Covid and the labor market:
A literature review on the effects of public intervention

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The effects of NPI (non pharmaceutical intervention)

The rationale for public intervention:

- The *laissez-faire* is inefficient.
- Physical contacts entail up to 3 types of externalities:
    1. Contamination externality (negative)
    2. Hospital congestion externalities (negative)
    3. Herd immunity externality (positive)
- Social cost roughly estimated to be 3 times as large as the private cost (risk of individual exposure) (Bethune & Korinek, 2020)
- However, the magnitude of the externality evolves with the reproduction rate.

Disentangling the effects of NPI from those of the pandemic

- The economic cost is intuitively attributed to the lockdown.

- The counterfactual: the economic impact of the pandemic without NPI
  1. Impact on the labor force: **more sick absences**
  2. **Spontaneous social distancing** (but lower than the social optimum!):
     - Evidence from big data shows that higher local contamination rates induced lower mobility before or in the absence of coercive measures (Farboodi et al., 2020; Maloney & Taskin, 2020)
     - Brzezinski et al. (2020) estimate that stay at home orders increase the number of people staying at home by about 8pp.

=> **reduction in consumption and labor supply**

Disentangling the effects of NPI from those of the pandemic

Drawing lessons from **historical data**

- Correia et al. (2020): « Pandemics Depress the Economy, Public Health Interventions Do Not : Evidence from the 1918 Flu »
  - Exploiting the heterogeneity in the timing and strictness of NPI across US cities
  - Faster and stronger intervention leads to stronger economic recovery
- In the absence of NPI, deeper recession in Italy (1918) where the epidemic has been more severe (Carillo & Jappelli, 2020).

Disentangling the effects of NPI from those of the pandemic

Reconstructing the counterfactual by using **mixed models** (epidemiological – economic), while allowing for **behavioral responses**
(Bethune & Korinek, 2020; Kaplan et al., 2020)

1. Spontaneous physical distancing of the susceptible slows the economy down.
2. The lack of prudence of the infected spreads the virus.

$\Rightarrow$ **Recession of similar extent**

The tradeoff between public health and the economy

- Does NPI have the potential to benefit both public health and the economy?
  Ex: testing/tracing

- Notion of the **pandemic possibility frontier** (Kaplan et al., 2020)

- When costs are unevenly distributed, the social cost is higher and (Glover et al., 2020) should be given a higher weight in the health/economy tradeoff

  Sources of inequalities:

  - Type of job: dependence on physical proximity vs teleworking
  - Gender
  - Generation

Isolating the impact of NPI on the labor market

Buchheim et al. (2020, Germany): **Employers' expectations** (business outlook and uncertainty)

- Mainly affected by the announcement of school closures
- To a much lesser extent by local measures and local Epidemiological data

Hassink et al. (2020, The Netherlands): **Employment and hours worked**

- Have been affected by the lockdown,
- No additional impact of epidemiological data

Kong & Prinz (2020, USA) **Unemployment** (Google search)

- Non essential businesses, bar & restaurants closures take most part of the effect. No residual effect of Stay at home orders and school closures
- Altogether 13% of the variation is captured by NPI.

=> place left to the pandemic

Focusing on the labor market: the role of job retention schemes

Reduction in labor demand

- Sudden drop in **vacancy supply** during the first wage all over the world:
  - Online job postings:
    - Australia -45% (Shen & Taska, 2020)
    - Mexico -38% (Campos-Vazquez et al., 2020)
    - Sweden -40% (Hensvik et al., 2020)
    - Austria -33% (Bamieh & Ziegler, 2020)
- Less **apprenticeship contracts** in Germany (Mühlemann et al., 2020)

The impact of the reduction in labor demand on labor market flows:

- Less hirings
- But the count of job losses depends on public intervention!

Focusing on the labor market: the role of job retention schemes

On less-regulated labor markets: job losses

USA: unemployment rate 4 -> 15% in one quarter (cannot result from the halt in hirings only)

On more-regulated labor markets: job retention schemes

Ex: short time work in Germany, Belgium…

Lower flows to **and out of** unemployment :

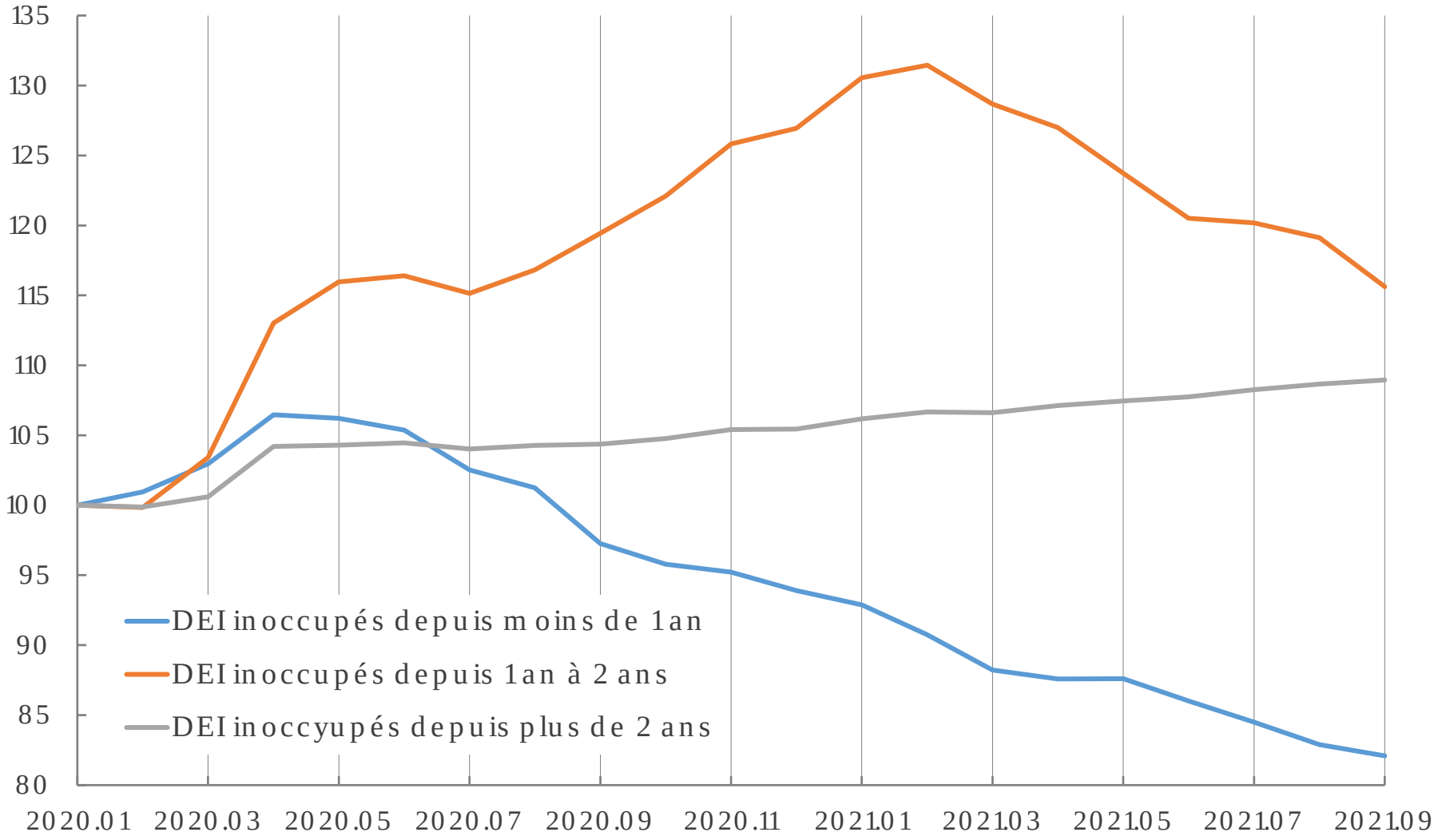
Wallonia, comparing 2020 to 2019 : hirings -11,5%; separations -2,1%

⇒ The increase in unemployment is mainly attributable to the reduction in hirings.

⇒ **Impact on unemployment composition**:

- Modest increase in short term unemployment (relatively few job losses)
- Significant increase in long term unemployment (much less job opportunities)

Impact on unemployment composition in Wallonia



LM tightness has remained high, even during the crisis

- High LM tightness in the US (Kandoussi & Langot, 2020)
- Lower filling rate of vacancies in Sweden (Hensvik et al., 2020): 30% less clics among the 60% remaining online job offers during the 1st wave.

Despite a lower labor demand, WHY?

BECAUSE there has been a decrease in labor supply as well :

1. Labor force dropouts: Constraints on the supply side
2. Workers waiting to be recalled

Labor force dropouts: Constraints on the supply side

- The count of job losses did not match the flow from employment to unemployment => **flow from employment to non-participation**
  - USA (Petrosky-Nadeau & Valletta, 2020; Béland et al., 2020; Coibion et al., 2020)
  - Australia: Guven et al. (2020)

- **Childcare:**
  - USA: Effect of school closures on female labor supply (Amuedo-Dorantes et al., 2020)
  - The Netherlands: Despite emergency childcare facilities for essential workers, reduction in hours worked among lone parents (Meekes et al., 2020)

Entry decisions of the young

- USA, **more high school graduates**: success rate 7pp higher, despite greater difficulties due to the pandemic (Ahn et al., 2020)
- Belgium: Cockx & Ghirelli (2016): Long term consequences of **entering the LM during a recession**
  - At entry:
    - For the low-skilled: higher probability of being unemployed
    - For the high-skilled: lower wage (over-qualified)
  - Long run impacts on rigid labor markets:
    - For the low-skilled: less hours worked

    minimum wage => unemployment more likely + cumulative impact
    - For the high-skilled: lower wage trajectory

    employment protection => locking effect

Workers waiting to be recalled

- USA, **lower search intensity** (Hensvik et al., 2020)

- Forsythe et al. (2020) **distinguish between available and non-available workers** (waiting to be recalled) – unclear in the absence of a retention scheme.

  From January to June 2020: 75% drop in LM tightness (raw measure), but only 50% once this dictinction is made (corrected measure)

- **Designing the appropriate policy:**
  - Which of the demand or supply constraints are the most binding?
  - Stimulating labor demand may be uneffective if contraints on the supply side (Cho & Winters, 2020; Forsythe et al., 2020)

Public intervention on the labor market

- **Short time work schemes (STW)** in Germany and Belgium
- Denmark: temporary wage subsidies (Mattana et al., 2020)

- **Ad hoc schemes in more flexible economies:**
  - UK: « Coronavirus Job Retention Scheme »
    - 80% of the wage, but full time off
    - Less effective than pre-existing schemes (Adams-Prassl et al., 2020)
  - USA: CARES ACT « Coronavirus Aid, Relief, and Economic Security »
    - Lump sum transfer to households; with « Employee Retention Credit »
    - Much less effective for retention (than STW)
    - More effective for income support (Cortes & Forsythe, 2020)

The pros and cons of short time work schemes: the PROs

- **Income support**
- Efficiency motive – **resource allocation**
  - Match specific skills are preserved
  - Search, matching and training cost are economized on in the recovery phase
  - The risk of not filling the job in contexts of labor shortages in avoided

- Evidence of **labor hoarding** in the absence of STW (Petroulakis, 2020; USA)
- STW schemes amount to subsidize labor hoarding.
- STW have a positive effect on firm employment and survival (Cahuc et al., 2018; Giupponi et al., 2018)

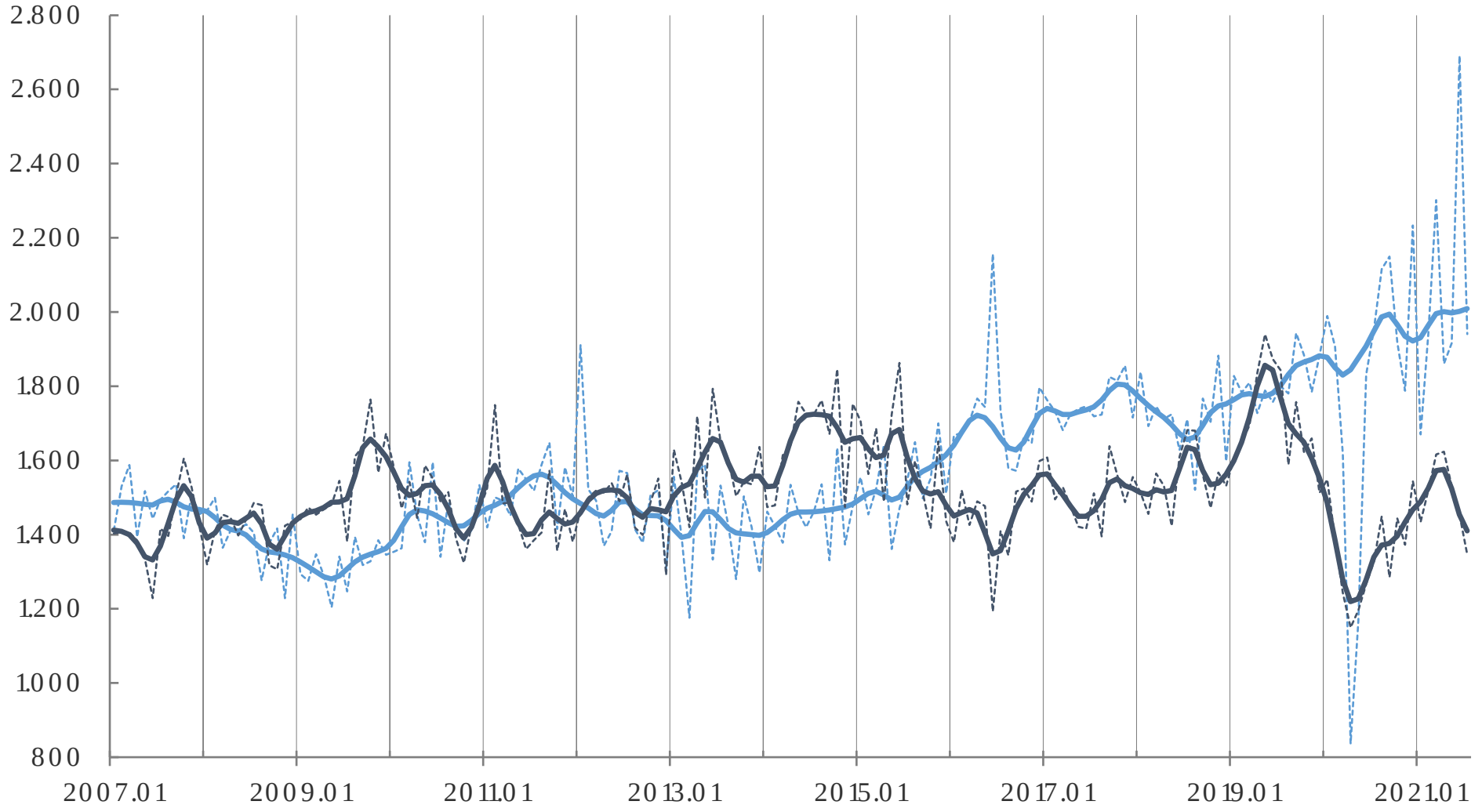
STW as an impediment to a smooth labor reallocation?

- The economy is not static, **job reallocation at any time**.
- During the crisis, **the LM has been frozen**:
  less bankruptcies, less hirings, less separations
- Creations and destructions that should have taken place have not.

- Risk of congestion on the LM during recovery (Kandoussi & Langot, 2020)
- Coexistence of labor shortages and temporarily unavailable workers

=> Importance of the timing (STW useful in the short run) – relax measures sufficiently early (?)

Creations and destructions: self-employed and firms in Wallonia



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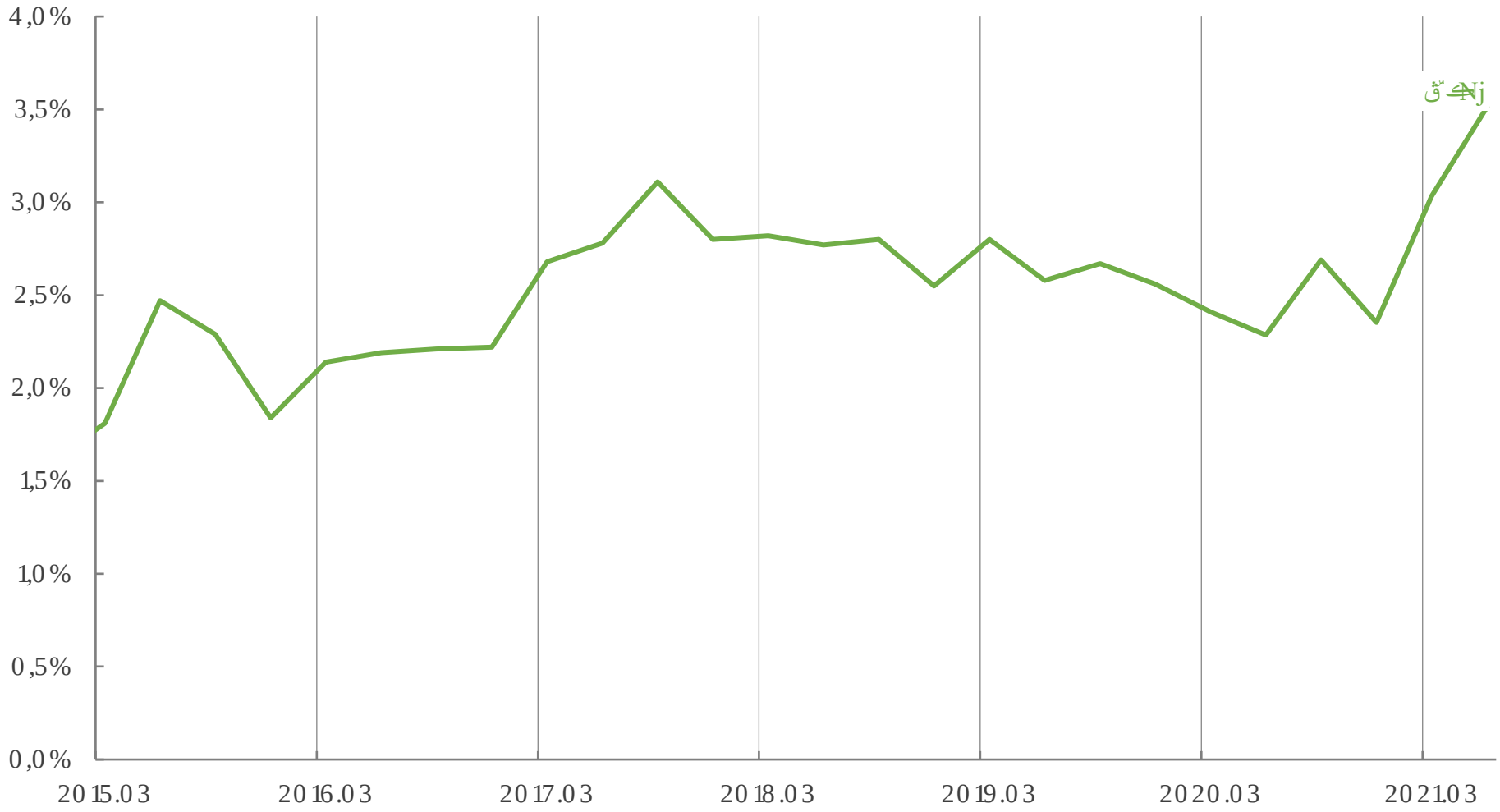
Evolution of the job vacancy rate in Wallonia



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