



# *Impact of Overworking*

Presented by Caroline Kuo

27 November, 2024



*Are you also a member of the overworked club?*



slido

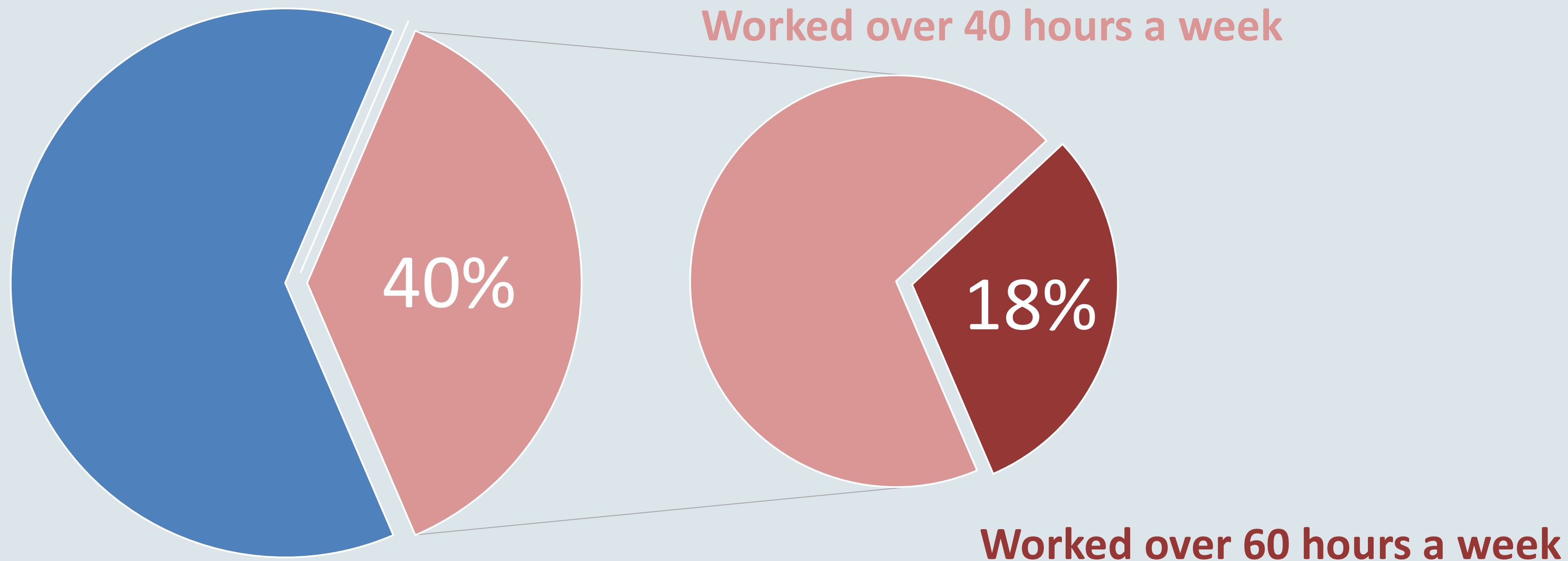
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**How many hours did you work last week?**

ⓘ Start presenting to display the poll results on this slide.

# *Weekly Working Hours*



# *Reasearch Question*



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Does excessive working hours have a detrimental impact on society, and are there solutions for employers?

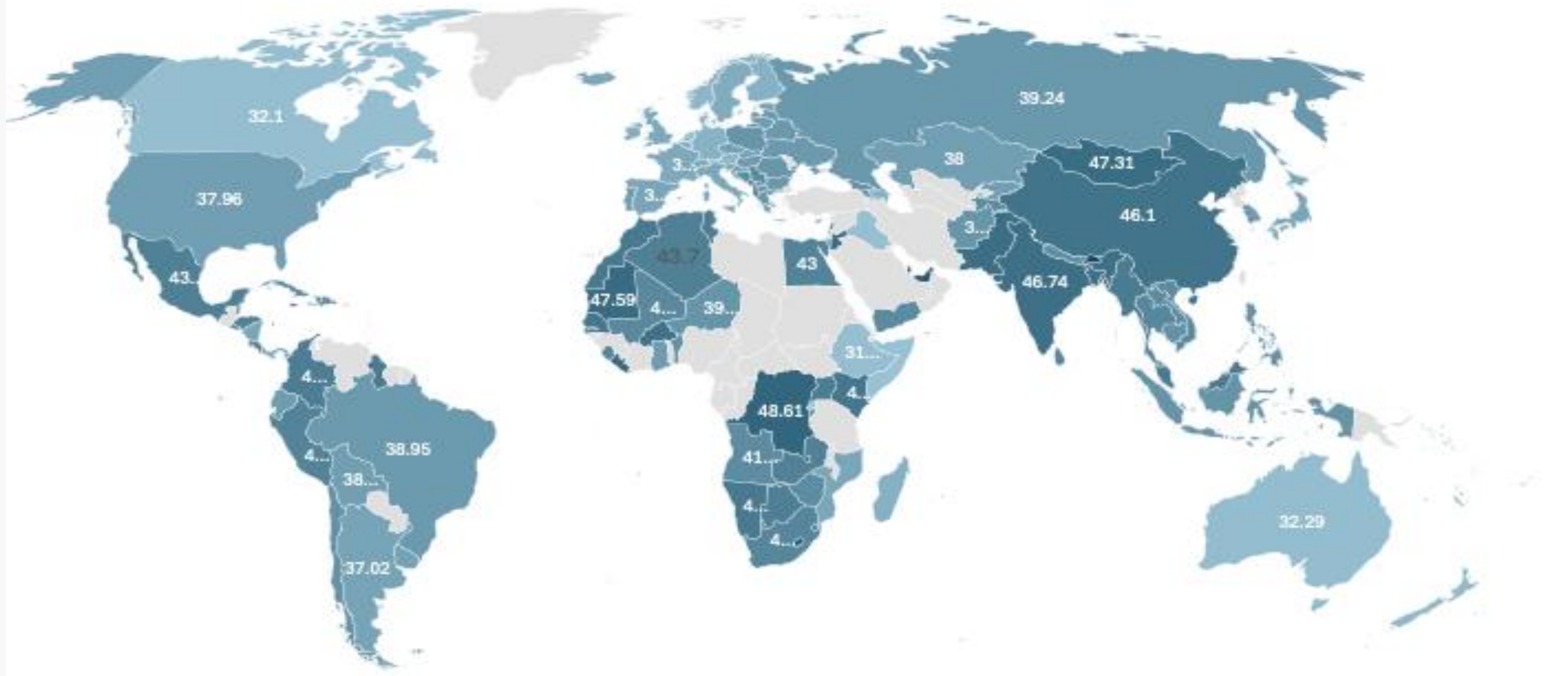
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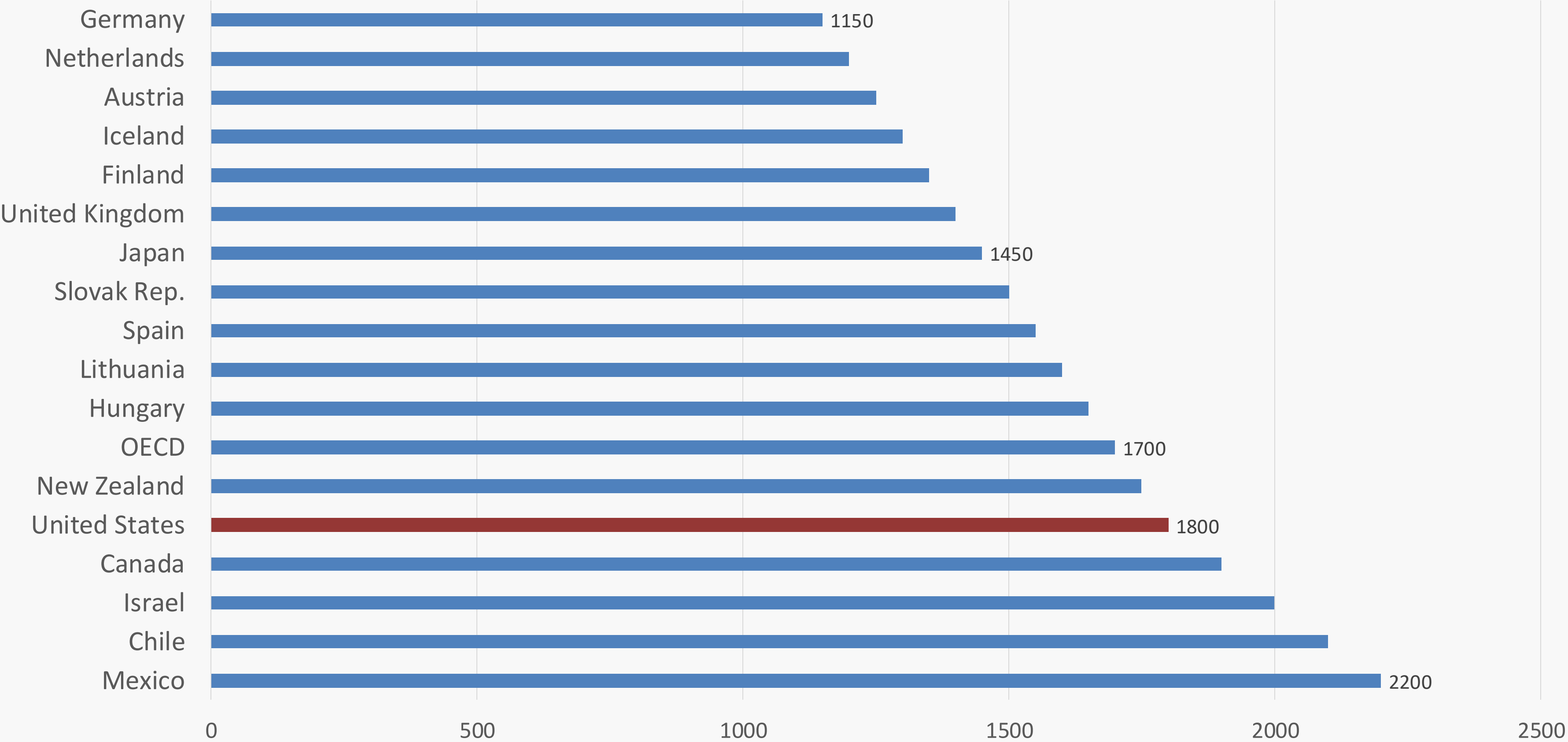
# Average Weekly Working Hours Worldwide (2023)

Source: ILO



# Annual hours worked per worker by countries (2023)

Source: OECD data



# What does overwork bring?



## Increased risk of health issues:

- People who work long hours (more than 55 hours per week) have a 33% higher risk of stroke.

## Burnout:

- According to a study in 2020, out of 2,474 nurses, 12.3% reported high levels of burnout symptoms during the early stages of their careers.

## Lower productivity:

- A research has shown that one in ten employees worked an extra day of unpaid overtime every week in 2021.



# *How common is burnout?*

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7 out of 10  
people have had contact with burnout



5 out of 10  
people feel stressed  
and have experienced burnout

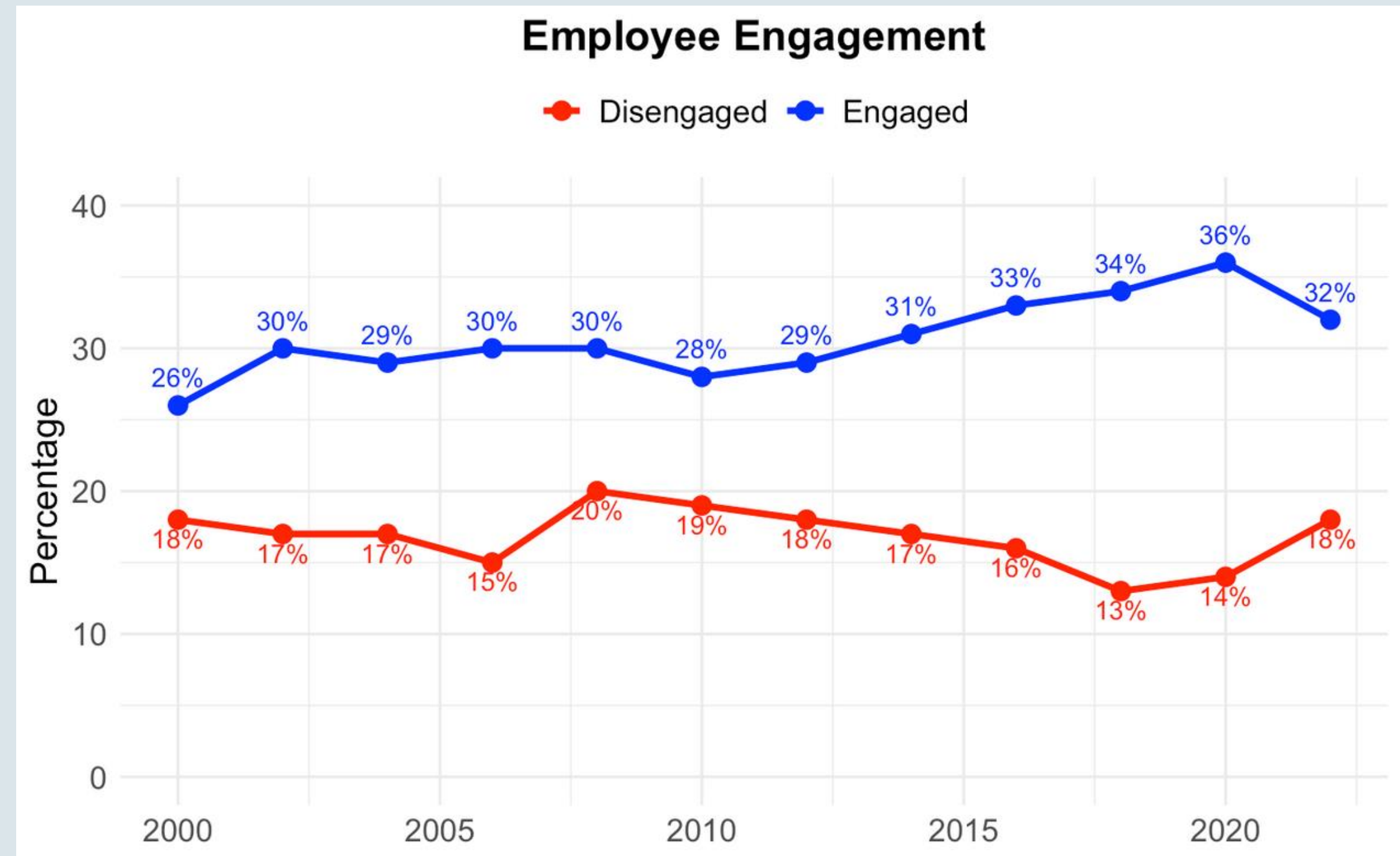


8 out of 10  
people take burnout seriously

# Burnout

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an increased number of actively disengaged employees (from 13% to 18%) could mean quiet quitting is on the rise.



# What does overwork bring?



## Increased risk of health issues:

- People who work long hours (more than 55 hours per week) have a 33% higher risk of stroke.

## Burnout:

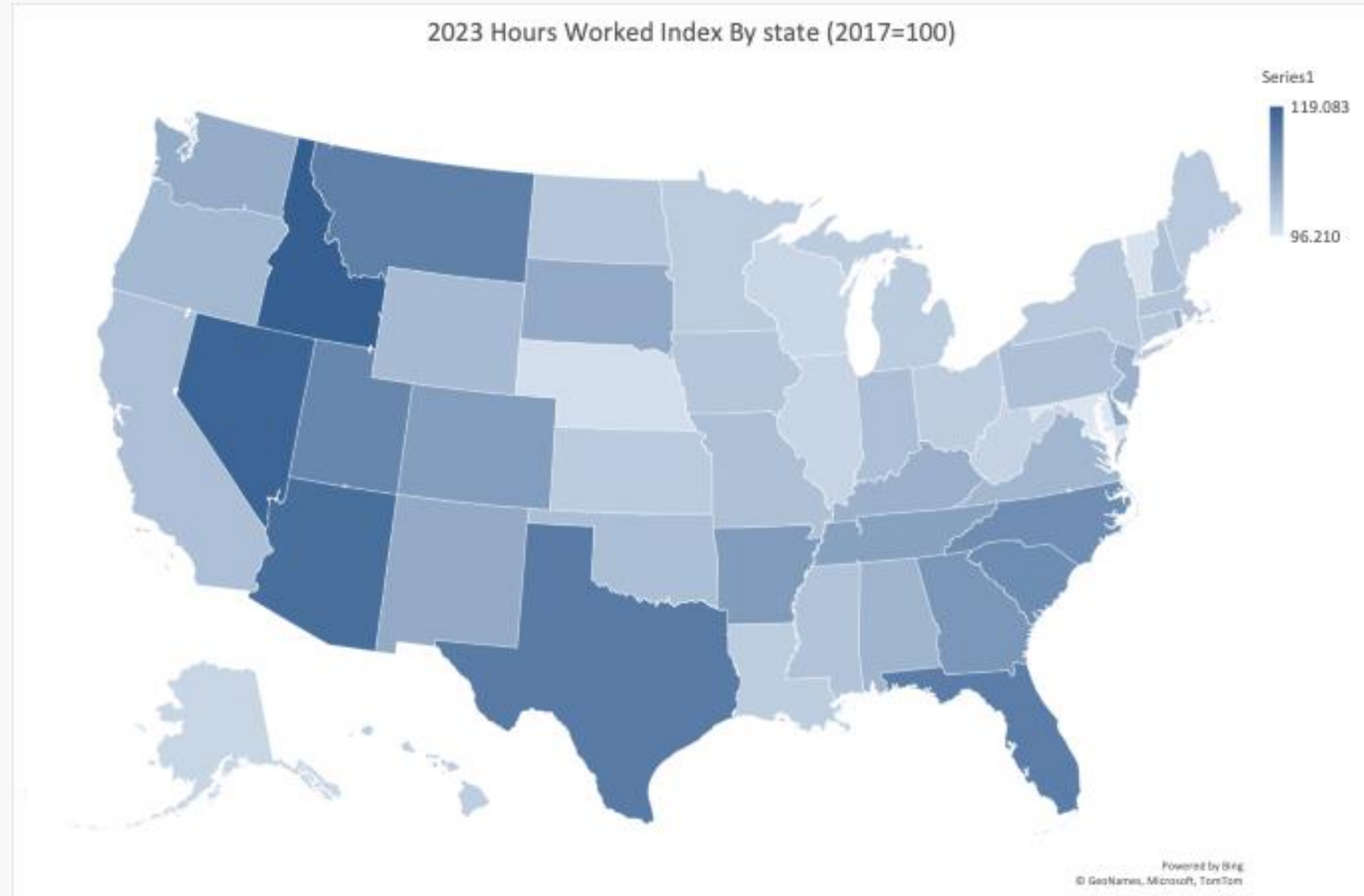
- According to a study in 2020, out of 2,474 nurses, 12.3% reported high levels of burnout symptoms during the early stages of their careers.

## Lower productivity:

- A research has shown that one in ten employees worked an extra day of unpaid overtime every week in 2021.

# *Labor Productivity vs. Working Hours*

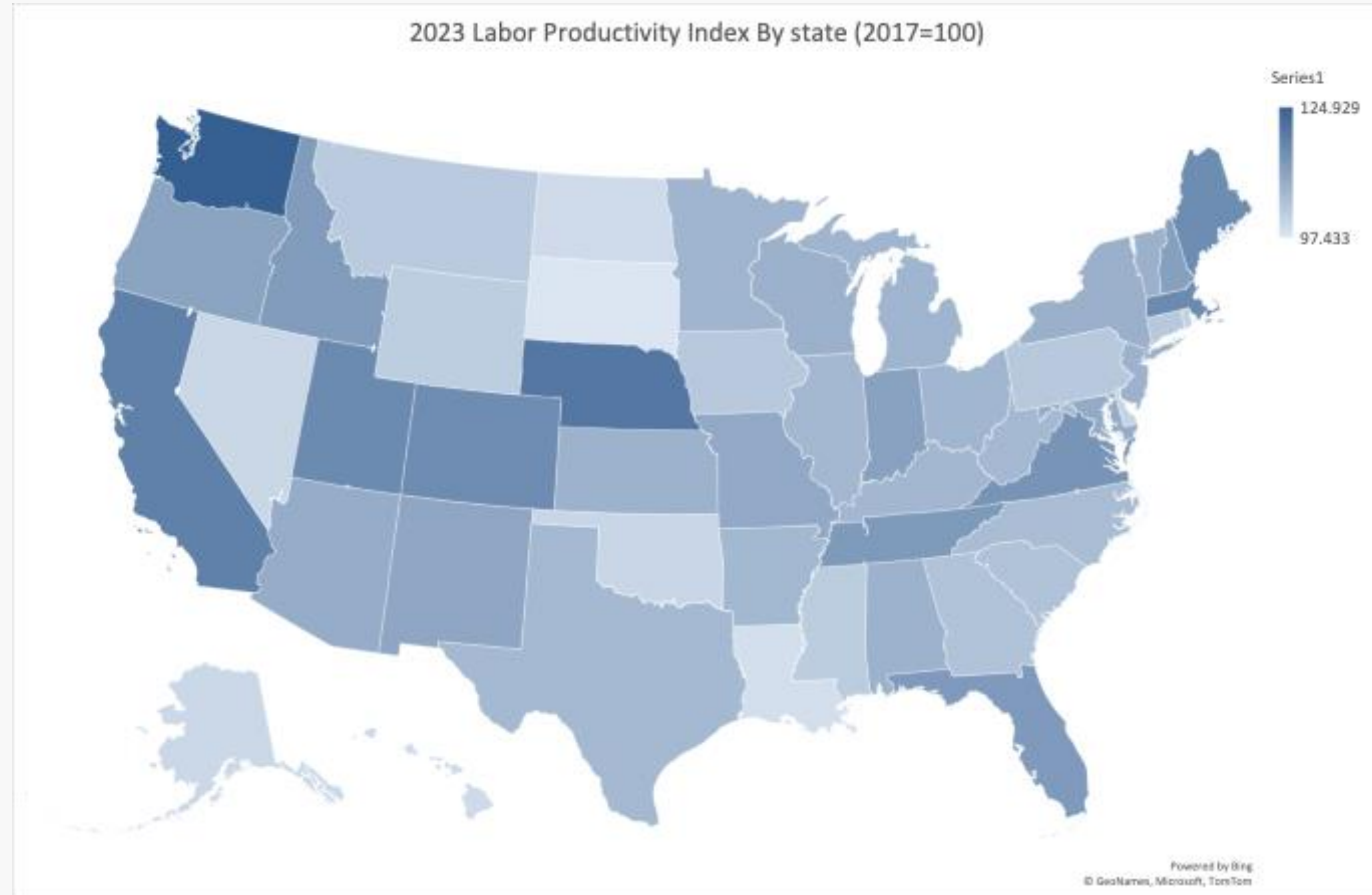
Source: BLS





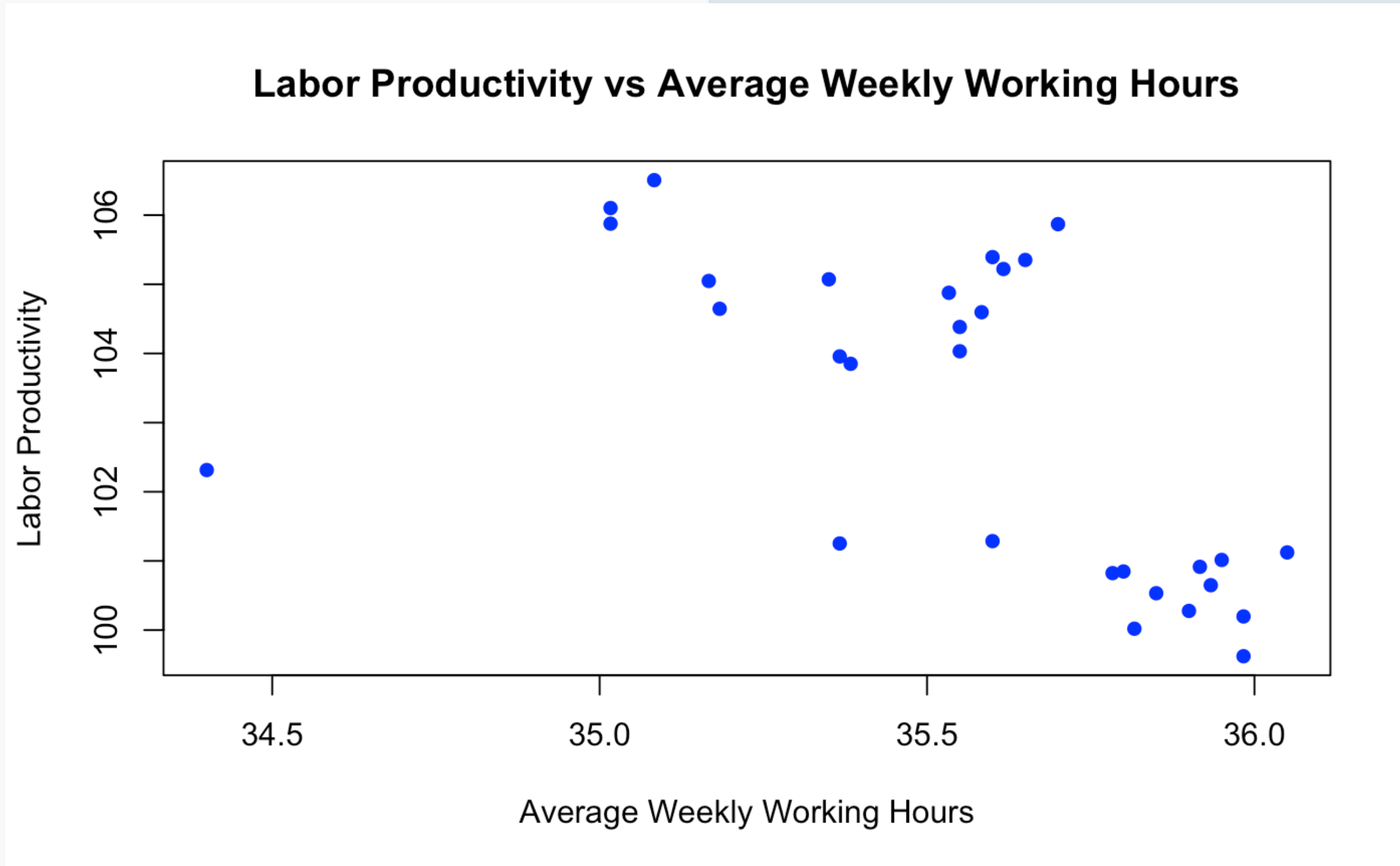
# *Labor Productivity vs. Working Hours*

Source: BLS



# *Lower productivity*

Source: BLS



# *Regression\_Variables*



**Dependent Variable:**  
Labor productivity (LP)

## **Independent Variables:**

Average Weekly Working Hours (WH)

Hourly Compensation (HC)

Output per Worker (output)

Unit Labor Costs (LC)

Value-Added Output (outputVA)



# Regression Model

$$\text{Labor Productivity} = \beta_0 + \beta_1(\text{Average Weekly Working Hours}) + \beta_2(\text{Hourly Compensation}) + \beta_3(\text{Output per Worker}) + \beta_4(\text{Unit Labor Costs}) + \beta_5(\text{Value-Added Output}) + \epsilon$$

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )	
(Intercept)	103.33742	2.70325	38.227	< 2e-16	***
WH	-2.13690	0.15538	-13.752	7.08e-13	***
HC	0.59564	0.10599	5.620	8.74e-06	***
output	0.74340	0.04543	16.362	1.61e-14	***
LC	-0.25233	0.04113	-6.135	2.45e-06	***
ouputVA	0.00371	0.00280	1.325	0.198	

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1



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# *Regression Model*

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## **Average Weekly Working Hours (WH)**

negative estimated coefficient:  
higher average weekly working  
hours, lower labor productivity.



## **Labor Cost (LC)**

negative estimated coefficient:  
higher labor cost, lower labor  
productivity.

# *Solutions*

## Increasing Overtime Pay

- Protecting Employee Health
- Promoting Efficiency
- Boosting Morale

- Increased Business Costs
- Impact on Labor market

## Encouraging Automation

- Improving Efficiency
- Reducing Overtime Demand
- Enhancing Product Quality

- High Initial Investment
- Changing Skill Requirements

# *Potential Challenges*



## **Regression model**

relatively high R squared  
insufficient data

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## **Impact on Labor-Intensive Industries**

especially for some countries' labor  
cost is relatively low,

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# *Conclusion*



**"Empower the Workforce, Evolve the Workplace"**





*Thank you*

