

Measuring Gender Equality

Christian Suter
University of Neuchâtel

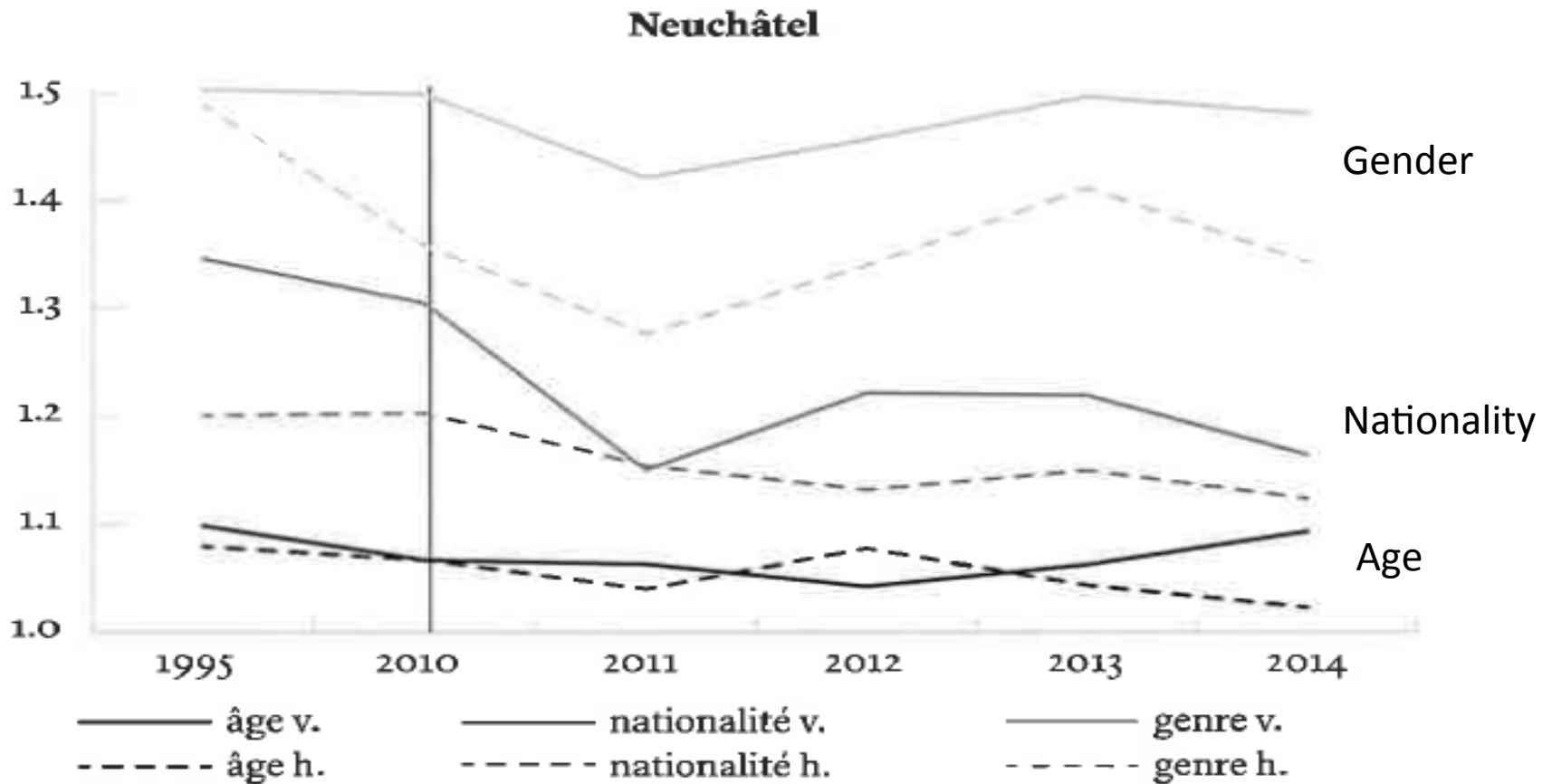


A classical measure of gender (in)equality: The dissimilarity index

- Developed by Duncan and Duncan (1955)
- Measure for horizontal/vertical occupational gender segregation
- The measure indicates the proportion of women or men that should be shifted to other professional fields (horizontal segregation) or occupational positions (vertical segregation) in order to achieve equal ratios.
- More recent segregation indexes include the index of association of Charles (1992) and Charles and Grusky (1995), indicating the factor by which women or men are over-represented in professional fields (or positions).
- Domain-specific measure (work).
- Easy and simple to interpret.
- Easy to calculate on regional level.
- But: The index does not inform on mechanisms of gender segregation (i.e. individual, organizational/institutional, societal)

Evolution of gender segregation, Canton of Neuchâtel, Index of association 1995-2014

(compared to segregation based on nationality and age)



Recent Gender Equality Measures: A selection of Indicators and Indexes (1)

- **Gender related Development Index GDI** and Gender Empowerment Measure (**GEM**)/Gender Inequality Index (**GII**) developed by the UNDP (1995), based on the HDI including three dimensions (health, knowledge, standard of living; GII: health empowerment, labour market).
- **Global Gender Gap Index GGGI** developed by the WEF in 2006 including four dimensions (economic participation and opportunity, educational attainment, health, political empowerment)

Recent Gender Equality Measures: A selection of Indicators and Indexes (2)

- (European) **Gender Equality Index GEI** including 6 dimensions (work, money, knowledge, health, time, power) for 28 EU-countries measured by 31 indicators, developed by the European Institute for Gender Equality (EIGE) has been launched in 2013. The GEI has been recently applied to Italian regions (by DiBella et al. 2021) and to EU regions (by Norlén et al. 2019).
- **Women's Economic Opportunity Index** including 5 dimensions (labour policy and practice, access to finance, education and training, women's legal and social status, general business environment) measured by 31 indicators developed by *The Economist* in 2009

Recent Gender Equality Measures: A selection of Indicators and Indexes (3)

- The **OECD Social Institution and Gender Index SIGI** originally based on 5 dimensions (discriminatory family code, restricted physical integrity, son bias, restricted access to productive and financial resources, restricted civil liberties) developed by the OECD in 2009 and revised in 2014.
- The **Global Index on Legal Recognition of Homosexual Orientation GILRHO** based on 8 legal rights developed by Kees Waaldijk at Leiden University in 2014.
- The **SDG Gender Index** published by Equal Measures 2030 in 2018 covering gender equality aspects of SDGs.

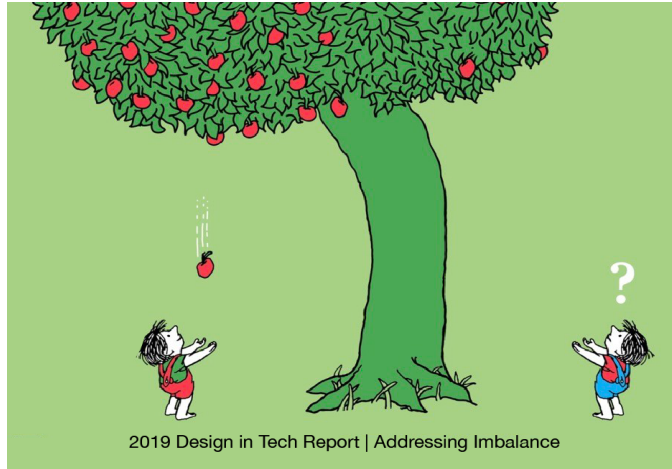
Quality criteria for constructing composite indexes of development (F. Booysen 2002)

1st criteria: Content

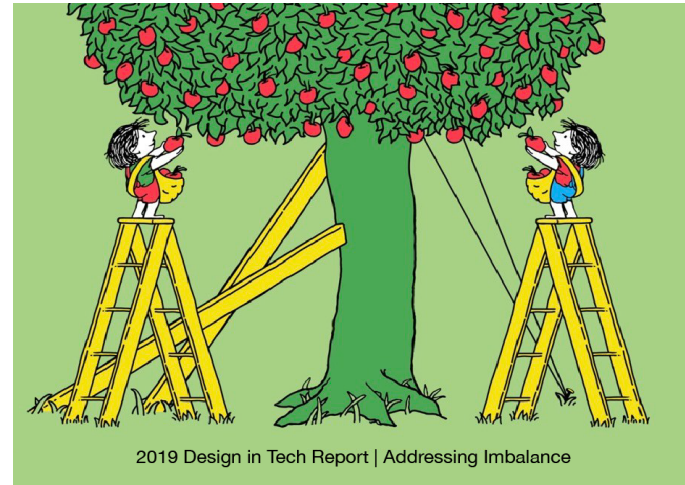
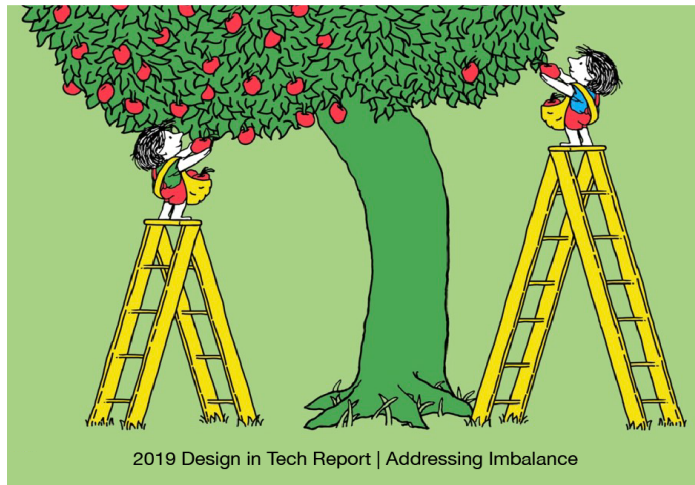
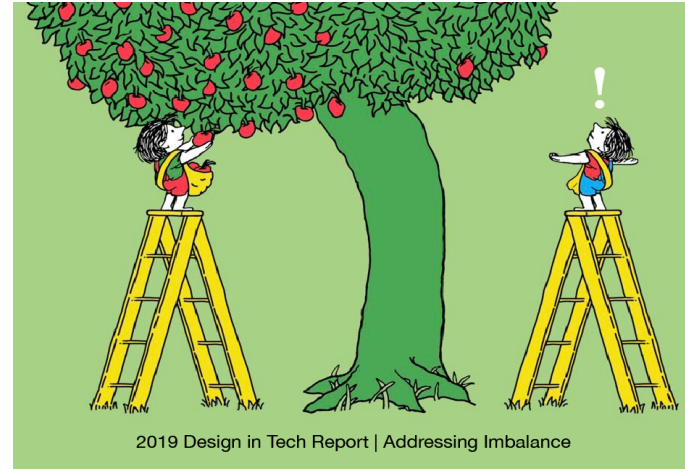
- Theoretical and conceptual framework, aspects and dimensions to be covered by the index
- Conceptual framework of equality:
 - equality/inequality
 - equity/inequity
 - disparity (parity)
 - dissimilarity, difference, etc.
- Conceptual framework of gender:
 - female/male, LGBT/Queer

Equality – inequality – equity

INEQUALITY



EQUALITY



EQUITY

JUSTICE

Quality criteria for constructing composite indexes (2)

2nd criteria: Technique and method

- Selection (of variables and components)
 - theoretical
 - statistical (principal component/factor analysis)
 - ad hoc, intuition, etc.
- Weighting and Aggregation
 - of sub-domains, components, overall index
 - arithmetic / geometric means
 - explicit (or implicit) weighting
 - equal weighting, expert-based weighting, individual/subjective preferences, statistical weighting (component scores)
 - non-comparabilities, partial orders (ordinal scales)

Quality criteria for constructing composite indexes (3)

3rd criteria: Comparative application:

- across space
- across time

4th criteria: Focus of measurement

- input (means) vs output (ends) indicators
- indicators of access, outcome, perceptions etc.
- single domain vs multidimensional measures

5th criteria: Clarity, simplicity, attractiveness

6th criteria: Availability across time and space

7th criteria: Flexibility

8th criteria: (Public) acceptance and legitimacy

9th criteria: Policy relevance

Concluding remarks

- At the national/international level currently several gender equality measures and indexes (but only very recently application at the regional level in Europe)
- Rich experience and scientific knowledge of conceptualizing and measuring gender (in)equality.
- There seem to be a trend towards more complex, multidimensional gender (in)equality measures.
- The 9 quality criteria for constructing composite indexes may be easily applied to regional indicators; but there are also some conflicting objectives (like simplicity vs multidimensionality; policy relevance vs multidimensionality) and challenges (like weighting and aggregation of complex multidimensional indexes).