financing in Poland

What we don't know at the moment?

When the negotiation process with EU Commission will be finished? 7 of 22 OP have a chance to be closed this year POWER is not in the first group Calls for proposals – June 2015 Still waiting for Particular Description of Priorities – only closed programs have a chance to have it. Co- financing level – max. 85% (excl. YEI – up to 100%)



Piotr Sibilski





Annex to the Report

TP WINNET BSR WORKSHOP AND SEMINAR IN SZCZECIN

2nd part Presentations November 21th 2014



Growth and gender equality: policy implications

Ewa Ruminska-Zimny, PhD TP WINNET BSR Seminar Szczecin, 21 November 2014

Gender as an economic issue

- A new perspective: for years equality seen only as a human right and/or social issue
- Gender matters in economics :from household economics to macroeconomics (late 1960s – 1990s)
- Economics of gender: International Association of Feminist economics; Gender and macroeconomics GEM
- A two way street: growth has an impact on equality; but also equality affects growth
- Policy implications: equality as "smart economics" presented by Sweden during the EU Presidency 2009

Economic gains: macro and micro levels

- Benefits could be calculated in terms of higher profits of firms (micro-level) and GDP growth (macro-level)
- In EU -27 GDP growth could be higher with gender equality in the economy from 14 (Slovenia) to 40-45% points (Greece, Malta, Netherlands); Polish GDP would be higher by 21 % points (*Lofstrom 2011* estimates at equal participation rates, wages, types of employment)
- Companies with mixed boards (women) have higher profits and returns on investments up to 56% (*Mc Kinsey Report* 2010; Credit Suisse 2012)

Equality and GDP/capita 2012 (Hozer-Kocmiel; Ruminska-Zimny 2013)



Key arguments

- Common sense in ageing societies and as a response to the crisis
- Women as the main source of new labour accross Europe (except migration): links jobs fertility
- Diversity matters for innovation and creativity (new ideas in production, services, management)
- Returns on investments in women's education



From individual sucess to systemic inclusion

- Individual sucesses Josephine Cochran (1886; inventor of a washing machine); prof. Agnieszka Zalewska, President of world organization for nuclear research CERN in Geneva (2013)
- Nobel Price Winners : 826 are men and only 43 women (5%) in all categories including litterature
- Elinor Ostrom: the only women who received a Nobel Proce in economics (2009; work on commons)
- This is despite high share of women in research and science in Europe including Eastern and Central Europe (over 50% of all researchers; EU average 33%)

Strategies and gender

- Marginalized in strategies: Europe 2020, EU BSR; Investing in Europe's Future 2010; national/local strategies 2014-2020
- Congress of Polish Women analized regional strategies in 8 voyewodship 2014-2020; no gender perspective in SWOT, objectives, success indicators; consequences for operational programmes and funding
- Mainstreaming principle (also "core value") but outside prorities inteligent growth, innovation, competitiveness
- A horizontal priority in EU regional policy -- but only 8% of gender related projects had specific strategy, budget and quantified targets (2000-2006)

Gender, innovation and sustainable development in BRS

- Framework for 4 helix partnership and cooperation in BSR: the region which include most advanced countries in terms of gender equality
- WINNET Center of Excellence and WRC: research and practice
- Policy impact at macro (policy framework); meso (institutions; sectoral policies) and micro (firms) levels

Challenges

- Advancing policy oriented research on links between gender, innovation and sustainable development in a view to include a gender perspective in strategies and policies at all levels
- Defining a gender sensitive framework for building innovative economy based on BSR experience
- Raising awareness, establishing 4 helix partnerships and policy dialogue at regional, national, local levels
- Identifying gender dissagregated indicators of success

Thank you

ewa.ruminska-zimny@mfk.org.pl

Women Resource Center, a Key Tool for Women's active participation in Gender Equal and Sustainable Growth! TP Winnet BSR, Stettin, in Poland, 21 November, 2014

> Britt-Marie S Torstensson, President Winnet Sweden

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Womens Resource Centres

Some History.....



The **primary task and mission** of the Swedish Womens Resource Centres, WRC is to:

Increase the number of women participating in economic life on a national, regional and a local level

The **primary task and mission** of the Swedish Womens Resource Centres, WRC is to:

Empower and mobilise women to participate on the labour market, in entrepreneurship, ICT and Innovation or other **with a strategic and Rural Development perspective**

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The primary task and mission of the Swedish Womens

Resource Centres, WRC is to:

Be a neutral meeting place for networking groups of women

The **primary task and mission** of the Swedish Womens Resource Centres, WRC is to:

Fundamental is that they should develop on the basis of local needs and conditions and women demands

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Briefly about the State financial resources of the Swedish WRC

 According to a parliamentary decision public funding can be granted for financing activities within local and regional WRCs (Regional Policy for Growth)

The Swedish Agency for Economic and Regional Growth – (Tillväxtverket) has the Swedish Governments assignment to run the Swedish WRC program

Winnet Sweden, a NGO – NON profit organization, for WRCs

For this programming period 2013-2015,

The Government is allocating 36 million per year to WRC for basic funding and co-finance for ERDF and other EU program projects

Women in Democracy support

* Winnet Sweden has financial support from the Swedish Government (The Ministry of Gender Equality) to be a Umbrella NGO organisation- non-profit for 120 WRC s, to be the driving force and to secure women's participation in Democracy and Regional Development and Growth in 21 regions, for 2013, 650 000 SEK

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- Winnet Europe, the European Association of Women Resource Centres, was established 2006 as a result of Interreg III C project, W.IN.NET
- Winnet Europes member is active in:
- Entrepreneurship Innovation,
- Labour market gendersegregation
- · ICT and infrastructure of transport
- Rurala Development, and cross border co-operation

A lot of transnational co-operation in Winnet Europe











Winnet Centre of Excellence®

The international network of researchers in the Baltic Sea Region for the purpose of doing and promoting research, teaching and policy making (on Gender, Innovation and Growth)

WINNET
Winnet Centre of Excellence®

Quadruple Helix Partnership Plattform

- Representation Accademia, Policy and desicion makers, Business and Civil Society WRC, national, regional and local and transnational level's to secure Womens participation in Regional Development for Economic Growth!
- ✓ Partnership
- ✓ Co-operation
- ✓ Network
- ✓ Thematic areas
- ✓ Regional Innovation
- $\checkmark\,$ Through: identified good practices from EU 28 MS, within the chosen themes, to be transferred
- ✓ analysed good practises and elaborated action plans
- ✓ Winnet Centre of Excellence; Interactive Action oriented Research & benchmarking reports as input to workshops

Handbook for Women's Resource Centres



Empowerment, the individual's own power, belief in knowledge and the power to influence their own situation in society, are the for Women. The Handbock is designed to aid the establishment of Women's Resource Centres. Use it! We wish you success! 1. Introduction 2. Why and how WRCs

- can contribute to change 3. WRC, the historical backaround and their
- background and their role and mission today
- 4. The work of a Women's Resource Centre 5. Starting up, organising and guaranteeing sustainability in a
- Centre 6. Working in project form 7. Working methods and tools for use in a WRC

The Familieosk for Warmon's Ranceres Cartres is published on the weeks the www.winnetsenetse weeks with the second second weeks with the second transformed secondary with support and funding from the sweeksh Agency for Economyce and Registral

.

For more information:

www.winnet.se

www.winneteurope.org

www.winnet8.eu

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Why so few women innovators?

Marta Hozer-Koćmiel University of Szczecin, Winnet Centre of Excellence

'Gender, Innovation and Sustainable Growth. Research and Practice' Seminar, 20-21.11.2014, Szczecin

Why so few women innovators?

What we are doing to change it?

Who are the actors?

When we do that?

Where the actions take place?

Why so few women innovators?

What we are doing to change it?

Who are the actors?

When we do that?

Where the actions take place?

 Number of women innovators in Europe is low
 Only 10% of patents awarded by the European Patent Office are awarded to women
 Only 20% of businesses started with venture capital belong to female entrepreneurs
 Women score less than men when assessing the level of innovation of their own business

Innovation of product: 14% of women compared to 15% of men

Innovation of process: 4% of women compared to 8% of men

Innovation in the organization: 5% of women compared to 7% of men

Marketing innovation: 9% of women compared to 11% of men

Less than 15% of high-tech business is owned by women

10 reasons why there is so few women innovators

1. Women's educational choices, and horizontal and vertical segregation in employment, result that the number of women in science and technology and the number of women innovators is lower than the number of men.

Science and technology, innovation and inventions are concepts mostly
associated with men and male areas. These fields are less attractive to women.

3. Stereotypes about women and men that science, technology and innovations are male dominated sectors, in which women are perceived as less professional.

4. The boards of technology companies are predominantly male. They often say that there aren't enough women engineers. On the other hand a significant proportion of the male board members of technology companies aren't engineers either!

5. Traditional views about the role of women in society and greater difficulties in balancing family responsibilities with working fast-moving and competitive sectors that expect long and flexible working hours and constant training to be up to date with new technological development and market opportunities.

Women's domestic work - 4.2 hours daily Men's domestic work - 2.3 hours daily

6. Economic obstacles - difficulties in accessing finance. Female entrepreneurs find it more difficult than men to access finance.

The issue of accessing adequate finance is a greater problem in science and technology sectors because:

- · it requires substantial investments, and
- · women are seen as less credible by financial stakeholders and investors (stereotypical thinking).

7. Lack of access to relevant technical, scientific and general business networks. Access to these networks is essential to develop business ideas, meet potential clients and business partners, understand the market with its developments.

8. Lack of business training when undertaking technical and scientific studies presenting entrepreneurship as a possible employment opportunity for women.

9. Women's perception that they lack personal or entrepreneurship skills such as self confidence, assertiveness and risk-taking.

10. Lack of role models sending positive messages that women can be successful in these sectors and fields of activities and to whom women could turn for mentoring and advice

Why so few women innovators?



Where the actions take place?

Winnet Baltic Sea Region (Winnet BSR) A Thematic Partnership project, Swedish Institute

Winnet Centre of Excellence - the international network of researchers in the Baltic Sea Region for the purpose of doing and promoting policy oriented research on Gender. Innovation and Growth.

Women Resource Centre - the network of practitioners that aims to 1. empower women, 2. be a neutral meeting place for networking groups of women, 3. be a centre for information and documentation, 4. provide women with advice on how to implement their projects or business ideas, 5. mediate contacts with others women's networks.

Research plan for The Winnet Centre of Excellence

1.

Stock taking of existing research on gender and innovation

2.

Gender analysis of the SMEs in ICT and tourism in the BSR

3

Pilot survey on women-led SMEs in ICT and tourism

4.

The analysis of Women Resource Centers' potential as actors increasing Women's participation in SME, Innovation and Economic Growth

5.

A book 'Model for Gender Sensitive Framework, Entrepreneurship and Innovation'

Why so few women innovators?

What we are doing to change it?

Who are the actors?

When we do that?

Where the actions take place?



Winnet Baltic Sea Region (Winnet BSR) A Thematic Partnership project 2013-12-01 to 2016-11-30 Male academics don't inspire female innovators. Female innovators inspire female innovators. - Vivek Wadhwa

> Thank you for your attention! Marta Hozer-Kocmiel <u>mhk@wneiz.pl</u>

Women entrepreneurs in Poland: barriers and challenges



Ewa Lisowska, Ph.D. Warsaw School of Economics

Some facts on women entrepreneurs (2013)

- In Poland women constitute 34% of self-employed people
- In towns there are half as many women entrepreneurs as in villages. It is also true in case of men
- Self-employed women share 12% of all working women (in Sweden only 4%)
- Women business owners is 3 times more than women nurses (respectively: 570 and 185 thousand)
- There are also more women business owners than women teachers (370 thousand)!

Poland has one of the largest share of women among self-employed in EU (Eurostat 2011)

	Women	Men
EU-27	31%	69%
Poland	34%	66%
Latvia, Lithuania	40%	60%
Luxemburg	39%	71%
Portugal	37%	63%
Estonia	30%	70%
Sweden	27%	73%

What more:

 Compared with the neighbors - Germany, Sweden, Lithuania, the Czech Republic and Slovakia - Poland has the highest % of women employers and self-employed among all working women: 2.9% and 11.5% (eg. Sweden 1.7% and 4.1%)

(Source: Polska przedsiębiorcza, PKPP Lewiatan, Warszawa 2013)





Sector of economic activity

WOMEN ENTREPRENEURS

- Health care
- Education
- Gastronomy
- Real estate
- Service market (accounting, consulting, PR)
- Other services

- MEN ENTREPRENEURS Transport
- Construction
- Industry

Women entrepreneurs are less focused on international expansion than men

(PKPP Lewiatan, 2013)



Innovativeness of women's companies is lower than men's companies (PKPP Lewiatan, 2013)

% of companies that implemented innovations in 2009-2011



Barriers of women

- Lack of money/capital to start up (women are far less likely than men to have own capital); high taxes, problems with finding new clients (economic barriers)
- Women are less likely to obtain venture capital because they cannot present the credibility (cultural barrier)
- Fear of failure (cultural barrier)
- Reconciliation between work and family responsibilities in respect to the limited access to institutional childcare (cultural barrier)
- Complicated formalities and procedures, unclear regulations and rules and frequent changes in law concerning economic activity (administrative barriers)
- Access to knowledge and training, i.e. education within the scope of entrepreneurship, including education at the higher level (educational barrier)

Challenges for government policy (also NGOs)

- Promoting entrepreneurship among women, i.e. Ambassadors network program
- Mentoring programs
- Grants to start a business •
- Stimulating innovation among women by education programs

Challenges for women entrepreneurs

- Innovativeness
- International expansion •
- Education in the field of entrepreneurial skills
- Searching for market niches (i.e. IT) •
- Networking
- Openness to risk-taking •



- Entrepreneurship
- Financing activities
- Starting the business
- The company today
- Women as a manager
- Human Resources Management
- Time management and women's roles in life
- · Economic and non-economic effects
- Future vision of the business



Slajd nr 3



Characteristic of surveyed women

- 80% Tertiary
- 20% General secondary, post- secondary and vocational secondary
- 65% Respondents with children
- 35% Respondents without children
- 65% Respondents without employees
- 35% Respondents with employees
- 40% Local scope of business
- 17% Regional scope of business
- 30% Nationwide scope of business
- 13% International scope of business

•	under 24:	6%;
•	24 - 29:	17%
•	30 - 34:	23%
•	35 - 39:	26%;
•	40 - 44:	12%;
•	45 - 49:	4%;
•	50 - 54:	7%;
•	55 - 59:	1%;
•	60 - 64:	3%;
•	over 65:	1%.

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Development plans - results of a quantitative research (Potencial for innovation of surveyed women)

- The intentions of development changes among surveyed self-employed women in Poland:
 - Implementation of a new products and/or services (74%)
 - Purchase of new equipment, machinery and technology (65%)
 - Entry into new markets and/or an increase in employment (64%)



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Development through the implementation of new products and/or services		Yes	No
	Intention	34	50
Reason for establishing own	Necessity	8	44
business	Intention along with necessity	58	6
Entrepreneurial attitude	Yes	89	75
	No	3	6
	Do not know	8	19
Entrepreneurial traditions	Yes	63	50
	No	37	50
			Slajd nr 7



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Slajd nr 8

Slajd nr 10

Development through the implementation of new products and/or services		Yes	No
Work experience before self-employment	Paid employment	85	94
	No experience	15	6
Children	Yes	61	69
	No	39	31
Applying for a grant for establisment and/or business development	Yes	63	50
	No	37	50



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AND MANAGEMENT	

Characteristics:

- Regardless of the way that the development was planed self-employed women singled out the same characteristics:
 - More often they were driven by the desire while making a decision about self-employment.
 - They describe themselves as more entrepreneurial.
 - More often they were applying for grants for establishing and/or developing their business.

Basic information	Type of innovation	Innovations examples
Sylwia Kitchen Sink manufacturer, May 2010 4 employees	technological and products	Implementing a new types of sinks; extending color varieties of existing models; designing new types of products (bathroom sink, paddlins); purchasing new machinery

opment and mentation of the ting system; menting and oving a new way rsonnel	
mentation of the ting system; menting and wing a new way rsonnel	Type of innovation Innovations exam
e lessons; duction of a new	products, Development and organizational, process implementation of reporting system; implementing and improving a new w of personnel evaluation; creatir author's programs dance lessons; introduction of a n services

Slajd nr 9



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Report of the Expert Group "Innovation through Gender"

Chairperson: Londa Schiebinger

Rapporteur: Ineke Klinge

Luxembourg: Publications Office of the European Union, 2013

Expert Group 'Innovation Through Gender'

- In 2011 the European Commission established this group to conduct a • comprehensive review of this domain and to help develop the gender dimension in EU research.
- The group involved more than sixty experts from across Europe, the United States, and Canada.

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Slajd nr 14

- The experts chose to go beyond simply pointing at loopholes and flaws, and instead looked at concrete examples of where appropriate treatment of gender differences enhances research.
- The goal of the group: to provide scientists and engineers with practical methods for gender analysis, and to develop case studies as concrete illustrations of how gender analysis leads to new ideas and excellence in research.



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Twenty-One Gendered Innovations Case Studies

- The case studies demonstrate that differences between:
 - needs,
 - behaviours.
 - attitudes

of women compared to men really matter, and accounting for them in research makes it relevant to the whole of society.

They also show that these differences can vary over time and across different sectors of society and require specific analyses.

Definitions:

us

us

- Innovation refers to new ideas, new knowledge, and new technologies and design.
- · Gendered Innovations processes that integrate sex and gender analysis into all phases of basic and applied research to assure excellence and quality in outcomes.
- The Gendered Innovations website presents state-of-the-art • methods of gender analysis.

(http://genderedinnovations.stanford.edu/)



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Gendered Innovations:

- Add value to research and engineering by ensuring excellence and quality in outcomes and enhancing sustainability.
- Add value to society by making research more responsive to ٠ social needs.
- Add value to business by developing new ideas, patents, and technology



Thank you for your attention

Sandra Misiak sandra.misiak@op.pl

Slajd nr 1

Slajd nr 1

TP Winnet BSR Workshop 20th of November, 2014 (Szczecin)

Innovation, Gender & Growth (IGG)

- state of the art in EU and beyond

Inger Danilda

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First of all - I am honoured !

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Themes covered

 Macro-level:
 Gender still a non issue

 Meso-level:
 Gendered institutions and gendered innovations

 Micro-level:
 Women as inventors and entrepeneurs

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Macro-level

Gender? Harvard professor in Brussels in October 2014

Knowledge societies vs industrial societies Urban vs rural areas Unequal gender contracs vs modern contracts

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Meso-level

A lot of knowledge from studies of gender and organiations Gendered infracturies vs inclusive stuctures for innovation support Gendered organisations vs inclusive organisations Gendered innovations – Stanford University + EU (Horizon 2020)

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Micro-level

Women as innovators and as entrepreneurs is not the same

Women have less, get less and pay more for capital as a general rule – but exceptions

Women is seen as less innovative - no evidende in research

Women inventors are in all fields – a lot of new ideas in the care sector not acknowledged

The power of technolgy rules and the dichotomy male-female is strong

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Swedish model in Armenia? Yes we can!



WINNET Armenia Association of Women Resource Centers Prepared by Anush Hovakimyan



Overview

- 1. Armenia: location, general information
- 2.The Economy of Armenia
- 3.Swedish model: Syunik Women's Resource Centers Network
- 4.Political involvement
- 5. Supporting the Empowerment of Women in Local Governments
- 6.Economic development
- 7.Social activism
- 8.Network Development
- 9.Summary



Armenia: General Information

Area: 29,743 square kilometers (11,484 sq	mi)
Capital: Yerevan	
Population: Over 3 million	C
Government: Presidential Republic	Coat
Parliament/National assembly	
Official language: Armenian	
Currency: Armenian Dram (AMD)	



Flag

The Economy of Armenia: Overview

- 1. GDP per capita (PPP): \$3305, (Sweden \$43,180)
- 2. Gross external debt \$6.417 billion
- 3. Small scale agriculture
- 4. Food importer
- 5. Small mineral deposits (gold, bauxite)
- 6. Conflict with Azerbaijan and Turkey
- 7. A limited range of products and services for businesses offered by banks



Official Unemployment rate in Armenia: 7% Real unemployment rate in Armenia: 45-50 %



Women: 70%



The Economy of Armenia: Women's involvement in economic field in Armenia

- Inequalities between men and women
- Only 6% of employers are women and 94 % are men.



 Unemployment and insufficient employment
 have bigger negative influence on women than on men. Women's Empowerment and Cooperation in Armenia with a focus on the Syunik region" Assessment Report conducted by Swedish Expert Birgitta Wistrand



Women in Syunik are poorly represented in local politics and at a disadvantage compared to men in terms of employment and starting small businesses.



Economic Empowerment of Women in the Syunik Region of Armenia" project

Recommendations by

To support the establishment of women's resource centers based on local women's initiative groups in the major towns of the Syunik region.





Establishment of 3 Women's Resource Centers in the Syunik region:

Meghry Women's Resource Center NGO (Dec 2008)

Kapan Women's Resource Center NGO (Jul 2009)

Goris Women's Development "Resource Center" Foundation (Jul 2009)





Syunik Women's Resource Center Network Mission



Promote the increase in the roles and competitiveness of women at the national, regional and local levels through collaboration and civic engagement thus supporting the development of women's resource centers.



•

Monitor, research, and analysis

regional, and national levels • Increasing women's role and

and civic involvement

Assist solving women's issues at local,

competency through cooperation

Create equal opportunities for women

women's issues

Syunik Women's Resource Center Network Goals and Objectives



Syunik Women's Resource Center Network Activity Aspects

- · Political involvement
- · Economic development
- Social activism and support









Leadership development

candidates

transparency

Meeting with Local Government Body

Election process accountability and

Participation in city council meetings

1 the Q

Political involvement: Key numbers/figures

- 2 of 18 Ministers are women
- · 6 of 66 deputy ministers are women
- 0 of 10 governors are women
- 0 of 21 city mayors are women
- Of 1237 candidates running for community leader posts 43 were women, 10 have been elected;
- Of 6698 local self-government councilors, 580 were women; 396 have been elected (8.3%)



Political involvement: Activites



Political involvement: Young Citizen Journalists in Action

TV shows, talk shows

- Videos/ documentaries
- More than 200 materials addressing local issues and events
- Social platforms for online broadcasting

http://womennet.am

- http://sharavigh.blogspot.com,
- <u>http://meghriavagani.blogspot.com/</u>
- http://eghegnazoravagani.blogspot.com/
- http://www.syunikwrc.net









Supporting the Empowerment of Women in Local Governments: Goal of the project



Supporting the Empowerment of Women in Local Governments: Activates

To work with women to increase their knowledge and involvement in the electoral process.

Target Communities: 20 communities across two regions.

Period: 2012 local elections





- · Creation of informative materials
- Survey of 250 active women to find relevant areas of need
- Community meetings to discuss and encourage the involvement of women in the electoral process





- · Capacity building seminars
- Campaign support
 - Brochures
 - Advertising through articles/videos
 - produced by journalist clubs
 - Further informative meetings





Supporting the Empowerment of Women in Local Governments: Results

- 38 women nominated, 26 elected (68.4%)
- 13 women involved with observation activities
- · Continued commitment to future elections cycles





Economic development Sociological Survey

Aim of this survey:

- study women's entrepreneurship in the Syunik Region;
- provide a description of the woman entrepreneur, her business and business environment;
- identify the factors that promote and hinder business development.



Economic development: Survey Findings

Three main issues found as a result of the survey:

- 1. Financing issues
 - Finding loans
 - Interest rates
 - · Repayment periods
- 2. Tax regulations
- 3. Lack of business knowledge and relevant skills



Economic development: Development of Handicrafts



Economic Development Handicraft groups: Activities

Portes BRITADOPERAT - RESOLUTION - PORTES

The Objective: To provide unemployed women in Syunik region a chance of lasting employment and a consistent and substantial income





- Organizing the groups into economical units
- Trainings, based on specific product groups
- Crochet, ceramics, carpet weaving, embroidery/sewing
- Meetings with outside consultants/experts
- Idea exchanges between the various groups
- Increase the access to markets



Economic Development: Handicraft Group Example

- Makes small crocheted animals (currently 65 different animals)
 Works with about 90 women
- artisans in the region
 Conducts trainings to bring in
- more women artisans to meet production demands and sustain growth
- Works with HDIF for increased access to markets
 Exports
 - Testing of products for relevant certificates is ongoing, this is to legally export items to the EU and North America



Economic Development: Handicraft Group Example

- Over 90 women artisans are now involved in this project, up from 15 in 2009
- · Reduction in regional unemployment rate
 - Average monthly income is proportionate to average regional salary
- Increased the working business knowledge of women involved and further developed the souvenir market



Economic Development Going Forward

- Establish all projects as sustainable income generating projects
- Involve more women in each project
- Increase participation in domestic and international expos
- Increase colloborations with partners/new partners
- Setting up revolving funds for each project
- Other Projects:
- Carpet making
- Ceramics
- Embroidery/Sewing
- Yarn production



Social activism

- Environmental projects
- Domestic violence victim support
- Job skills trainings
- · Raising awareness about local community issues
- Distribution of donations from International Aid organizations to needy community members









- A bigger network increases the opportunities for collaboration and idea/experience exchange
- First goal is to grow the network within Armenia
 Reaching out to other women based organizations
- Second goal is to expand the network outside of our traditional boarders, and onto the international stage as part of a larger network

Meetings with WINNET Sweden member organizations, politicians and governmental institutions at local, regional and national level



WINNET Armenia Association of Women Resource Centers

Meghri Kapan Goris Sisian Eghegnadzor Gyumri Ijevan Dilijan Spitak Amasia Yerevan



Summary

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- 8.Network Development



Remember, please!

If the world were ruled by women, then there would be no war... just a couple of nations not talking to each other ©

> Thank you! Anush Hovakimyan Email: anhovakimyan@gmail.com

Szczecin, 21.11.2014

BST method - Polish WRC experience



Karina Tomaszewska



WRC

................

Resource Centres for Women as a modell are the most effective sources for engaging women in sustainable regional and local development.

The primary task and mission of Resource Centres is to increase the number of women participating in economic development and growth on a regional and a local level.

Fundamental to Women's Resource Centres is that they should develop on the basis of local needs and conditions.









The idea of a Business Success Team A Business Success Team is a new approach in the pattern

of contacts and networks. The idea is for businesswomen from different branches to meet regularly to motivate and support each other in the management and development of their own enterprises.





Round 2: Back-up

The goal of this round is to re-assess together and to find solutions for difficult issues and situations. The method provides a number of questions to guide the discussion:

- 1. Where have I not progressed?
- 2. What aspects have I developed?
- 3. What ideas and solutions can I contribute to help the other participants?

Round 3: Aims

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Each of participants has to define aims ahead of the next meeting.

These goals are recorded in the form of a journal, so that it can be checked that the participants work in a goal-orientated manner.

Each participant has about 2 minutes to state her aims, particularly what will be achieved by the next meeting.





