

The international *WageIndicator* data on work and wages

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Outline

- 1. WageIndicator websites & organisation
- 2. Web survey principles & topics
- 3. Questionnaire design
- 4. Databases in use
- 5. No of observations & some descriptives
- 6. Volunteer survey, representativity and weighting
- 7. The world database of occupations and wages

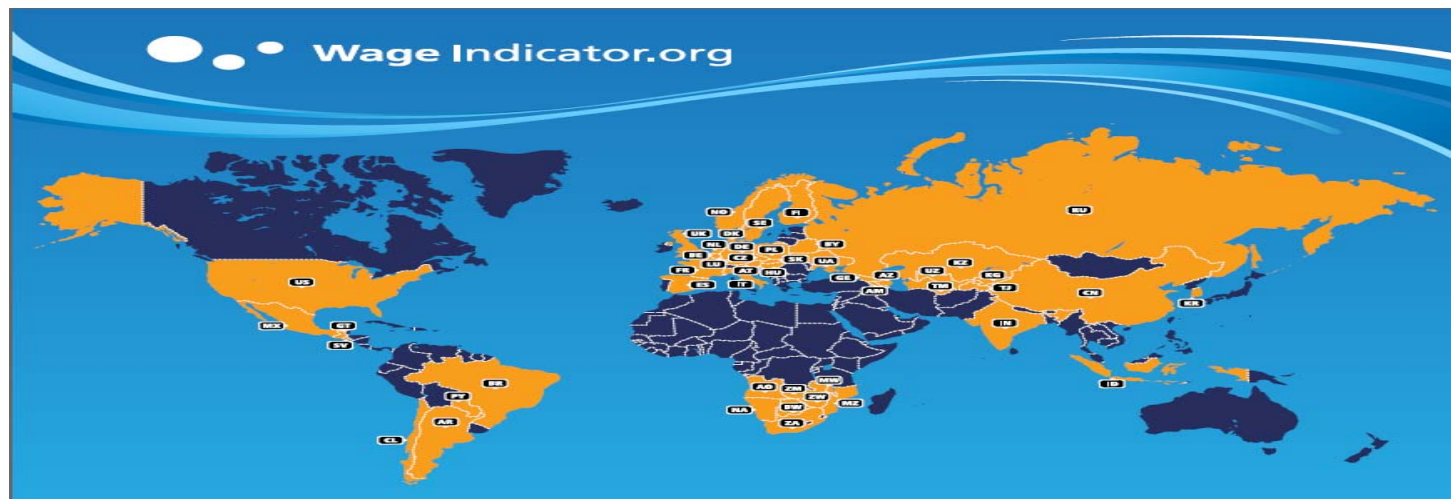


WageIndicator websites

- **National websites with**
 - a crowd-pulling device: a *Salary Check* providing free information on occupation-specific wages, controlled for individual characteristics
 - work-related content
 - answering visitor's emails
 - Decent Work Check, gross-net Check , VIP pay Check & other Checks
 - extra web pages for women (FrauenLohnspiegel), elderly workers (55+), IT staff (India)
 - language portals for post Soviet countries, Spanish speaking Latin America
 - a permanent web-survey

WageIndicator in 50+ countries

- 2001 Netherlands
- 2004 7 EU-countries
- 2005 Latin-America, South-Africa
- 2006 USA, India
- 2007 Russia, post-soviet countries
- 2008 China, more EU and LA countries
- 2009 Indonesia, Southern African countries
- 2010 Pakistan and neighbouring countries, all African countries (?)





Much web traffic

- **Worldwide 10 million web-visitors per year**
 - worldwide, the public shows a great desire for information about wages
 - visitors use the website for decisions about schooling, occupational choice, wage negotiations, and job mobility
- **Web-marketing efforts**
 - large efforts are put into web-marketing
 - links posted on frequently visited websites
- **Cooperation with major Internet players**
 - MSN, newspapers, portals, career sites, trade union websites, temp agencies
- **Attractive web-tools and web-content**
 - new: per country 430 occupation pages with occupation specific content

The logo for WageIndicator Foundation features three overlapping circles in shades of blue. The largest circle is in the foreground, and two smaller ones are behind it. The circles are partially transparent, showing the ones behind them. The text 'WageIndicator Foundation' is written in a white, bold, sans-serif font across the top of the blue header bar.

WageIndicator Foundation

- **WageIndicator Foundation**
 - owns the *WageIndicator* concept
 - is a not-for-profit organization
 - founded in 2003 under Dutch law
 - by University of Amsterdam / AIAS,
Dutch Confederation of Trade Unions (FNV),
NL branch of career website Monster
- **Mission statement**
 - “Share and compare wage information.
Contribute to a transparent labor market.
Provide free, accurate wage data through Salary Checks on national websites.
Collect wage data through web surveys.”*
- **International Labor Organization (ILO)**
 - advisor in our plans to expand to 75 countries



Organization

- **NL team operating worldwide**
 - hosting and technical support
 - web-management
 - marketing, design, development of web-tools
 - data- and survey management
- **Country teams**
 - web-manager(s) from media partners, career sites, research institutes, trade unions
 - (sometimes) researchers from universities or private institutes
- **Funding**
 - projects from EU, development aid, ministries
 - fees from countries
 - licenses, banners, advertisements
 - sales of data and survey questions
 - country teams mostly funded from national partners



Web-survey principles

- **Worldwide**
 - similar questionnaires are posted at all national websites
 - web-surveys are in the national language and have country-specific questions on education, region, etc
 - comparable across countries for data elsewhere not available
- **Volunteer survey**
 - message to the web-visitor:
please complete the survey in return to the free information provided
 - much web-traffic -> large sample sizes
 - 2* 10 minutes questions about work and wages
- **Data used for**
 - regression coefficients underlying the Salary Check
 - research



Topics in the questionnaire

- **Wages**
 - wages, benefits, wage periods, annual bonuses, pay mode, overtime pay contribution to social security, pay in time, opinion about pay
- **Industrial relations**
 - collective bargaining coverage, trade union membership, employee representation in workplace (works council or similar)
- **Workplace**
 - industry, firm & workplace size, ownership, name of company
- **Employment contract and working hours**
 - contract, number of jobs, contractual and actual working hours
- **Working conditions**
 - physically or mentally exhausting work, stress, workload, time pressure, autonomy, monotony



Topics - 2

- **Occupation, education and training**
 - occupation, job level, education, time needed to learn the job
 - training provided by employer , desire for training
- **Job history and future**
 - years entering first job, current employer, current job, career break
 - job search activities, expecting to be still employed in a year time
- **Household and family**
 - marital status, household composition, children, age of children
 - division of work in household
- **Demografics**
 - region currently livig, region of work, region of birth, commuting distance
- **Attitudes & satisfaction**
 - job satisfaction, life satisfaction, attitudes towards many topics



Questionnaire design

- **Outline**
 - 14 pages with survey questions
 - dynamic pageing
 - data cleaning during survey completion
- **Questionnaire optimization**
 - reducing the number of characters, clicks and pages, but not at the cost of the number of variables
 - split questions in a Y/N question + follow-up question, based on frequency information from previous data releases
 - page optimization
 - all aiming to prevent break off



Questionnaire design - 2

- **Response categories**
 - Radio button: 1 answer from a choice < 10 items
 - Drop down: 1 answer from a choice 10 -100 items (e.g. calendar years)
 - Search tree: 1 answer from a choice > 100 items
 - Text box: for text, including ‘Add new’ in search trees
 - Checkbox: multiple answers from a choice < 10 items
 - 5-point Likert scales in a matrix: 1 response-set for multiple items (<10)



Routing

- **Routing & different questions**
 - Employee
 - Self-employed, employer, free lance
 - Work-no-pay
 - Unemployed
 - Never had a job
 - Disabled
 - School pupil, student
 - Apprentice
 - Other
- **Why**
 - important to prevent break off from people who do not feel addressed
 - allows for asking specific questions to small sub-populations



Country specific databases

- **Education database**
 - per country 8 or more relevant educational categories (1/2-tier search tree)
 - cross-over tables to ISCED and years leaving education
- **Region database**
 - per country list of regions with largest cities (2-tier search tree)
 - cross-over tables to urbanization degree
- **Trade union database**
 - per country list of trade unions + text box (1/2-tier search tree)
 - for the survey question “Of which trade union are you a member?”
- **Language database**
 - per country list of 3-10 languages spoken at home (1-tier search tree)
- **Ethnic groups database**
 - per country list of 3-10 ethnic groups (1-tier search tree)



International databases

- **Occupations database**
 - 1,600 occupational title (3-tier search tree)
 - coded ISCO-08 -4digit
- **Industry database**
 - 300 industries (2-tier search tree)
 - coded NACE 3/4 digit
- **MNE database**
 - 600 MNE and their affiliates in 18 countries in a number of industries
 - used for question about name of company
- **Country database**
 - 220 countries
 - used for questions about country of birth (self, mother, father) and for ownership of company if foreign-owned



Paper based questionnaires

- **Paper based questionnaires**
 - in countries with low Internet access
 - derived from national WageIndicator questionnaire
 - interviews with target groups, in most cases occupational
- **Depends on funding**
 - project in Paraguay: Mar2009
 - some 2,000 observations
 - projects in Cambodia and Nepal, 2010

Completed part_1 in 2009-Q2

Country		Country	
Argentina	1056	Mexico	3549
Belgium	836	Netherlands	2616
Brazil	1770	Paraguay	620
Belarus	768	Poland	285
Chile	658	South Africa	1395
Colombia	1069	Spain	574
Czech Republic	7449	Sweden	295
Finland	3208	United Kingdom	881
Guatemala	177	United States	378
India	1085	15 other countries	380
		Total	29049

Some descriptives

- 84% is employee, remaining group self-empl, unempl, etc
- 94% is paid on a monthly basis
- 93% is paid on time
- 2,94 employers from start working life to current job (sd 2.40)
- 2005.86 is average year starting in current job (sd 4.46)
- 94% is born in country of survey
- satisfaction with life as a whole: 7.1 (sd 2.00) on scale 1-10
- finds job stressful: 3.4 (sd 1.10) on scale 1 =no stress - 5 =much stress

Education in Argentina	%
ARG Primaria (en Capital Federal)	1.4%
ARG Secundaria (en Capital Federal)	21.6%
ARG EGB2 (fuera de Capital Federal)	1.1%
ARG EGB3 (fuera de Capital Federal)	2.9%
ARG Polimodal (fuera de Capital Federal)	14.4%
ARG Superior no universitario (profesorados, terciarios)	22.6%
ARG Universitario de grado	29.6%



Data

- **Data processing**

- all survey data collected at one server
- every quarter data release
- from XML -> Excel
- text data is stored in Excel
- numerical data from Excel -> SPSS or Stata

- **Use of data**

- for academic use mostly 500 euro per survey year
- signing agreement concerning confidentiality and non-commercial use

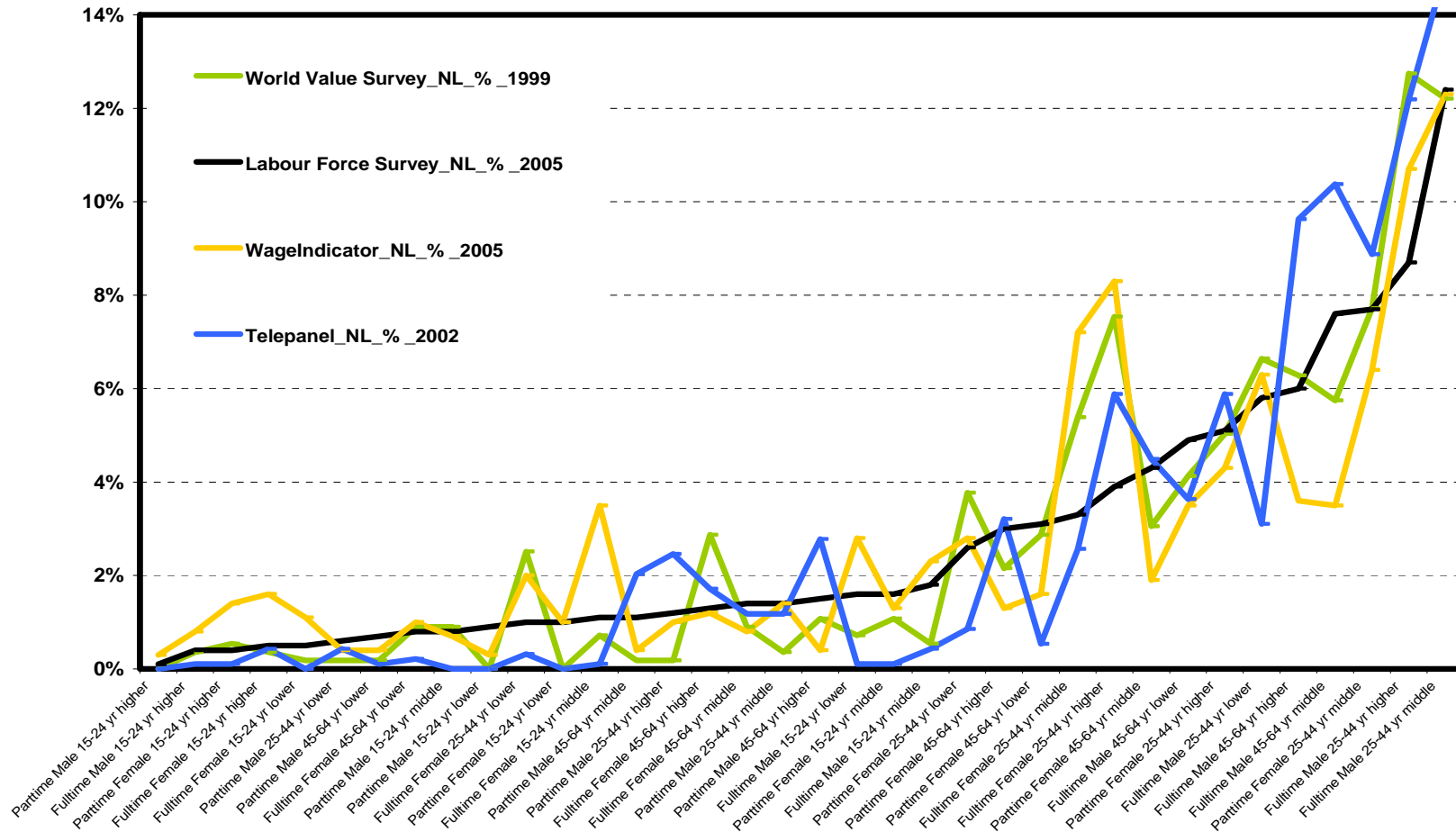


Advantages & disadvantages

- **Advantages of volunteer web-surveys**
 - increasing importance of web-surveys
 - increasing problems with other survey modes (rising non response; telephones)
 - a web-survey can easily be held continuously & worldwide
 - large sample sizes allow for analyses of small sub-populations
 - large sample sizes allow for follow-up questions in the survey (screening device)
 - particularly important when sampling frames are absent
- **Disadvantages of volunteer web-surveys: self-selection**
 - self-selection: the results are not representative for the population at large
 - sources of error:
 - * non-coverage due to lack of Internet access
 - * no sampling frame due to lack of list of Internet users
 - * break off rates much higher compared to other survey modes
 - + measurement and processing errors (not specifically web-surveys)

How does NL data compare?

(36 cat: 3 age * 3 edu * 2 w.hours * 2 genders)





Weighting

- **Why**
 - to correct for systematic survey errors
 - to adjust the sample to the target population
- **Weighting**
 - simple weighting:
adjustment for socio-demographic under/over representation between sample and population -> corrects proportionally
 - Propensity Score Adjustment (PSA):
to correct for differences due to the varying inclination to participate in the survey
so far mixed findings: some differences disappeared after simple weighting, some after additional PSA, and some continued to exist or became even larger



Project

- **3 yr post doc researcher at Erasmus University Rotterdam**
 - using reference surveys for Germany and Netherlands
 - partners in Spain and US do so for ES, AR, US, MX
- **Findings: similarity between DE and NL**
 - underrepresentation of
 - women
 - people aged 45-65
 - part-timers
 - persons from regions with high unemployment
 - persons with high job satisfaction
 - simple weights effective for socio-demographics, PSA effective for wages
 - yet, no consistency within weights
 - effects of weights differ across countries



A worldwide wages database

- **A globalising economy ...**
 - requires worldwide comparative and up-to-date data on wages, including time series
 - which are currently only very limited available
- ***WageIndicator ...***
 - might develop as a worldwide database on wages, benefits, working hours, working conditions, industrial relations at the workplace
 - all publicly available through national Salary Checks and Occupation pages
 - thus increasing our understanding of the labour market worldwide



Thank you for your attention

- Thanks for listening
- For more information:

www.wageindicator.org