

# ▶ Using high-frequency data for nowcasting the labour market impact of Covid-19

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## ▶ March 2020: global labour market in major disruption

### ILO Monitor on the world of work

Tracking disruption at the global, regional level  
105 days 5 editions published (Mar – Jun 2020)

### Labour statistics are scarce

40% of countries in a given year have no data (no LFS)  
Global indicators are never observed

## What to do?

### Data environment

#### Target variable

Hours worked.

#### Explanatory variables: “One-off” high frequency data

Google Mobility Reports, Oxford Stringency Index

#### Explanatory variables: “Long” HF data

High frequency economic indicators: retail sales, consumer confidence, (approx. 4'000 series – raw database).

130 without quarterly data ← → Widely available

60 with some lag ← → Narrowly available

## ▶ What did we do...

### ... for the “60 countries”?

Classic nowcast, but scale, speed, uneven HF coverage

#### Lessons learned:

Model search: include country specific models and common (panel) models

Go beyond error-based selection: stability, likelihood of responding well to COVID-19 shock

### ... for the “130 countries”?

Indirect nowcast:

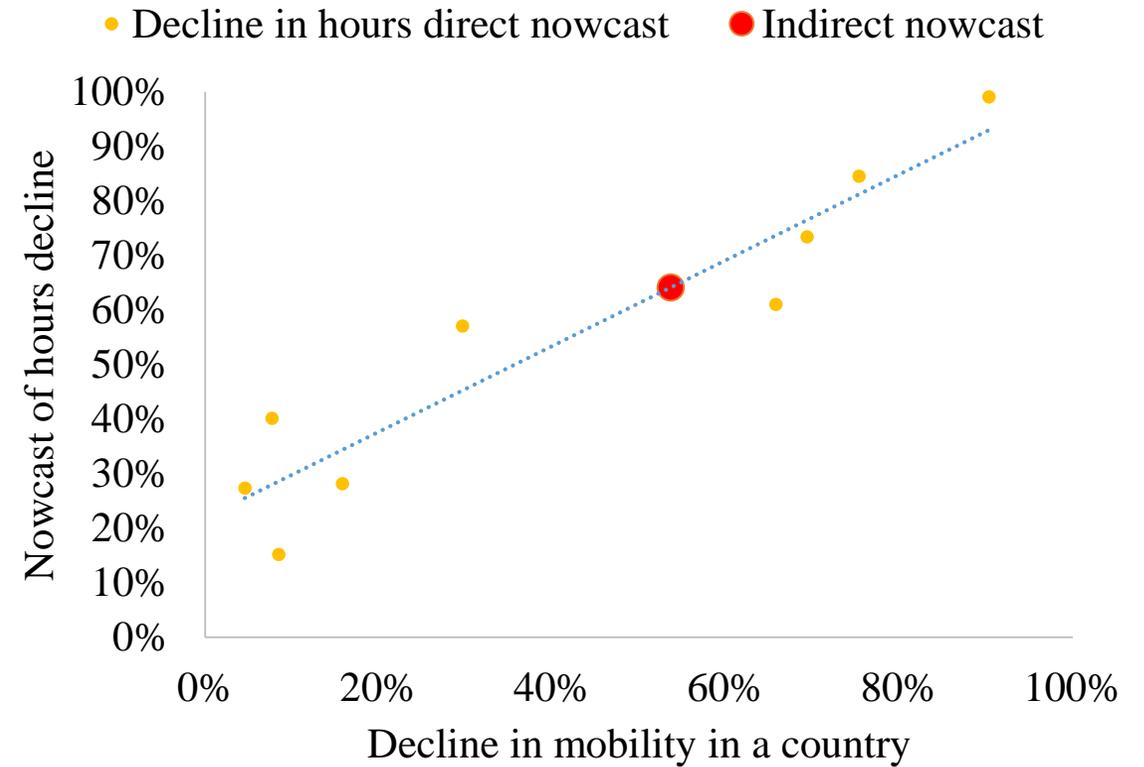
#### How?

Cross-sectional extrapolation based on mobility and stringency

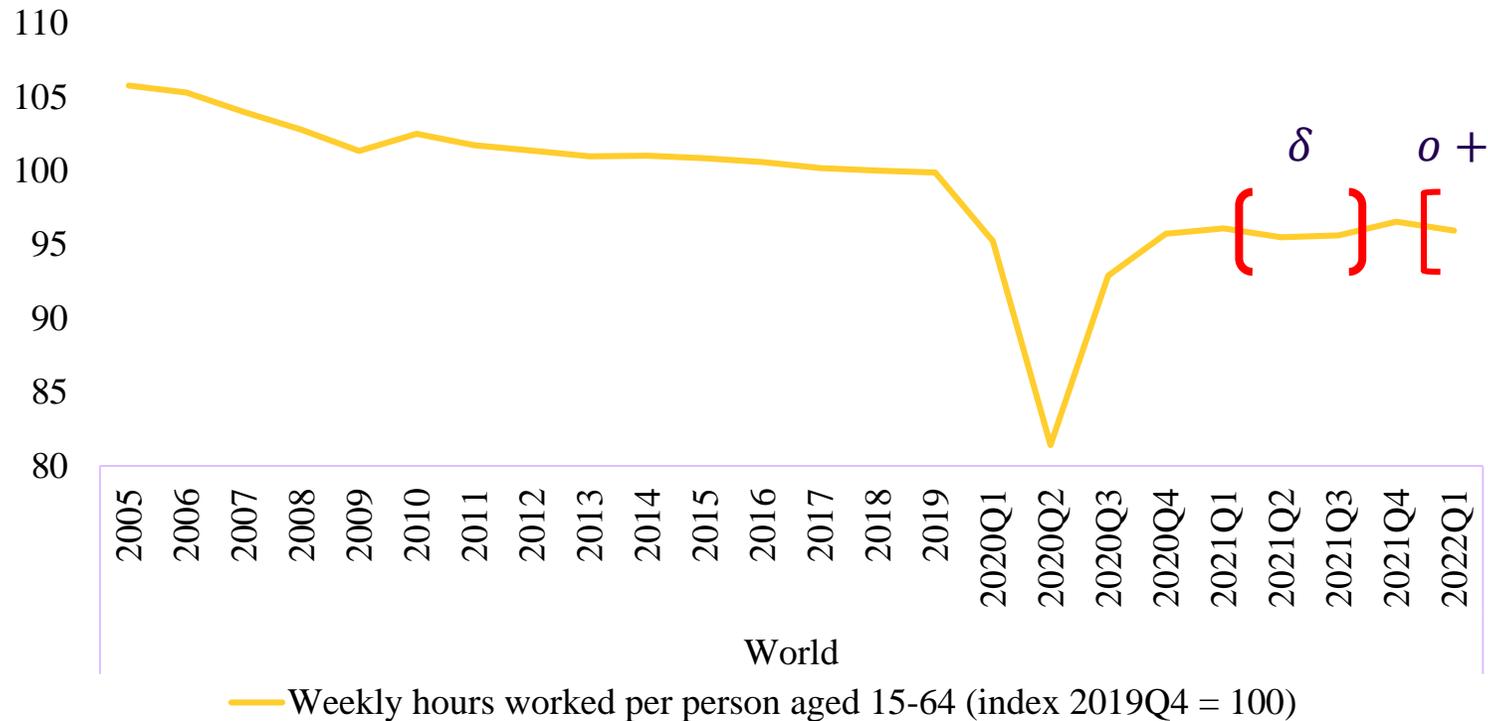
Simple set-up (very limited data)

## Over-simplified, back in March 2020:

### Classic nowcast vs. Indirect nowcast



## ILO Monitor, latest edition (23 of May 2022)



Pseudo out of sample performance (RMSE/Prediction):

Approximate range of 1.3%-3.5% depending on the quarter, for global\* aggregate.

## ▶ Timeliness increases relevance

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## News

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### ILO Monitor on the World of Work

ILO: Labour market recovery goes into reverse >

23 May 2022

**Positive trends in hours worked  
have stalled and risk being reversed**