



# Preliminary analysis of employment impact of the recent minimum wage hike

**German Advisory Group Ukraine**  
in cooperation with



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# Structure

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Contacts

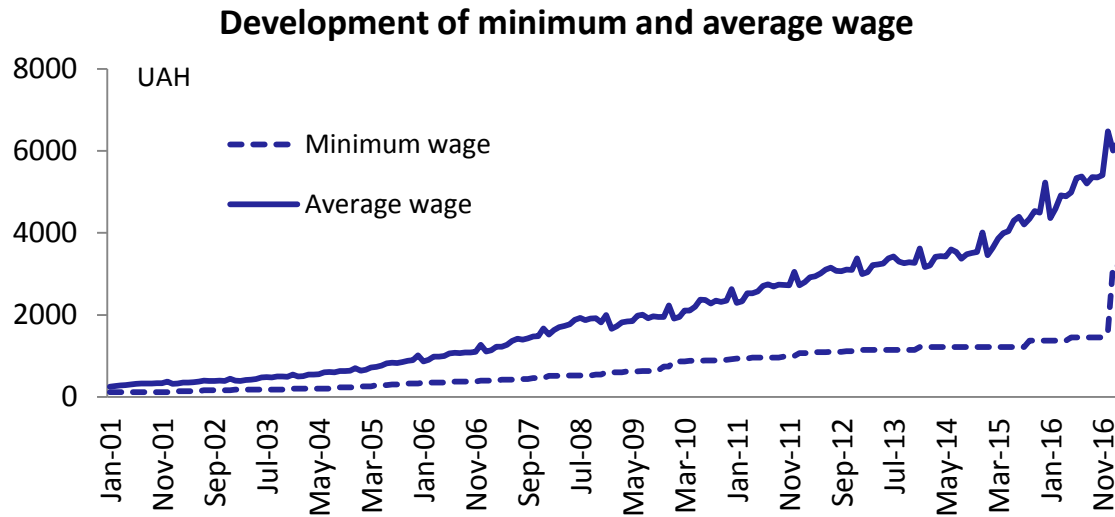
# 1. Background

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- In October 2016, Gov't of Ukraine decided to hike up official minimum wage from then 1.450 UAH/month to 3.200 UAH/month as of 01.01.2017
  - Originally, the 2017 budget draft from September 2016 foresaw a level of 1.600 UAH as of 01.01.2017, unchanged from the Dec 2016 level
  - Intention: Protection of vulnerable workers and reduction of informal economy
- This, rather unexpected, hike was not discussed before and created uncertainties regarding i.a. output, employment and inflation
  - Further implications relate i.a. to fiscal sustainability and the size of the informal economy
- This policy note provides an overview of recent wage developments and a preliminary assessment of the impact on employment

## 2. Minimum wage dynamics

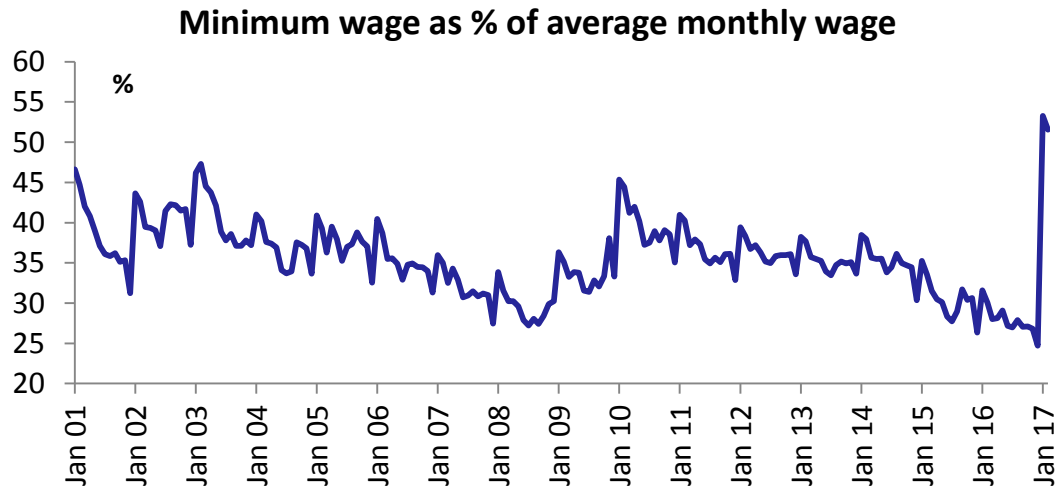
- Until recently, only gradual increases in minimum wage; the recent doubling stands clearly out
- This may have been main driver of recent hike in nominal average monthly wages, which currently (Feb 2017) run at 35.4% yoy (versus 23.8% yoy in Dec 2016)



Source: Law on the Minimum Wage, State Statistical Service of Ukraine

## 2. Minimum wage dynamics

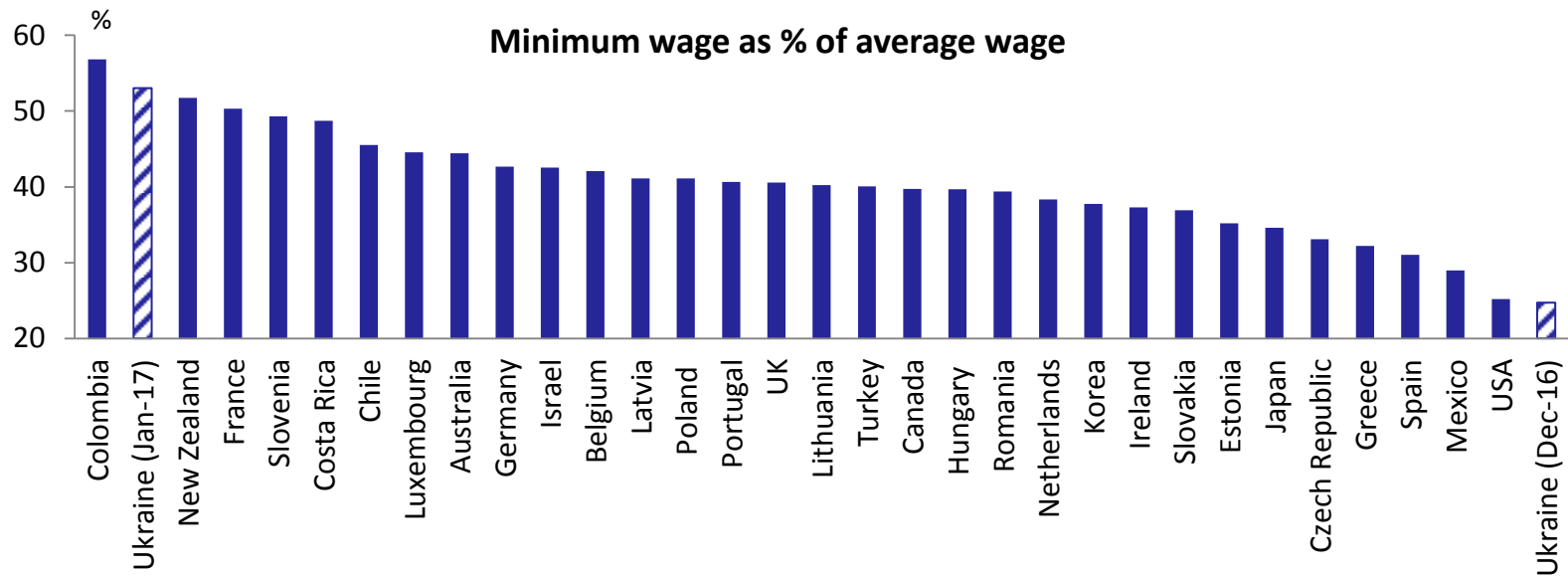
- Ratio between minimum and average wage tended to decline from 47% (2001) to 25% (2016), only interrupted during financial crisis of 2008/09
- However, hike in minimum wage brought that ratio to 53% in January 2017, higher than at any time since 2001



Source: State Statistical Service of Ukraine

# International experience (OECD)

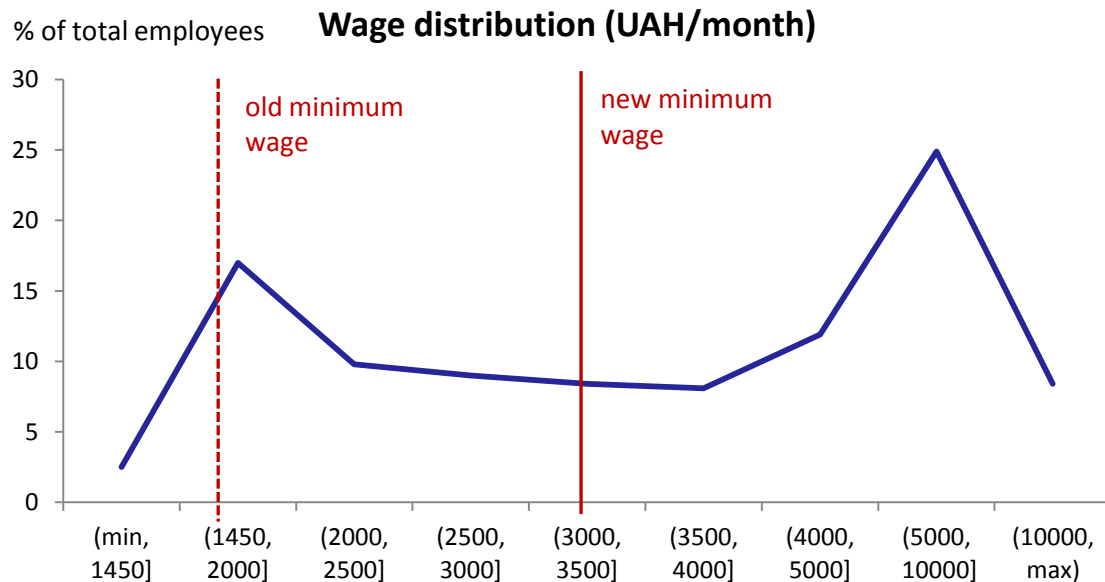
- After the hike, Ukraine's ratio of minimum to average (mean) wage jumped from 25% (Dec 2016) to 53% (Jan 2017), turning it from the lowest to one of the highest levels in international comparison (Sample: OECD)



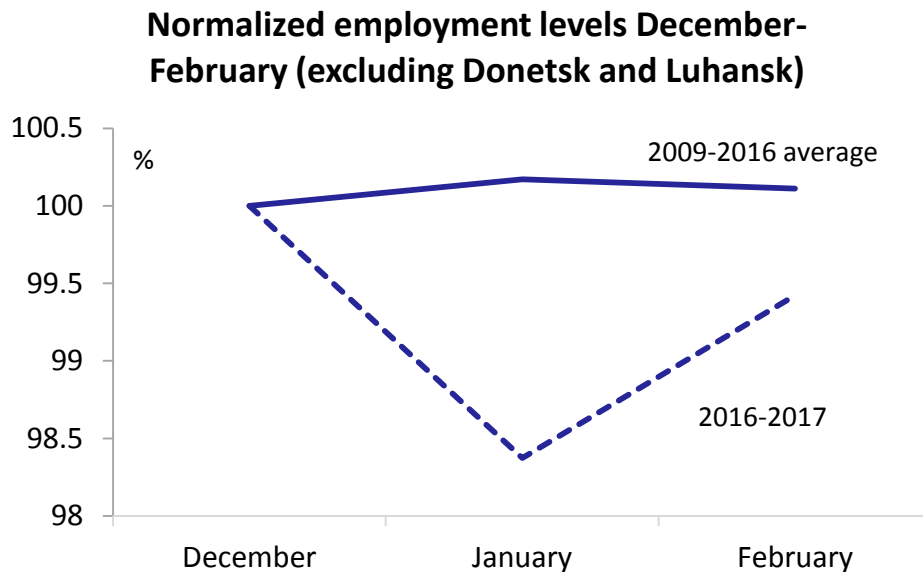
Source: OECD and State Statistical Service of Ukraine ; Note: Latest available data: 2015 for all OECD countries; Dec 16 / Jan 2017

# Wage distribution

- Looking at recent wage distribution data of firms (Sep 2016), we detect a bimodal wage curve
  - Data for December 2016 are available, but distorted due to end-of-year bonus payments etc.
- In Sep 2016, 41.7% of all firm employees (excluding microenterprises as well as employees of individual entrepreneurs) received a wage below or equal to the new minimum wage



### 3. Employment effects



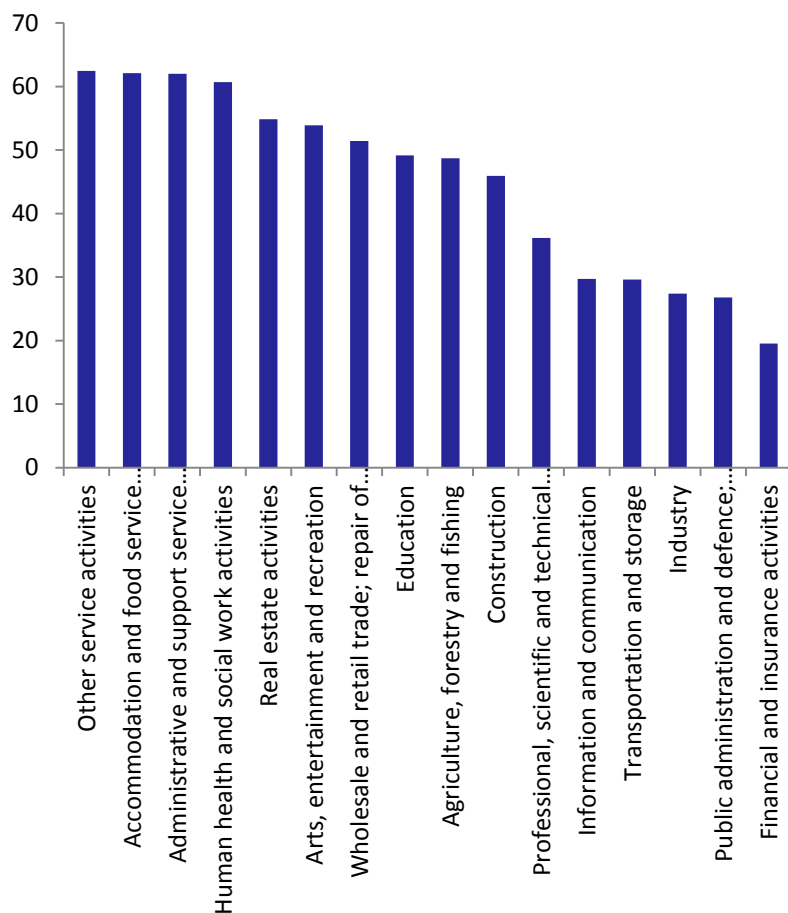
Source: State Statistical Service of Ukraine

- Employment dropped in January 2017 (m-o-m) by 1.6% compared to long-term average of almost no change, if we exclude Donetsk and Luhansk regions
  - Including both regions, the drop was 1.4%
- However, in February this drop was almost entirely reversed
- If the minimum wage hike is the reason for the January drop, sectors and regions with the highest share of potential minimum wage workers would be the most affected!



# Employment effects: Sectoral distribution

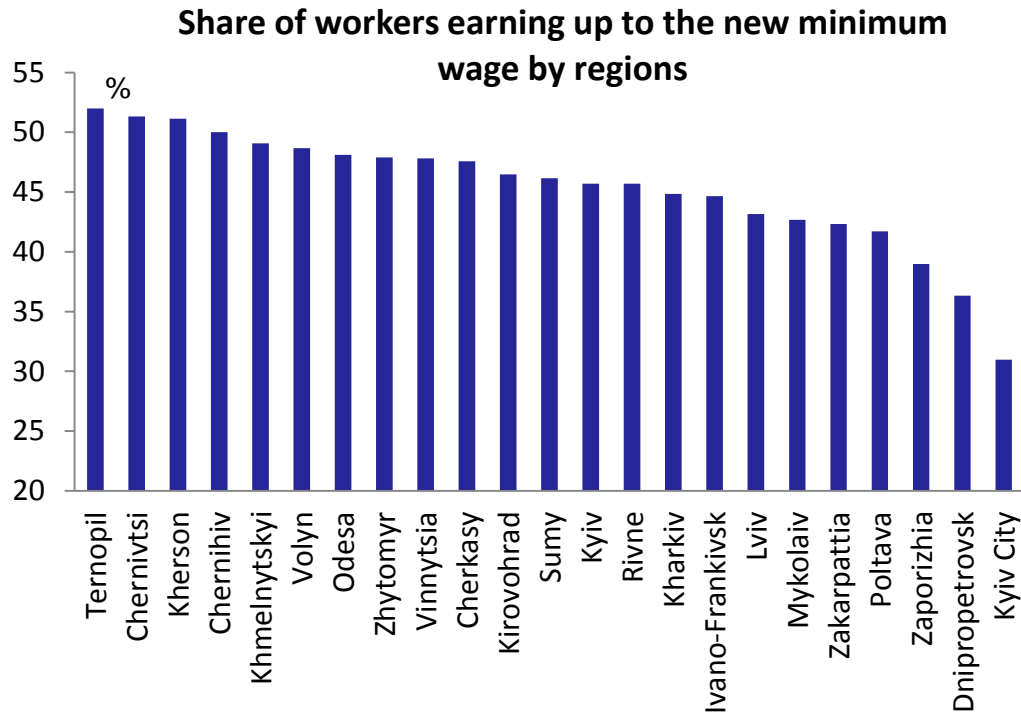
Share of workers earning up to the new minimum wage by sectors



- In certain sectors, the share of potential receivers of new minimum wage is significantly above national average (41.7% in Sep 2016)
- TOP-5 sectors are:
  - Other service activities
  - Accommodation and food service activities
  - Administrative and support service activities
  - Human health and social work activities
  - Real estate activities
- Sectoral employment impact of minimum wage hike?

Source: State Statistical Service of Ukraine; data excluding AR Crimea and Sevastopol, limited data on Luhansk and Donetsk

# Employment effects: Regional distribution

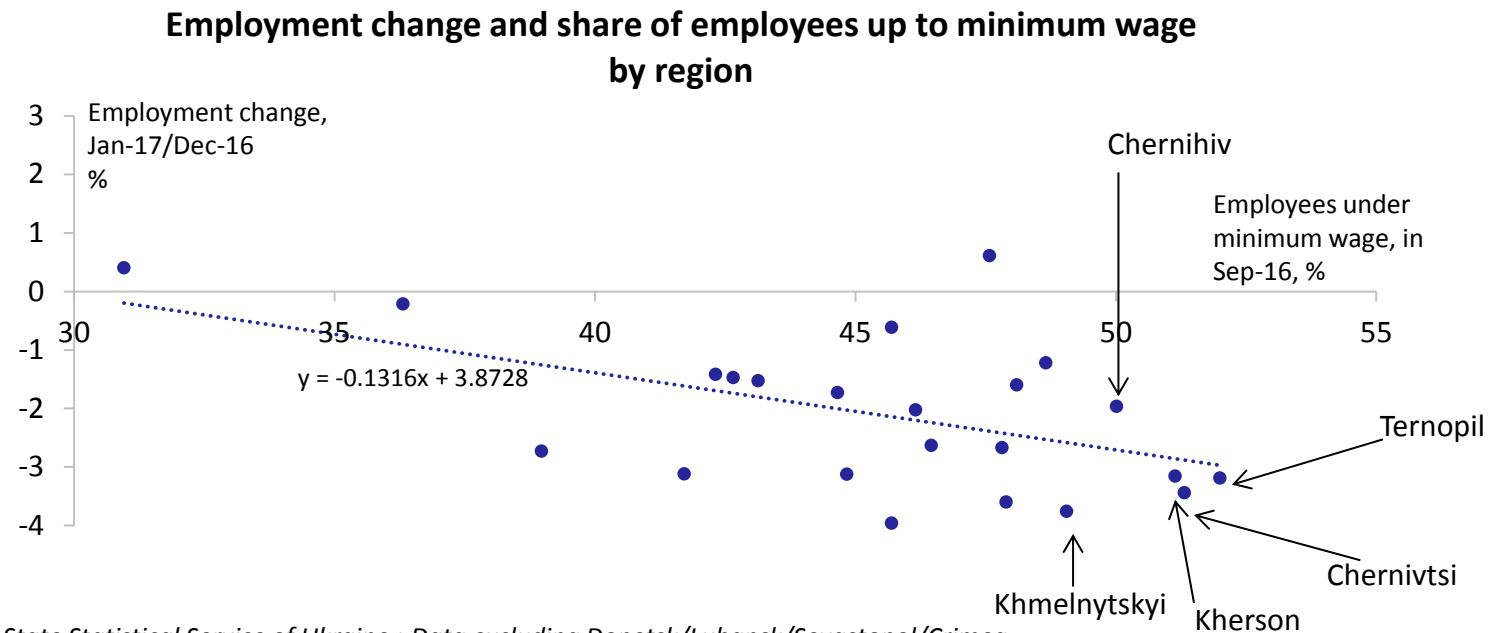


Source: State Statistical Service of Ukraine ; data excluding AR Crimea and Sevastopol, limited data on Luhansk and Donetsk

- In certain regions, the share of potential minimum wage receivers is significantly above the national average (41.7% in Sep 2016)
- TOP-5 regions are:
  - Ternopil
  - Chernivtsi
  - Kherson
  - Chernihiv
  - Khmelnytskyi
- Regional employment impact of minimum wage hike?

# Employment effects: Regional variation

- Employment data for Jan 2017, first assessment of effect of minimum wage hike by region:



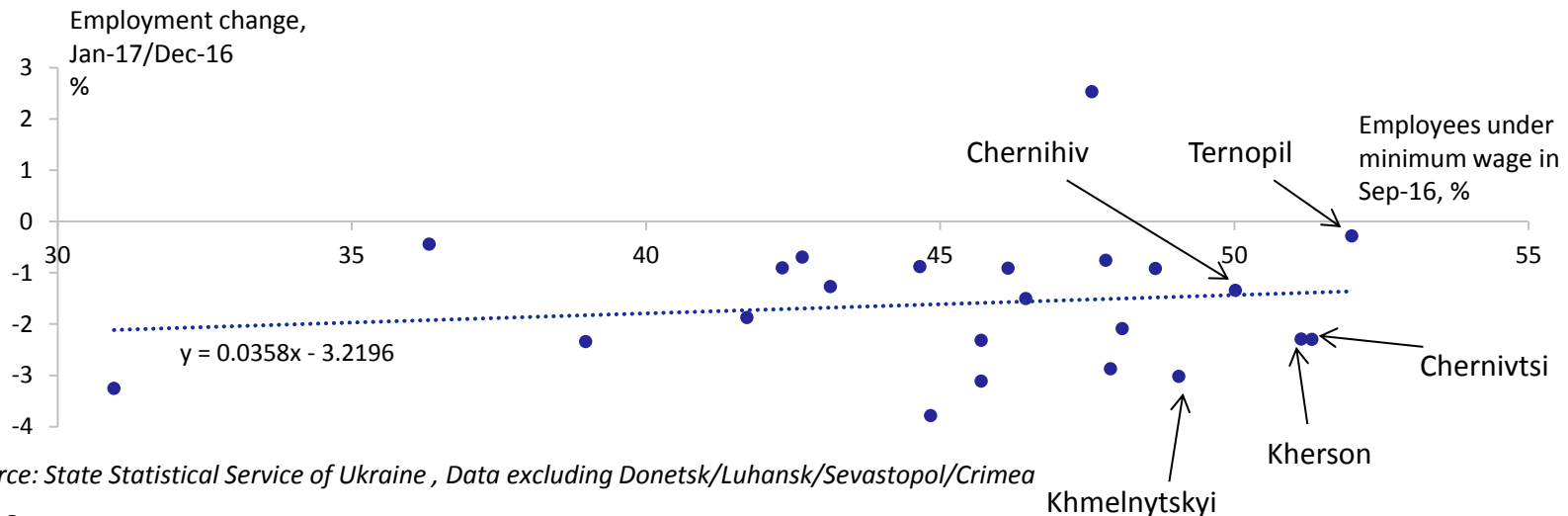
Source: State Statistical Service of Ukraine ; Data excluding Donetsk/Luhansk/Sevastopol/Crimea

- Assessment:
  - Significant drop in employment in Jan 2017
  - Increasing for regions with higher share of employees working at minimum wage

# Employment effects: Regional variation

- However, correcting for long-term trend (2009-2016 avg) changes this finding!

Employment change and share of employees up to minimum wage by region (corrected for long-term trend)



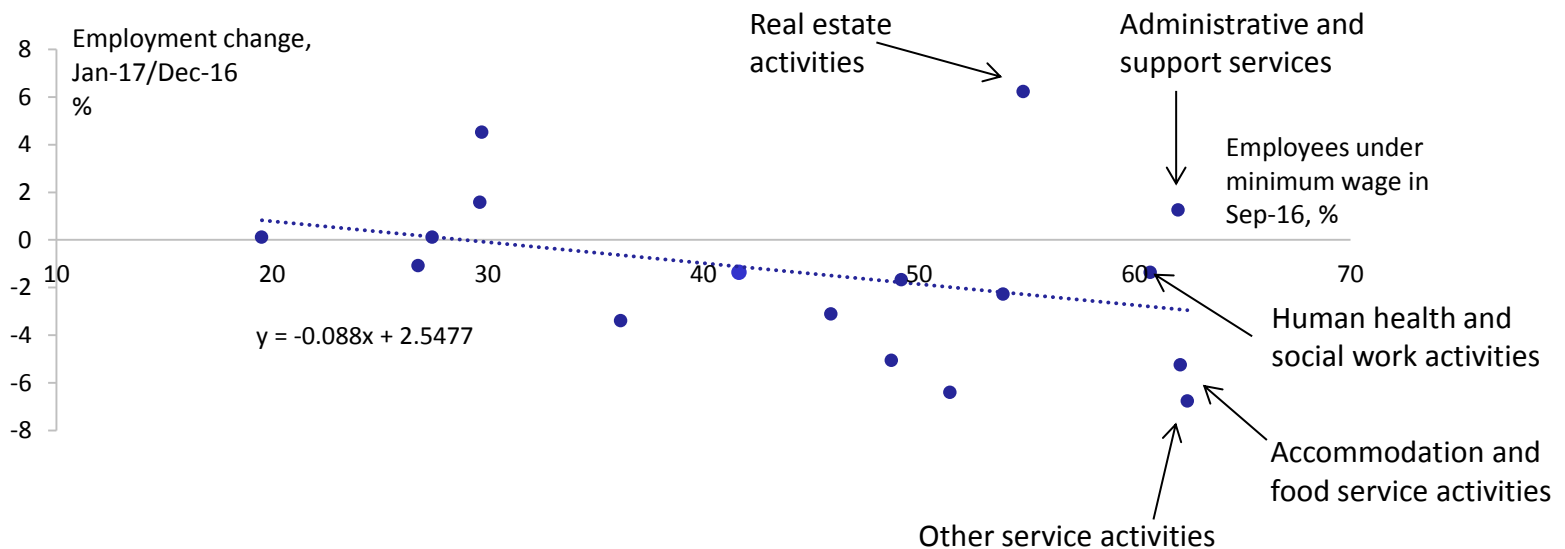
Source: State Statistical Service of Ukraine, Data excluding Donetsk/Luhansk/Sevastopol/Crimea

- **Assessment:**
  - Employment drop not more severe for regions with higher share of employees under minimum wage

# Employment effect: Sectoral variation

- Job losses and prevalence of minimum wage by sector:

Employment change and share of employees up to minimum wage by sector



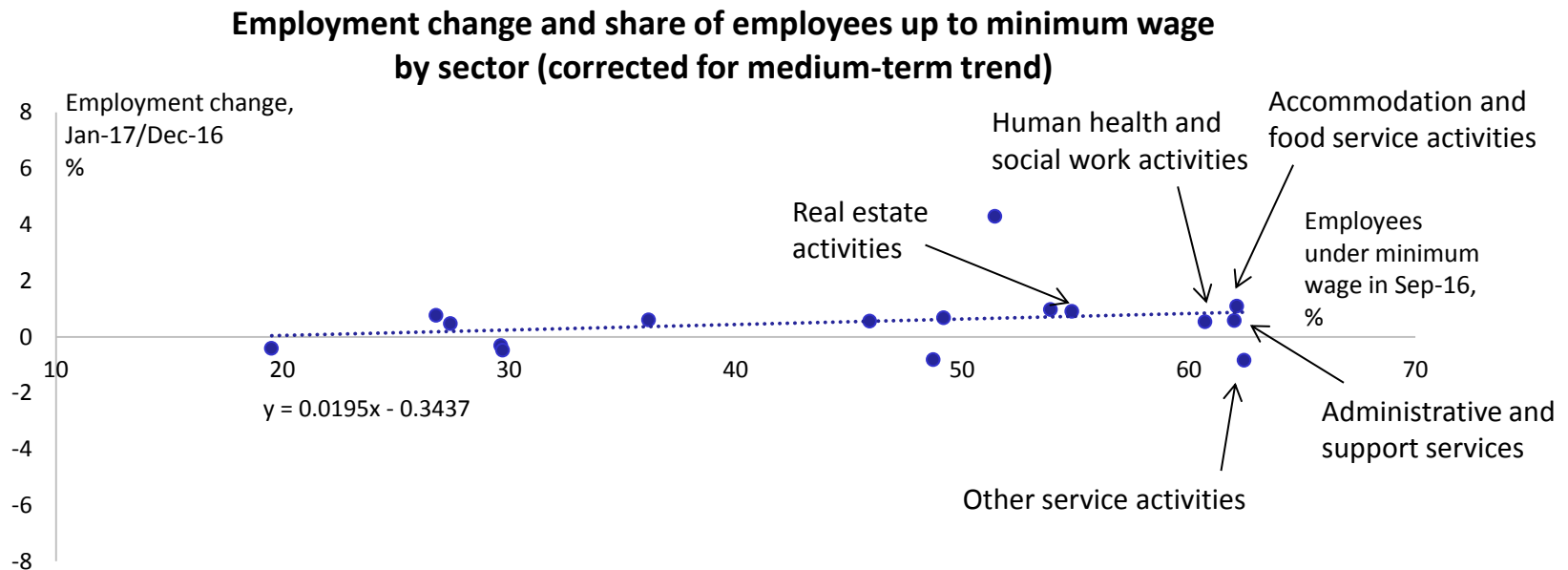
Source: State Statistical Service of Ukraine

- Assessment:

- Employment drop somewhat higher for sectors with higher share of employees under minimum wage

# Employment effect: Sectoral variation

- The picture changes when deviation from medium-term trend (2014-16 avg) is subtracted:



Source: State Statistical Service of Ukraine

Note: Due to a break in sectoral statistics in 2013, the medium-term trend is used instead of a long-term trend

- **Assessment:**
  - Employment performance in sectors is not dependent on share of employees under minimum wage!

# Employment effect

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## Conclusions:

1. We find no variation among regions and sectors after correction for long-run trend changes of employment between Dec 2016 and Jan 2017
2. No evidence that the minimum wage hike caused the atypical January drop in employment (based on this data)

## 4. Data limitations

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### 1. Wage data do not cover whole economy

- Wage data only for companies with at least 10 employees
- No micro enterprises (less than 10 employees), no employees of individual entrepreneurs – both categories employed 2015 together almost 3 m people
- Employment impact of minimum wage probably very strong in those categories

### 2. Informal economy

- Significant informal economy (35% of official GDP according to latest estimations by MinEcon)
  - Informal employment more wide-spread among lower-skilled people, which are more likely to earn lower wages



## 4. Data limitations

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- Surveys suggest that 8% of employees receive their total salary unofficially, and a further 26% partly “in an envelope” (Nov 2016 survey by the Ukrainian Institute for the Future)
- Against this development, employment impact difficult to assess
  - Formal employment moves into the shadow in response to wage hike?
  - Formal employment stays constant and re-declaration of previously paid salary “in the envelope” into official salary in response to wage hike?

## 5. Summary and policy conclusions

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- Sudden minimum wage hike created significant uncertainties; such a decision should be well prepared, analysed and implemented, ideally in a gradual and rule-based fashion
  - The magnitude of the “shock” stands out in international comparison
- Analysis of employment data from early 2017 suggest a short-lived negative employment effect after minimum wage hike
  - However, we could not detect a causal relationship
  - Longer time series needed to investigate possible impact further
- The employment patterns in the state sector – where a significant number of minimum wage earners are employed – might be also a reason for the observed lack of causation
  - For political reasons, staff layoffs might be (currently) avoided at the expense of a more equal distribution of wages

## 5. Summary and policy conclusions

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- Data limitations regarding wage data and unknown behaviour of informal economy further limits robustness of our results
  - High-frequency data for micro enterprises and employees of private entrepreneurs are of particular interest here
  - Behaviour of part-time jobs should be also analysed
- General remarks:
  - Law enforcement likely the most effective means to curb informality
  - Minimum wage better determined by independent commission



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