



Institut der deutschen
Wirtschaft Köln

Logib-D



Logib-D: Assessing the Gender Pay Gap on Firm Level

Prague, November 20, 2014

Dr. Jörg Schmidt

iW.KÖLN.WISSEN
SCHAFFT KOMPETENZ.

agenda

the Logib-D coordination office

about the functionality of the Logib-D software

concluding remarks

Logib-D: who's who?

**Federal Ministry for Family Affairs, Senior Citizens, Women and Youth
of Germany (BMFSFJ)**

Logib-D coordination office
Cologne Institute for Economic Research
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scientific monitoring

Cologne Institute for
Economic Research
e. V.

**project management,
coordination, hosting
website**

Cologne Institute
for Economic
Research
Consult GmbH

**webtool and
data analysis/
management**

PMSG
PersonalMarkt
Services GmbH

consulting

Baumgartner &
Partner
Management
Consultants GmbH

the Logib-D coordination office

- ▶ what are the tasks of the **Logib-D coordination office**?
 - ▶ **point of contact** for all internal and external requests (email, phone).
E.g.
 - requests from the ministry, interested companies, journalists
 - requests concerning the Logib-D tools, the consultation process, the application procedure, technical requirements, interpretation of results, ...
 - ▶ **managing / updating the website www.logib-d.de**
 - news, instruction manuals, application deadlines, appointments (e.g. Logib-D network meeting), background information, ...

the Logib-D coordination office

- ▶ **promoting Logib-D** in the public domain, and particularly to make it known to german companies: E.g.
 - presenting Logib-D at human resources events and networking events (e.g. HR trade fairs or employers' associations meetings); with exhibition counter, presentations, give-aways, flyers
 - promoting Logib-D by notifications, (scientific) publications, in social media,...

- ▶ **organization of the Logib-D consultation process:**
 - regular advisory board meetings
 - kick-off workshops for participating companies (including video tutorials)
 - label award ceremony ("Logib-D geprüft"- Logib-D approved) and network meetings for exchange of experiences

potential benefits for companies

► reasons for using the Logib-D software?

- **skilled labour shortage / demographic change:**

Communicating the application of Logib-D (e.g. via the Logib-D label) might support firms in raising their attractiveness, particularly for qualified females

- **internal transparency of pay structures:**

Logib-D improves the internal transparency and enhances the awareness of gender pay equality

- **employee satisfaction:**

Logib-D supports employee satisfaction, since increasing pay equality can foster work motivation

- **reporting:**

The data provided with Logib-D enables companies to include various gender data into their reporting framework (e.g. in sustainability reports).

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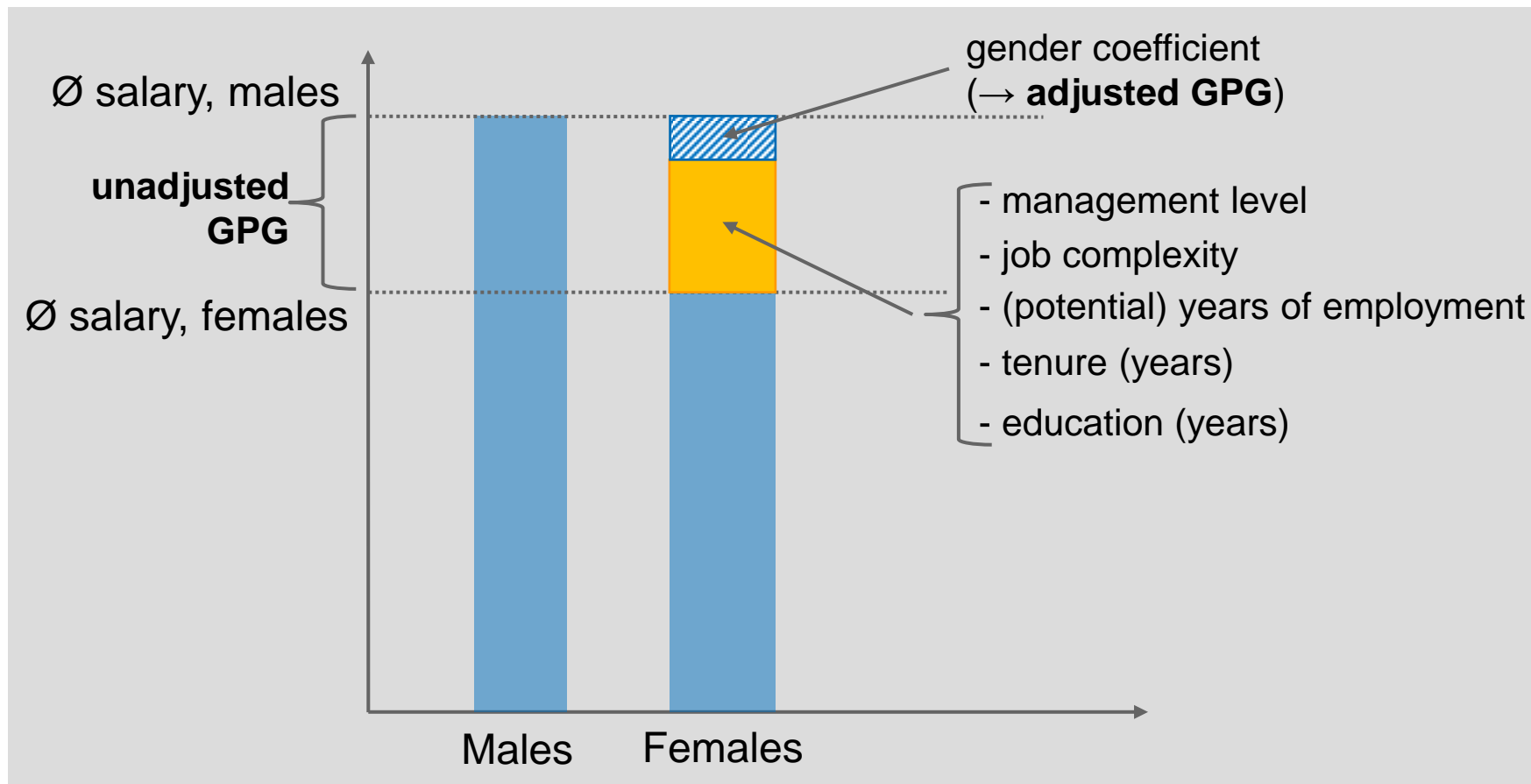
the Logib-D software

data requirements

- ▶ **The following data should be provided for each employee:**
 - salary (total cash or fixed salary or variable salary components)
 - gender
 - age
 - educational attainment (up to 6 items)
 - entry date (and possibly the employment breaks of each person)
 - job complexity (up to 6 items)
 - management level (up to 6 items)

what does Logib-D do?

analyzing the gender pay gap (GPG)



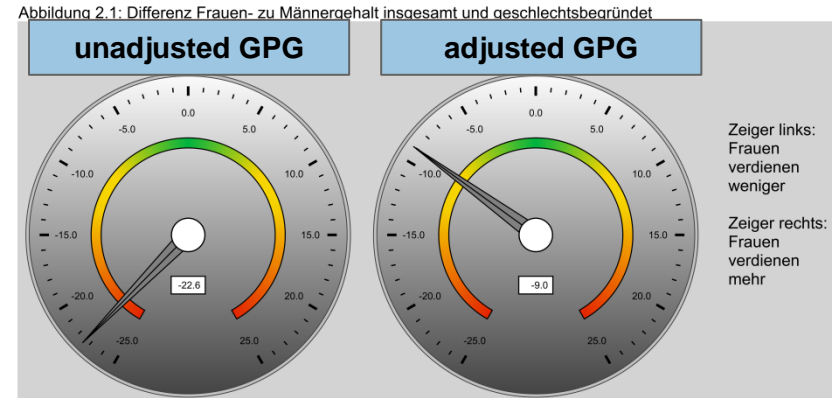
Source: Own illustration following Strub (2005)

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interpretation of the results

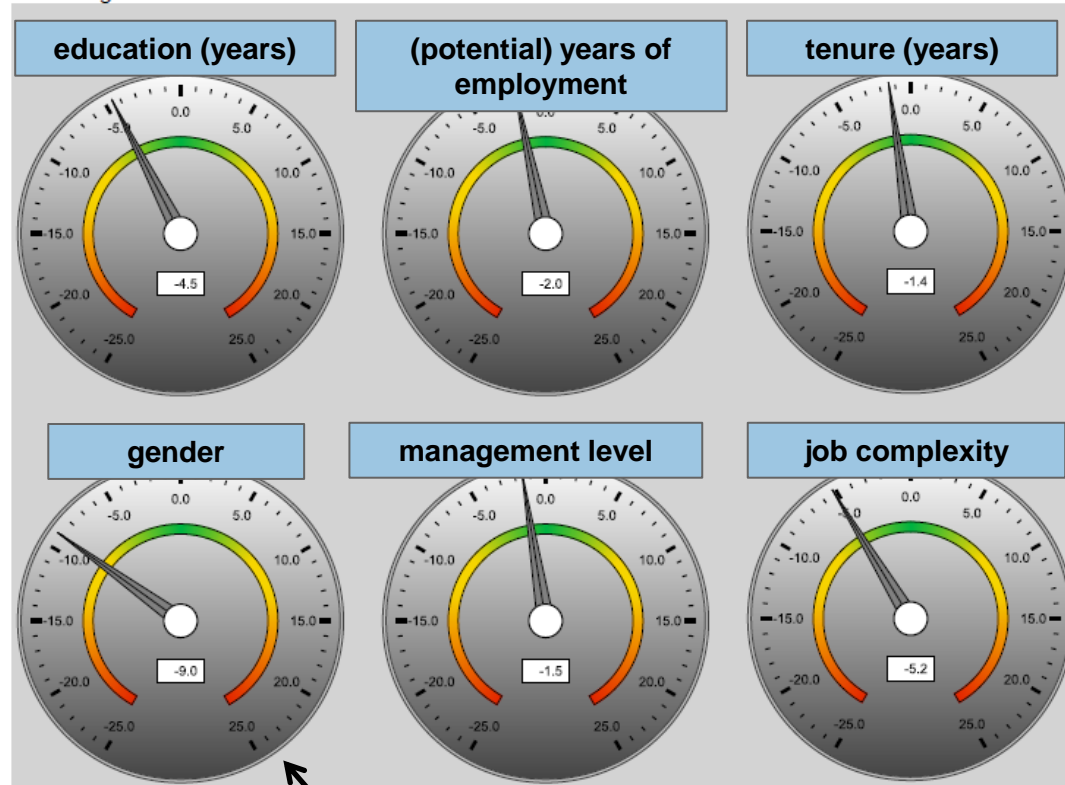
- ▶ The aim is to find out which part of the unadjusted GPG is explained by personal and job-specific characteristics
- ▶ E.g. if the unadjusted GPG is 22,6 % and the adjusted GPG is 9 %:
 - Females earn on average 9 % less than males if they don't differ in education, tenure, (potential) years of employment, job complexity and management level
 - This means that about 60% of the unadjusted GPG is explained by the included variables



Source: www.logib-d.de, webtool - outcome report 1 based on test data, original output in german

Logib-D webtool outcome report, abstract I

Abbildung 2.4: Anteil der Variablen an der Gehaltsdifferenz zwischen Männern und Frauen



- ▶ In the Logib-D webtool, detailed information about the impact of each single variable on the GPG is provided

Tabelle 2.1: Differenz Frauen- zu Männergehalt insgesamt und geschlechtsbegründet

| | durchschnittliches Frauengehalt in % vom Männergehalt |
|-------------------------|---|
| (unadjusted) GPG | -22,6 % |
| adjusted GPG | -9,0 % |

Source: www.logib-d.de, webtool - outcome report 1 based on test data, original output in german

Logib-D webtool

outcome report, abstract II

Tabelle 2.2: Durchschnittswerte der Erklärungsmerkmale nach Geschlecht

age (years)
education (years)
(potential) years of employment
tenure (years)

management level
1) without leadership function
2) lowest management level
...
6) top management level

job complexity
1) most simple operations
...
6) most challenging operations

| | | Durchschnittswerte/ Verteilung | | Diff. in % |
|---|-------------------|-----------------------------------|------------|---------------|
| | | males | females | |
| Alter | | 47,0 | 45,7 | -2,8 % |
| Ausbildungsjahre | | 13,5 | 13,0 | -3,7 % |
| Erwerbsjahre (potenziell) | | 27,5 | 26,7 | -2,9 % |
| Dienstjahre | | 16,9 | 15,2 | -10,1 % |
| Berufliche Stellung | Mittelwert | 3.2 | 2.8 | |
| 1. Ohne Führungsfunktion | | 8,5 % | 12,6 % | 48,2 % |
| 2. Unterste Führungsebene (Anleitung, Überwachung von Arbeiten) | | 31,8 % | 35,2 % | 10,7 % |
| 3. Untere Führungsebene (Abteilungs- / Gruppenleitung) | | 19,5 % | 26,1 % | 33,8 % |
| 4. Mittlere Führungsebene (bis 250 Mitarbeiter) | | 14,0 % | 10,6 % | -24,3 % |
| 5. Obere Führungsebene (über 250 Mitarbeiter) | | 19,7 % | 12,6 % | -36,0 % |
| 6. Oberste Führungsebene (über 1.000 Mitarbeiter) | | 6,6 % | 2,9 % | -56,1 % |
| Anforderungsniveau | Mittelwert | 4.2 | 3.7 | |
| 1. einfache Tätigkeiten (auch ungelernte) | | 1,7 % | 2,9 % | 70,6 % |
| 2. wiederkehrende Aufgaben (Berufsausbildung) | | 3,4 % | 10,6 % | 211,8 % |
| 3. teilweise wiederkehrende Aufgaben (Mstr. od. Ausb. mit Erf.) | | 25,9 % | 32,9 % | 27,0 % |
| 4. qualifiziertes Arbeiten (Studium od. Mstr., Akademie mit Erf.) | | 28,6 % | 27,4 % | -4,2 % |
| 5. hoch qualifiziertes Arbeiten (Studium, >2 J. Erfahrung) | | 27,8 % | 21,6 % | -22,3 % |
| 6. höchst anspruchsvolle Tätigkeiten (Studium, > 8 J. Erfahrung) | | 12,5 % | 4,5 % | -64,0 % |

Source: www.logib-d.de, webtool - outcome report 1 based on test data, original output in german

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requirements and characteristics

- ▶ the included variables are in line with scientific standards
- ▶ sufficient number of observations
- ▶ sufficient number of females and males in the analysis
- ▶ the total number of variables is restricted, because
 - the input / costs should be limited for companies
 - the results of the Logib-D software will not be valid for smaller companies

the Logib-D software

webtool vs. exceltool

analyzing the (adjusted) gender pay gap in companies

webtool:

- ▶ online usage
- ▶ easy-to-use procedure
- ▶ test data set and work sheet available
- ▶ detailed analysis of GPG
- ▶ outcome report (pdf) with broad explanations
- ▶ outcome reports based on test data, online available

exceltool:

- ▶ downloadable from website
- ▶ step-by-step instruction manual
- ▶ test data set and work sheet available
- ▶ two regression models (basic and advanced)
- ▶ results presented on excel-sheets

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concluding remarks

- ▶ Logib-D is supposed to be a highly adequate software to analyze the GPG in companies
- ▶ Logib-D reveals the impact of some of the most relevant factors on the GPG and, therefore, makes it for HR managers much easier to identify starting points for developing measures to reduce potentially existing pay differences in their companies
- ▶ By disseminating Logib-D, it may offer a perspective to establish gender pay equality on firm-level as a (key) success factor in HR management in the long-run

Thank you very much!

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