UNIVERSITY OF SZCZECIN
FACULTY OF ECONOMICS AND MANAGEMENT

Stock taking on Gender and Innovation in BSR

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Within WCE women innovators inspire women academics.
Women academics inspire women academics.

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Gender diversity and equality contribute to innovativeness.

Gender perspective can strengthen innovation milieus [Danilda & Thorslund 2011; Beck 2009; McKinsey & Company 2007; Lundvall 1992]

Gender equality:

The concept meaning that all human beings are free to develop their personal abilities and make choices without the limitations set by strict gender roles; that the different behaviour, aspirations and needs of women and men are considered, valued and favoured equally [A glossary of terms on Equality between Women and Men; European Commission; Lindberg & Schiffbänker 2013; Pettersson 2007; UN 2003-2012]

Gender diversity:

The concept can refer to the number of women and men in an organisation or in a certain position and can also signify an intersectional perspective taking into consideration gender in connection with other social differentiation categories such as age, ethnicity, educational background etc.
[www.gendertoolbox.org; Hunt, Garant, Herman, Munroe 2012; European Commission 2013; Castaño 2009]

6 statements about Innovation and Gender [Danilda & Thorslund 2011]

1. Competition for well-educated employees
2. Competition through better decisions
3. Gender diversity as driver of creativity and innovation
4. Competition with user-driven innovation
5. Gender as a means of design innovation
6. Competition by image shaping

Smart, Sustainable and Inclusive Growth

Smart: developing an economy based on knowledge and innovation.

Sustainable: promoting a more resource-efficient, greener and more competitive economy.

Inclusive: fostering a high-employment economy delivering social and territorial cohesion [European Commission 2010; ENERGIA 2006, 2007, 2013; Johnson-Latham; Gerd 2006]

Smart, Sustainable and Inclusive Growth

Gender equality is a prerequisite for sustainable development. Women live in a more sustainable way than men and that their market activity is generally more environmentally friendly [Johnsson-Latham 2007; Löfström 2008; Dollar, Gatti 1999; Forsythe, Korzeniewicz and Durrant 2000; OECD 2004-2012; Plantenga, Remeny, Figueiredo, Smith 2009; Klasen, Lamanna 2009]

Recruiting and retaining women in scientific and technical fields is a key to success [European Commission 2010]

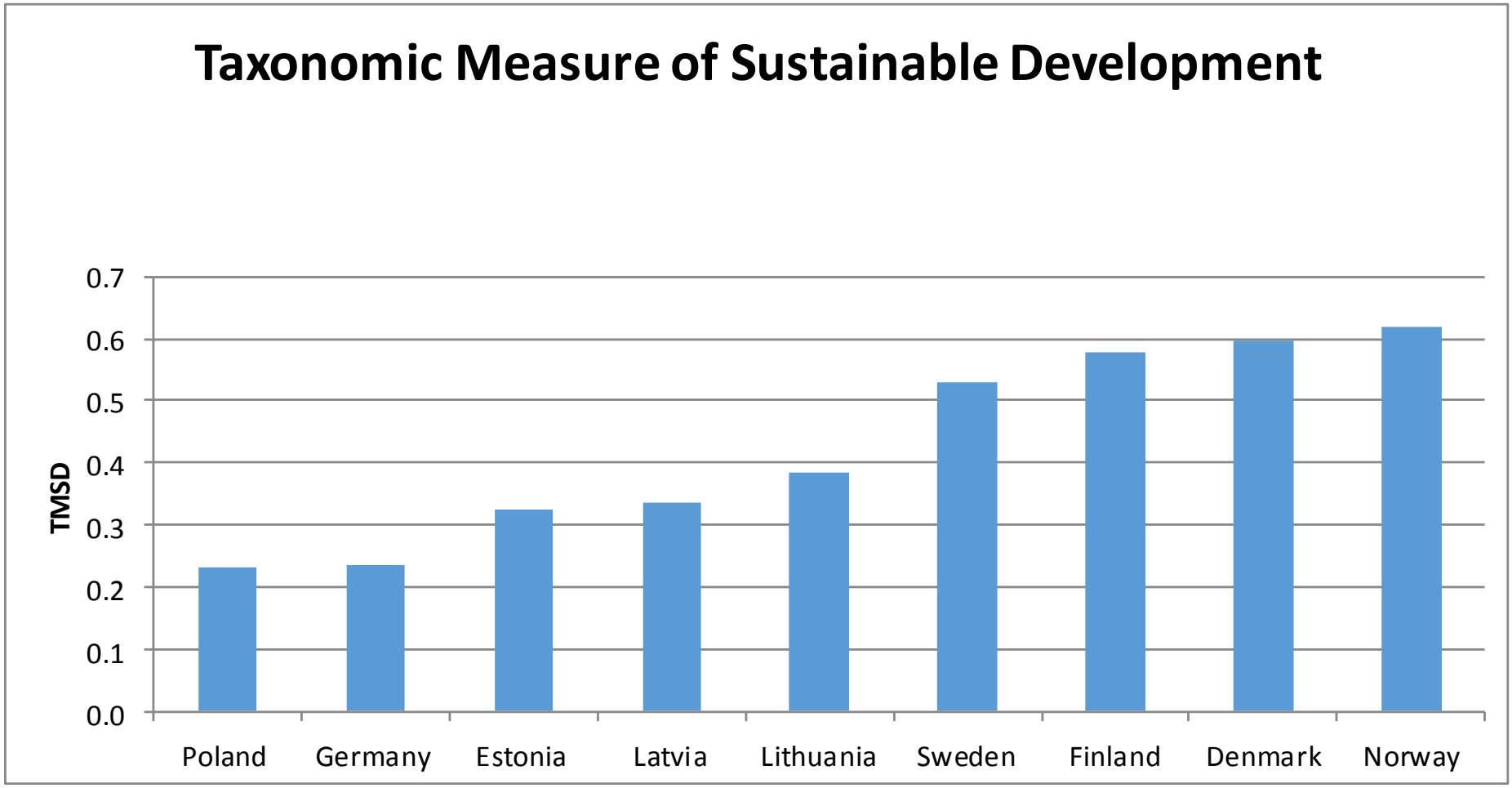
Taxonomic Measure of Sustainable Development – TMSD

10 themes included: socio-economic development, sustainable consumption and production, social inclusion, demographic changes, public health, climate change and energy, sustainable transport, natural resources, global partnership and good governance [Hozer-Kocmiel, Ruminska-Zimny, Söderberg Torstensson 2013]

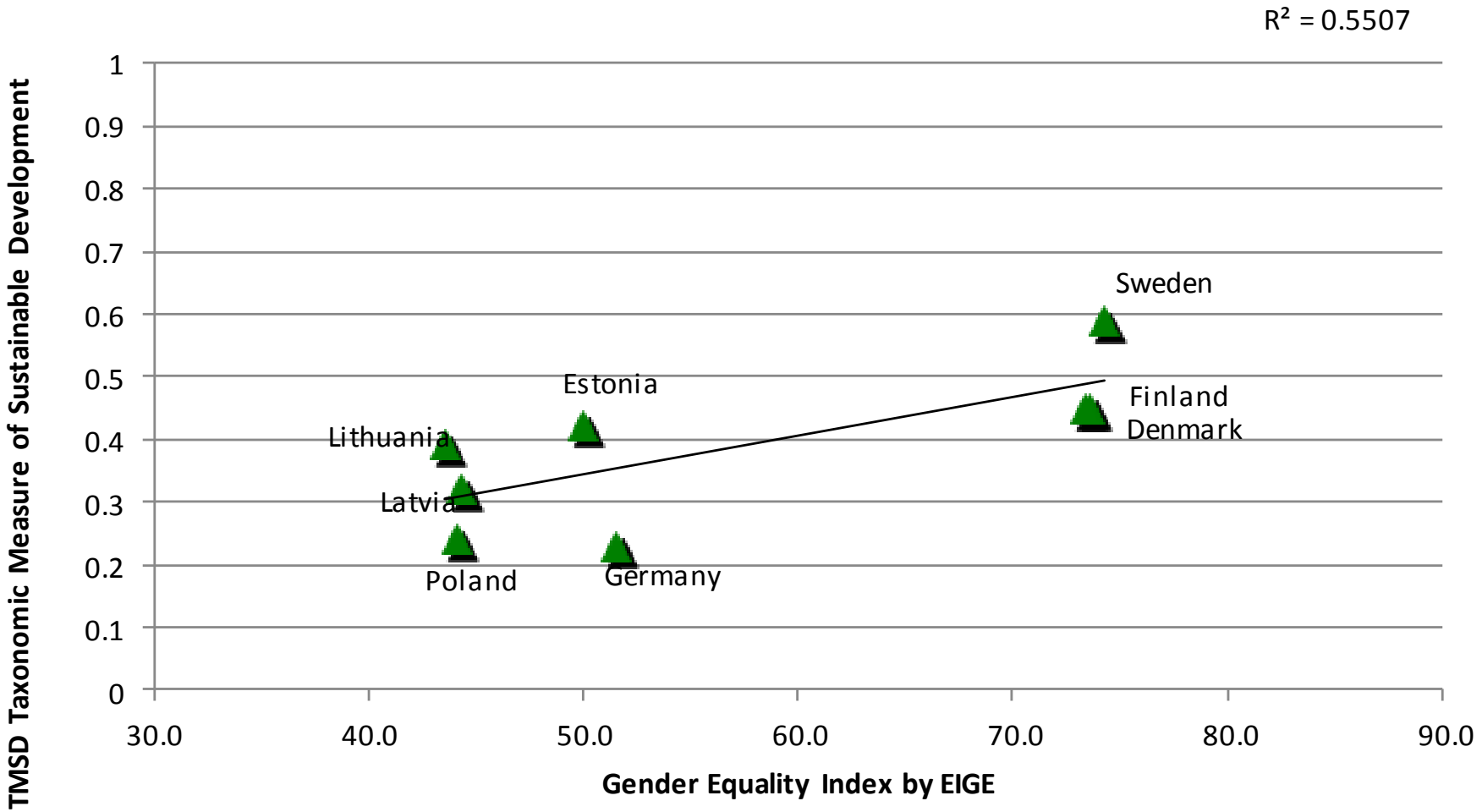
10 variables were used to calculate TMSD:

1. Growth rate of real GDP per capita,
2. Resource productivity,
3. People at-risk-of-poverty or social exclusion,
4. Employment rate of older workers,
5. Healthy life years and life expectancy at birth,
6. Greenhouse gas emissions,
7. Share of renewable energy in gross final energy consumption,
8. Primary energy consumption,
9. Energy consumption of transport relative to GDP,
10. Official development assistance as share of gross national income.

TMSD in BSR


Taxonomic Measure of Sustainable Development
TMSD
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Poland
Germany
Estonia
Latvia
Lithuania
Sweden
Finland
Denmark
Norway

GEI EIGE and TMSD in BSR countries



Low number of women innovators

Low number of women innovators in Europe [Eurostat 2000-2014; N. Ahmad and A. N. Hoffmann, 2008; OECD 2000-2014; Nyberg 2002; Pettersson 2007]

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 [European Commission 2008]

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.

2. 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.

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.

Increase of Science and technology women graduates

	Germany		Lithuania		Sweden		Poland	
	Females	Males	Females	Males	Females	Males	Females	Males
2011	10.1	22.6	13.3	31.6	10.4	20.4	13.6	21.3
2001	3.6	12.2	10.6	18.9	8.4	16.1	5.5	9.7

Science and technology graduates aged 20-29
Source: Hozer-Kocmiel, Misiak, Tomaszewska (2014)

Men and women in ICT sector

	work in ICT	work in non-ICT service	work in other sectors	do not work
Men	20.67 %	27.89 %	36.17 %	15.27 %
Women	10.76 %	44.28 %	21.51 %	23.46 %

Source: Hozer-Kocmiel, Misiak, Tomaszewska (2014)

Why is it important to promote women in ICT sector?

(Hozer-Kocmiel, Zimoch 2011)

1. ICT is one of the most dynamic sector of economy, participation in this sector enable women to influence economic growth and alleviate the effects of the economic crisis.

2. Increase of participation of women in ICT would reduce labour market segregation and allow women to receive higher salaries.

3. Increased usage of women's IT skills will allow many companies, institutions and private persons to benefit from women's skills in that area, and to use 50 % talents – women's talents.

Why is it important to promote women in ICT sector?

(Hozer-Kocmiel, Zimoch 2011)

4. Demographic changes cause structural changes in labour market; many people leave the labour market to retirement. Women successfully take part in economic activities, therefore this is the time to encourage them to train and find work in ICT sector.

5. ICT participation equality policies and programmes are very important. Gender imbalance in the sector is not self-regulating, therefore proactive practices are essential [Hozer-Kocmiel, Zimoch 2011; Hurek, Maj 2012; Alsos, Ljunggren, Hytti 2013; Andersson, Berglund, Thorslund, Gunnarsson, Sundin 2012).

Next Steps

1. Stock taking paper on gender and innovation with special focus on ICT and tourism, suggested title: Gender and Innovation in the BSR. Literature review with suggestions for further research

2. Our part + Questions sent to the WCE researchers about the situation in their country

3. Publication of the article

Thank you for your attention!

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