

**GTG Meeting:**

**Women's Economic Empowerment  
Group**

*Geneva, 10-12 May, 2023*

# **Measuring the Gender Pay Gap: Methodology and Key Findings in Brief**

## **Armenia**



**Lusine Kalantaryan**

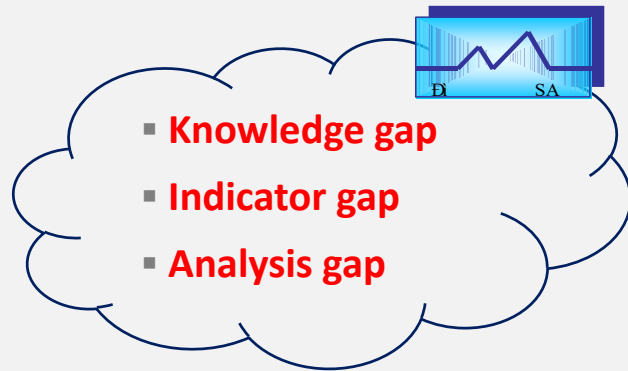
Head of Labour Statistics Division

Gender Statistics Focal Point



ArmStat

# Co-operation



2019



AUSTRIAN  
DEVELOPMENT  
COOPERATION



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

UN  
WOMEN  
United Nations Entity for Gender Equality  
and the Empowerment of Women

Armenia



- ▶ **Technical assistance in measurement and analyzing the Adjusted GPG** based on the **Labour Force Survey 2018** microdata.
- ▶ **3-day training:** Introduction of international practice on GPG, Adjusted GPG; STATA statistical analysis software; replication of the adjusted GPG
- ▶ **The report “Analysis of the Gender Pay Gap and Gender Inequality in the Labor Markets of Armenia”.**

# What is a Gender Pay Gap (GPG)

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- ▶ The **gender pay gap**, abbreviated as **GPG**, refers to the difference in average wages between men and women **for equal work**.

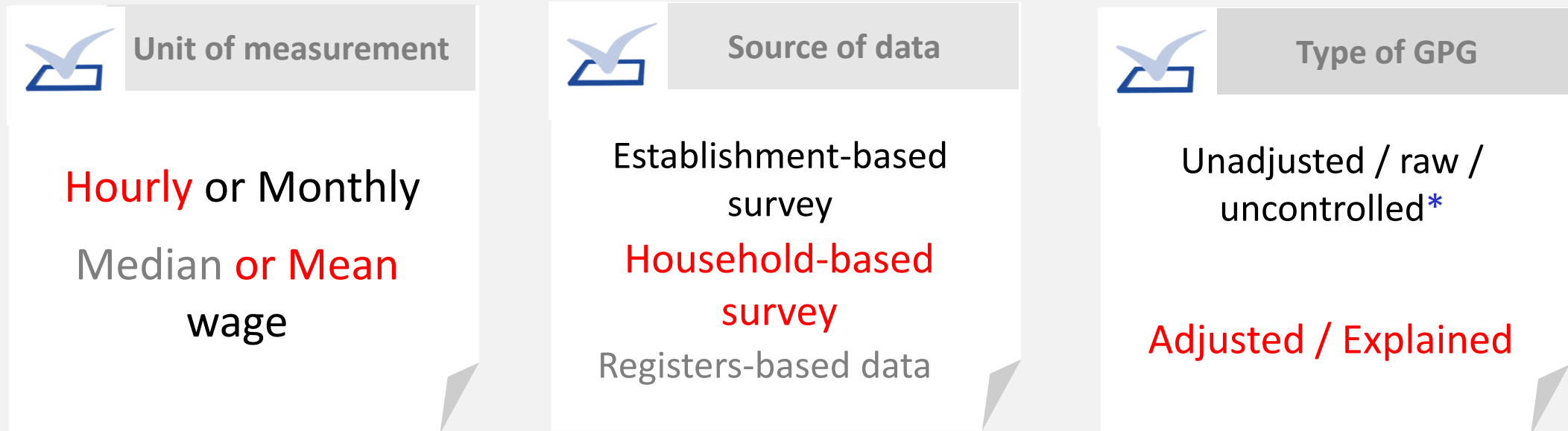


**EQUAL PAY FOR EQUAL WORK!**

# Measurement of GPG

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- The size of GPG depends on **WAYS** and **METHODS** of measurement

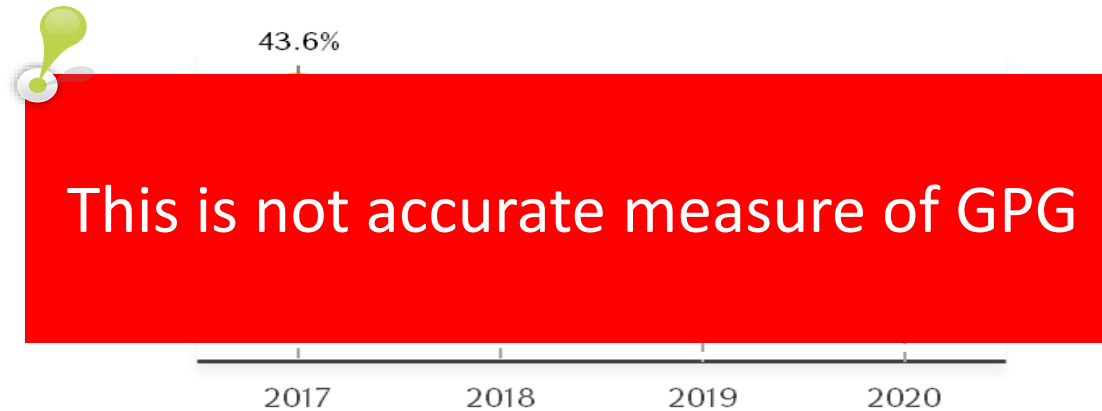


\* The simple differences between average men's and women's wages, not accounting for their different endowments.

# Measurement of Gender Pay Gap

## ARMSTAT's practice

### Monthly Mean (Unadjusted) GPG



[https://armstat.am/file/article/gender\\_2021.pdf](https://armstat.am/file/article/gender_2021.pdf)



An average employee **WOMEN** may not be identical  
to an average employee **MEN**  
by level of education, work experience, etc.!

# When We Measure a **Monthly** GPG

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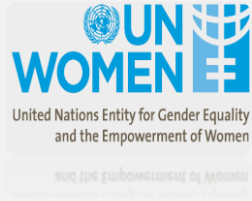


We compare the **APPLE** with the **ORANGE**



2019

# Measurement of GPG



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Unit of measurement

Hourly Mean GPG



Source of data

Household-based survey



Type of GPG

Adjusted / Explained  
GPG

Methodology behind:  
ILO, Eurostat

# Key findings



*Data for the future. Data are a key resource not just for decision-making now but for future modelling and problem solving...*



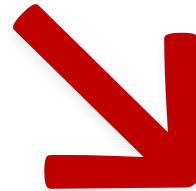
# Transition from the Monthly to the Hourly GPG

How much less do women earn than men?

Unadjusted **Monthly** GPG

**-40 %**

Where negative, males are exhibiting higher wages than females.



**-23.1%**

Unadjusted **Hourly** GPG

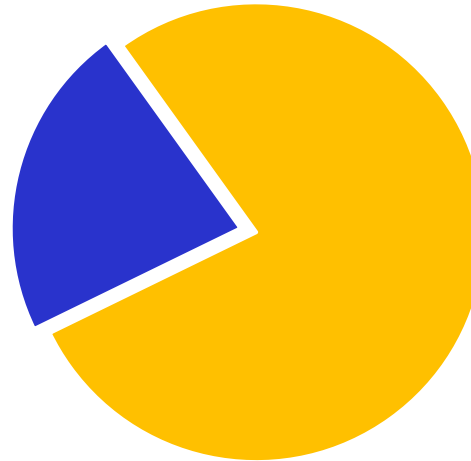
2018

# Weaknesses of Monthly GPG: Characteristics

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## Part-time employees\*

22%  
Male



78%  
Female

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**Few Men employees  
work part-time**

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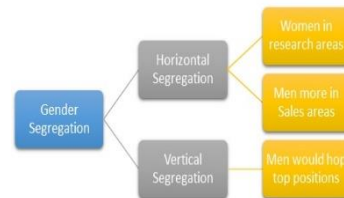
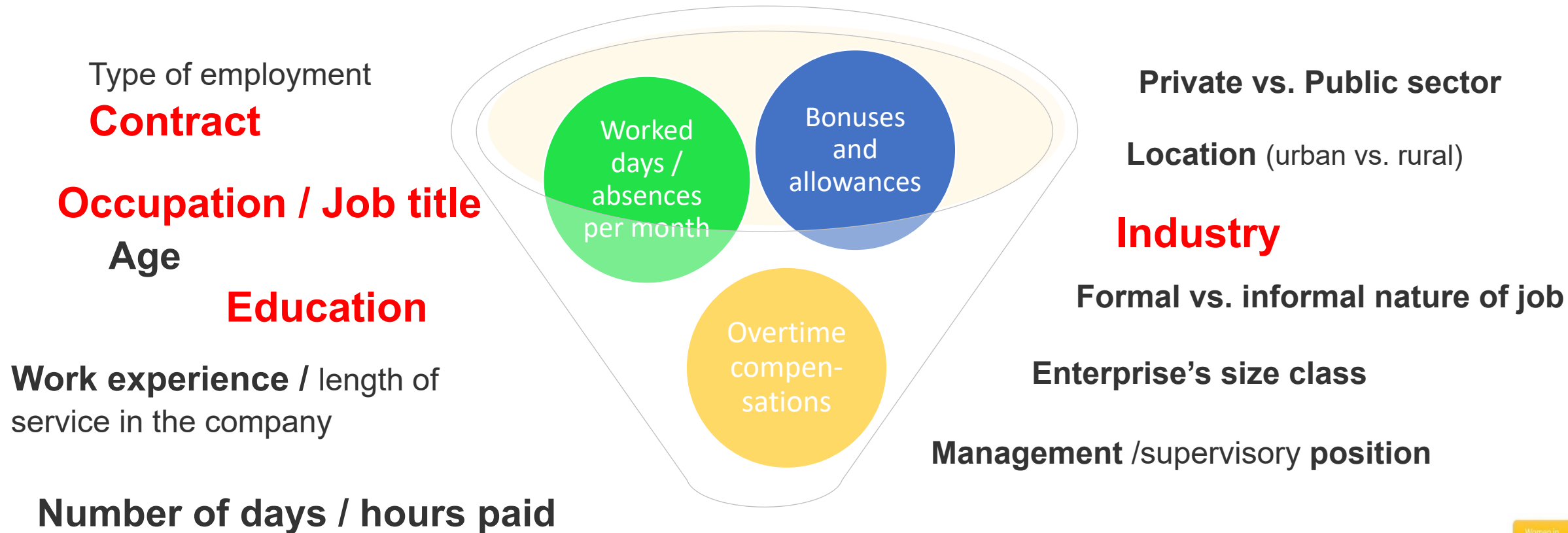
**8 in 10 part-time  
workers are Women**

Source: LFS 2018

\* Those who usually work < 35 hours per week.

# Weaknesses of Monthly GPG: Personal & labour market characteristics

## Composition Factors impact on Monthly Earnings



# Do not rely too much on Monthly GPG

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**So,**

**many factors can explain the wage differentials.**

**Personal and labour-market characteristics of**

**Women could be different than Men.**

# When We Measure an **Hourly Adjusted** GPG

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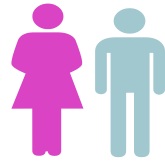
We compare the **APPLE** with the **APPLE**



# Average Hours Spent per Week, 2018

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## Employment (income generated)



## Unpaid housework



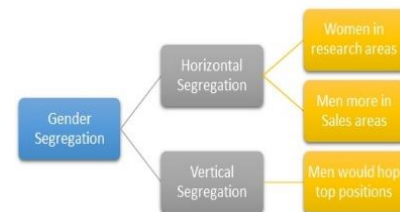
▼ Women spend more time than men  
**UNPAID WORK at home**  
reducing their labour force participation  
and making them vulnerable to low income, even if they pursuing  
higher education in greater numbers.

# Conclusion

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**Women work fewer hours than men,**  
**and such differences are spread among**  
**ages, occupation and economic statuses.**



# Transition from Unadjusted to the Adjusted Hourly GPG

How much less do women earn than men?

**Unadjusted** Hourly GPG

**-23.1%**

**Adjusted** Hourly GPG

**-28.4%**



**Working women have better labour-market characteristics than men**

2018

*The calculations were made using data from the Labour Force Survey*



# Gender Pay Gap, 2018

Adjusted for personal and labour-market characteristics



Gender (Female =1)

<b>Unadjusted GPG</b>	<b>- 23.1%</b>
<b>Adjusted GPG</b>	<b>- 28.4%</b>
Personal characteristics only (age, education)	- 27.7%
Industry (Sector) only	- 24.6%
Industry + Personal characteristics	26.7%
Occupation only	30.6%

**10%**



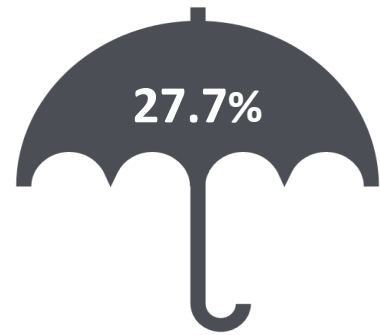
**Could not be explained!**

Source: LFS 2018

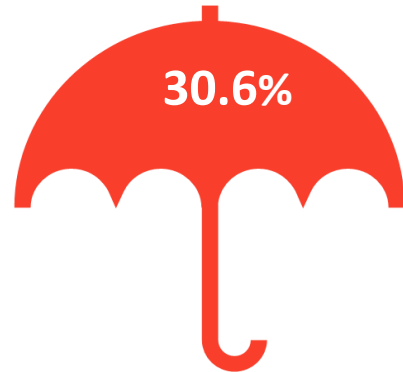
Where negative, males are exhibiting higher wages than females.

# Gender Pay Gap, 2018

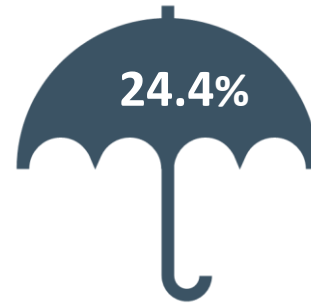
Adjusted for personal and labour-market characteristics



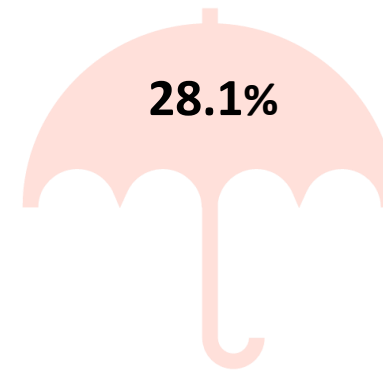
Personal  
(age, education)



Occupation



Industry



Contract

10%



Could not be  
explained!



The GPG is a result of many factors, such as an occupational segregation, bias against working mothers etc. Consequently, different groups of women **experience very different gaps**.

# Gender Pay Gap, 2018

## Unadjusted (raw) vs. Adjusted

	Raw GPG	Adjusted
<i>by Education</i>		
Vocational	-51.1%	-16.3%
Upper secondary	-30.2%	-15.3%
<i>by Industry</i>		
Agriculture	-23.1%	-14.9%
Construction	-22.1%	-4.2%
<i>by Occupation</i>		
Managers	-24.1%	53.9%
Professionals	-28.0%	50.6%
Clerical support workers	-28.3%	19.6%

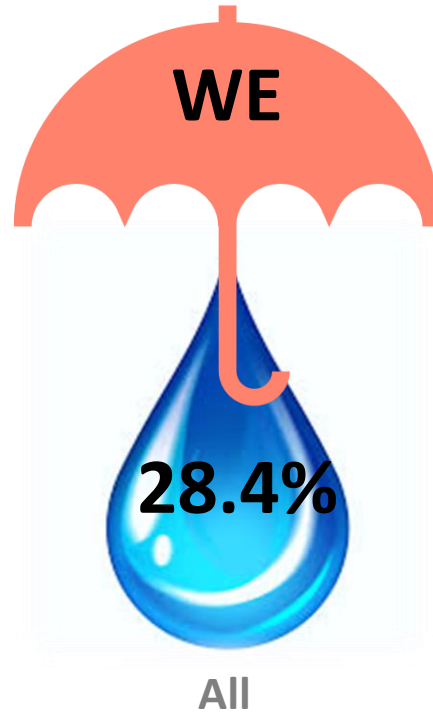
Be careful when using data

EXAMPLES

Source: LFS 2018

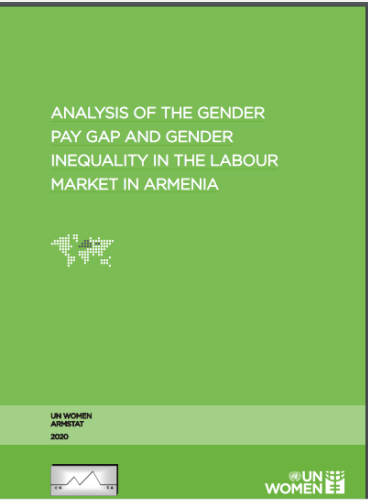
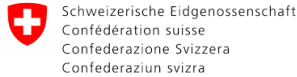


Because of the **Gender Pay Gap**  
WOMEN has less money for the "rainy days" **today and tomorrow**

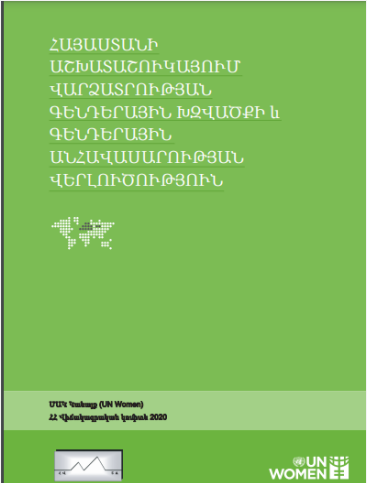
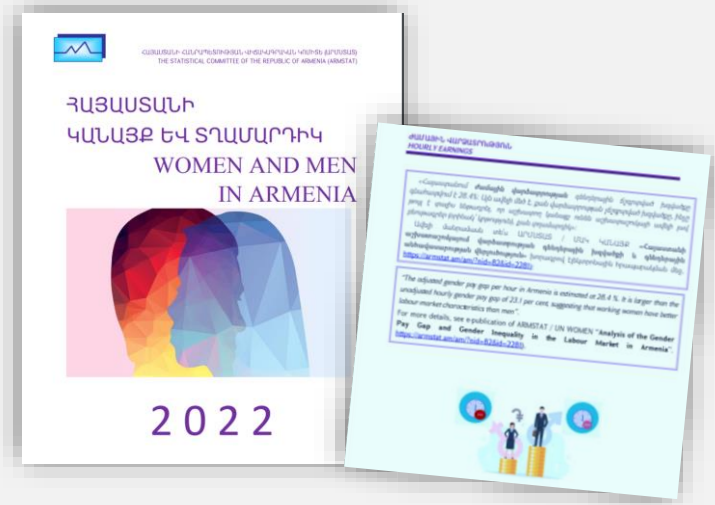




# GPG Armenia - 2018

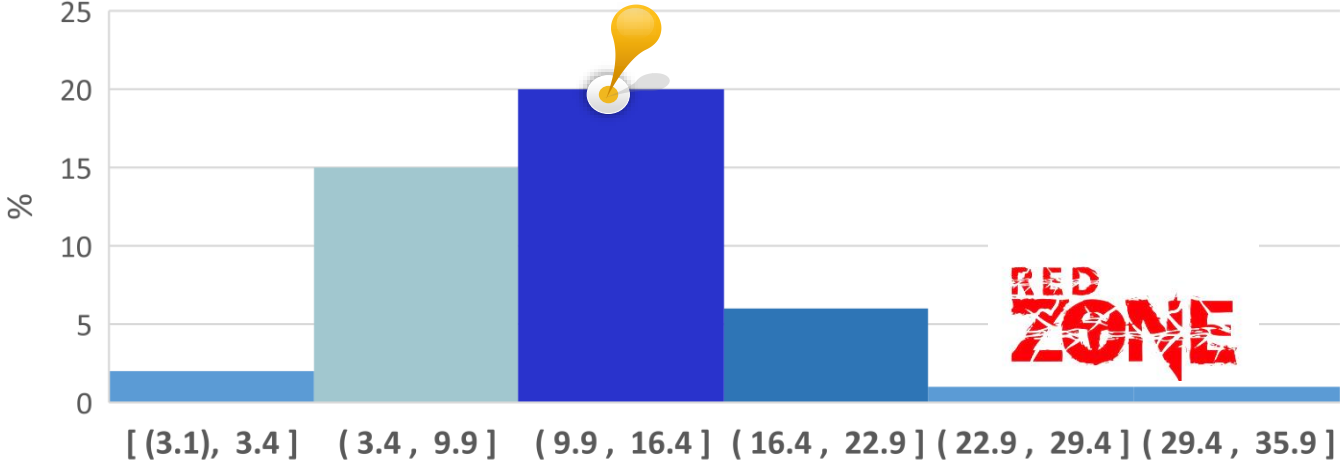


<https://www.armstat.am/en/?nid=82&id=2281>



# Globally, how deep is the gap?

## Gender Pay Gap in OECD countries, 2018

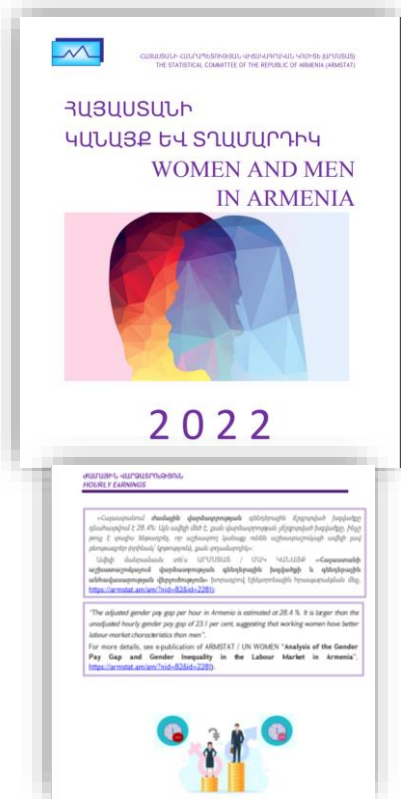


Source: OECD data

The highest GPG in the OECD countries was recorded in **Korea (34.1%)** and the lowest - in **Bulgaria (1.3 %)**.

Among OECD countries Luxembourg is the only country where Men earn less than Women (-3.1%).

# Data dissemination



## Open-source database

Statistical Committee of the Republic of Armenia

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Labour Force Survey anonymised micro data database and questionnaire (by household's members)

- 2021 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire \(PDF\)](#)
- 2020 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire \(PDF\)](#)
- 2019 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire \(PDF\)](#)
- 2018 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire \(PDF\)](#)
- 2017 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire \(PDF\)](#) [Instructions \(PDF\)](#)
- 2016 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire \(PDF\)](#) [Instructions \(PDF\)](#)
- 2015 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire N1 \(PDF\)](#) [questionnaire N2 \(PDF\)](#) [Instructions \(PDF\)](#)
- 2014 [database \(SPSS\)](#) [database \(excel\)](#) [questionnaire N1 \(PDF\)](#) [questionnaire N2 \(PDF\)](#)

The World Bank Microdata Library

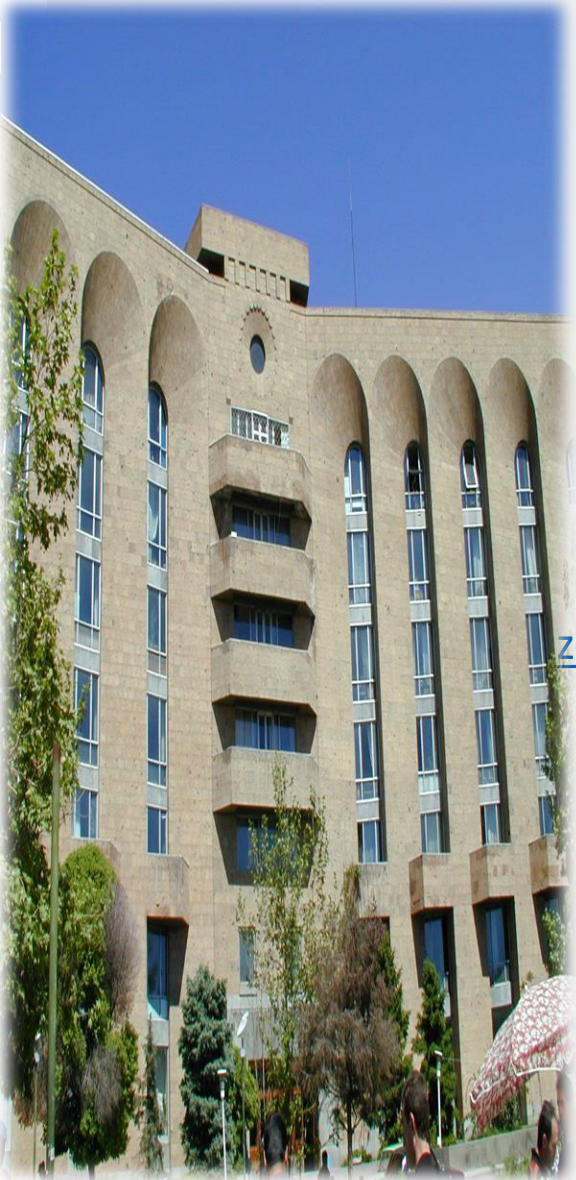
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<http://www.armstat.am/en/>

Don't miss the opportunity to visit the ArmStat webpage <http://www.armstat.am/en>, [https://armstat.am/file/article/gender\\_2022\\_n.pdf](https://armstat.am/file/article/gender_2022_n.pdf), gain valuable knowledge on socio-economic and gender profile of Armenia, as well.



Thank you for your attention!

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[zoom.us/rec/share/YLdPh6glkDzESyVK\\_5PdLXFhFQLjNTNleiJQH4KYmulT6eLyUIFb2BxF8qfA846e.bKR\\_7n9pawCc6AJj?startTime=1567834966000](https://zoom.us/rec/share/YLdPh6glkDzESyVK_5PdLXFhFQLjNTNleiJQH4KYmulT6eLyUIFb2BxF8qfA846e.bKR_7n9pawCc6AJj?startTime=1567834966000)

Q/A



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