Intensity and income distribution effects of job retention schemes in Italy during Covid-19 pandemic

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Job retention schemes in 2020: a widespread phenomenon

- Almost 7 mln employees involved in job retention schemes (CIG)
  - ✓ 44% total employees industry and services
  - ✓ 18% of population in working age (15-64 yrs)
  - ✓ Belonging to 6 mln households, in which:
    - there are 18 mln residents involved (30% of total population) …
    - … and 3 mln < 15 yrs old (39% of respective population) …
    - … and 14 mln in working age (36% of respective population)
  - ✓ 2.000 euro of per capita CIG compensations
  - ✓ 4.000 euro of per capita gross earnings not paid by employers
  - ✓ 2.000 euro of per capita loss
- Almost 1 mln firms involved in CIG
  - ✓ Almost two out of three firms with employees, >75% excluding microenterprises
  - ✓ 774 thousands micro enterprises (≤10 persons employed)
  - ✓ 10% workable hours in CIG
  - ✓ Incidence of enterprises in CIG stable by size, lower only for microenterprises
  - ✓ Intensity in terms of hours in inverse relation with size
  - ✓ Peaks beyond 25% in Recreation and Horeca

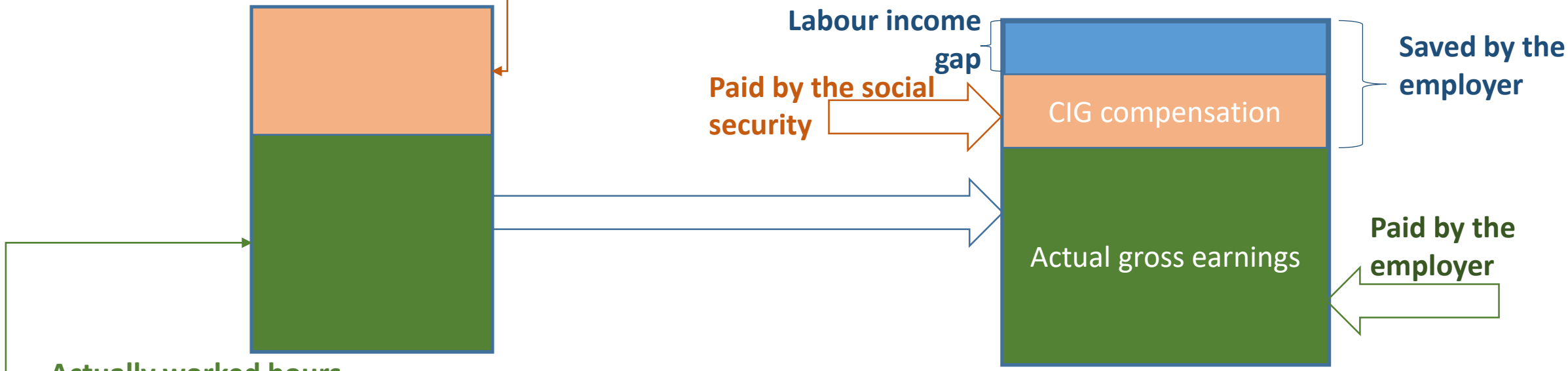
Integrate use of statistical sources

- Statistical registers (latest release 2019)
  - ✓Business register joined with SBS register and LEED register
  - ✓Income register, module BDR-I
  - ✓Population register
- LFS survey (2018-2020)
  - ✓Large set of original variables collected with the survey
  - ✓In particular Actual households (for equivalent income deflation)
- Dataset of estimates from social security *(provisional)* administrative data by employer/employee/month *(i.e. by «monthly job»)*
  - ✓Usual information: earnings, type of contract, employer id, workable hours,
  - ✓Detailed info on CIG events

Workable hours
The hours that would have been normally worked by the employee according to his labour contract

Hours in CIG
The workable hours that have not been worked and subject to CIG compensation

Potential gross earnings
Gross earnings corresponding to Workable hours due to be paid by the employer



Actually worked hours
The hours actually worked by the employee according to his labour contract

Job retention schemes: benefit for firms or for employees?

Presence of CIG events

Workable hours = ***Actually worked hours*** *plus* ***Hours absorbed by CIG***

Potential and ***Actually paid*** gross earnings

CIG compensations

Potential gross earnings gap= ***Potential gross earnings*** minus ***CIG compensations***

By type (part-time, fixed term, …)

Source integration

- Large opportunities for analysis, Quite new territory, First analyses = Learning process
  - ✓New questions to answer, much more than old questions answered
- First results are thus twice provisional
  - ✓because the admin data 2020 were themselves provisional (though, very high coverage)
  - ✓because they (and our estimation approach) might need further validation and discussion
- So … just description for the moment
- By individual (employee), integrating LFS sample and variables with all the other sources
  - ✓Cons: Sampling and non Samplig error
  - ✓Pros: Many variables, Link with labour market, *Actual household* for equivalent measures
  - ✓Surveys are fundamental for an equilibrated use of admin data
- By firm, integrating exhaustively the Business register with SBS estimates and with the integrated estimates based on admin data

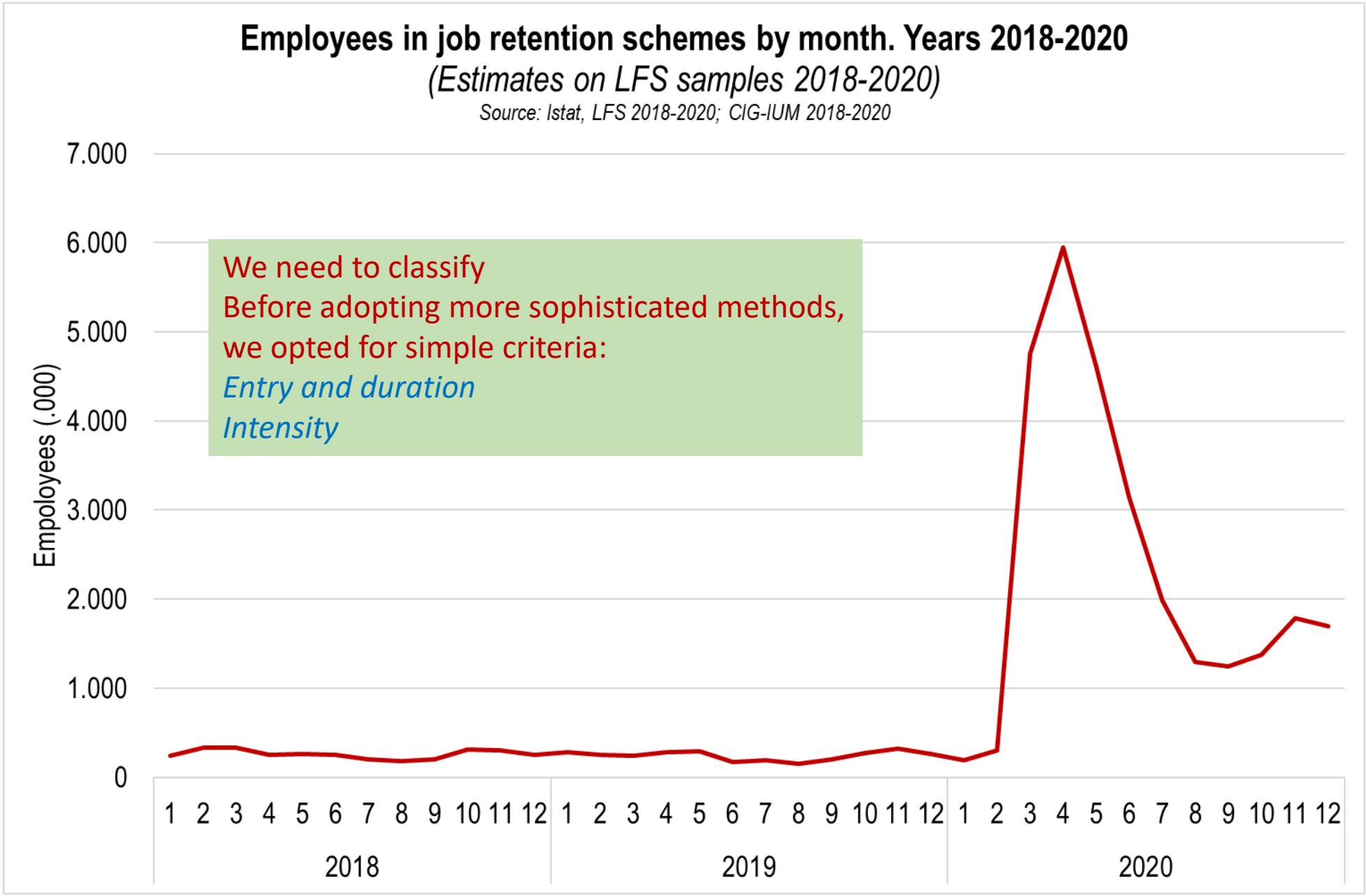
Employees: selected issues

- CIG Flows and intensity: classifications
- Employees selected by CIG in 2020 and their households
- Impact on gross earnings
- Impact on equivalent disposable income

Employees in job retention schemes by year. Years 2018-2020 *(Estimates on LFS 2018-2020 samples)*

	Employees		Hours in CIG		Incidence %		CIG compensations (euro)			
Year	N(.000)	Incidence %	N(mln)	per capita	Employees in CIG	Total employees	Total (mln)	per capita	Unpaid gross earnings	Impact of CIG events
2018	676	4,3	177	262	14,1	0,7	1.161	1.718	2.529	7,2
2019	652	4,1	177	271	14,4	0,7	1.142	1.751	2.379	7,0
2020	6.984	44,4	2.325	333	19,3	9,6	14.219	2.036	28.101	8,6

Flows


Employees in job retention schemes by month. Years 2018-2020
(Estimates on LFS samples 2018-2020)
Source: Istat, LFS 2018-2020; CIG-IUM 2018-2020
Empoloyees (.000)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0
1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12
2018
2019
2020
We need to classify
Before adopting more sophisticated methods,
we opted for simple criteria:
Entry and duration
Intensity

Flows

Employees in job retention schemes, by entry and duration cohort. Year 2020 *(Estimates on LFS 2020 sample)*

Cohorts	Employees N (.000)	Employees %	avg. months in CIG	Hours in CIG *incid.%*	Actual gross earnings *per capita*	CIG compensa-tions *per capita*	Unpaid gross earnings *per capita*	CIG impact on (%) Employees	CIG impact on (%) Employers
In CIG before March 2020	807	*11,6*	*5,6*	*24,6*	19.907	2.900	5.811	*-11,3*	*-22,6*
In CIG only in the first phase (narrow - til May)	2.549	*36,5*	*2,1*	*9,8*	20.546	1.015	1.986	*-4,3*	*-8,8*
Others in CIG only in the first phase (large - til July)	1.241	*17,8*	*3,7*	*17,2*	19.802	1.801	3.580	*-7,6*	*-15,3*
Others in CIG during first and second phase	2.123	*30,4*	*6,4*	*30,2*	16.729	3.224	6.356	*-13,6*	*-27,5*
Others entered in CIG in the second phase	263	*3,8*	*1,9*	*10,1*	15.345	806	1.569	*-4,5*	*-9,3*
Total	6.984	*100*	*4,1*	*19,3*	18.983	2.036	4.024	*-8,6*	*-17,5*

Intensity

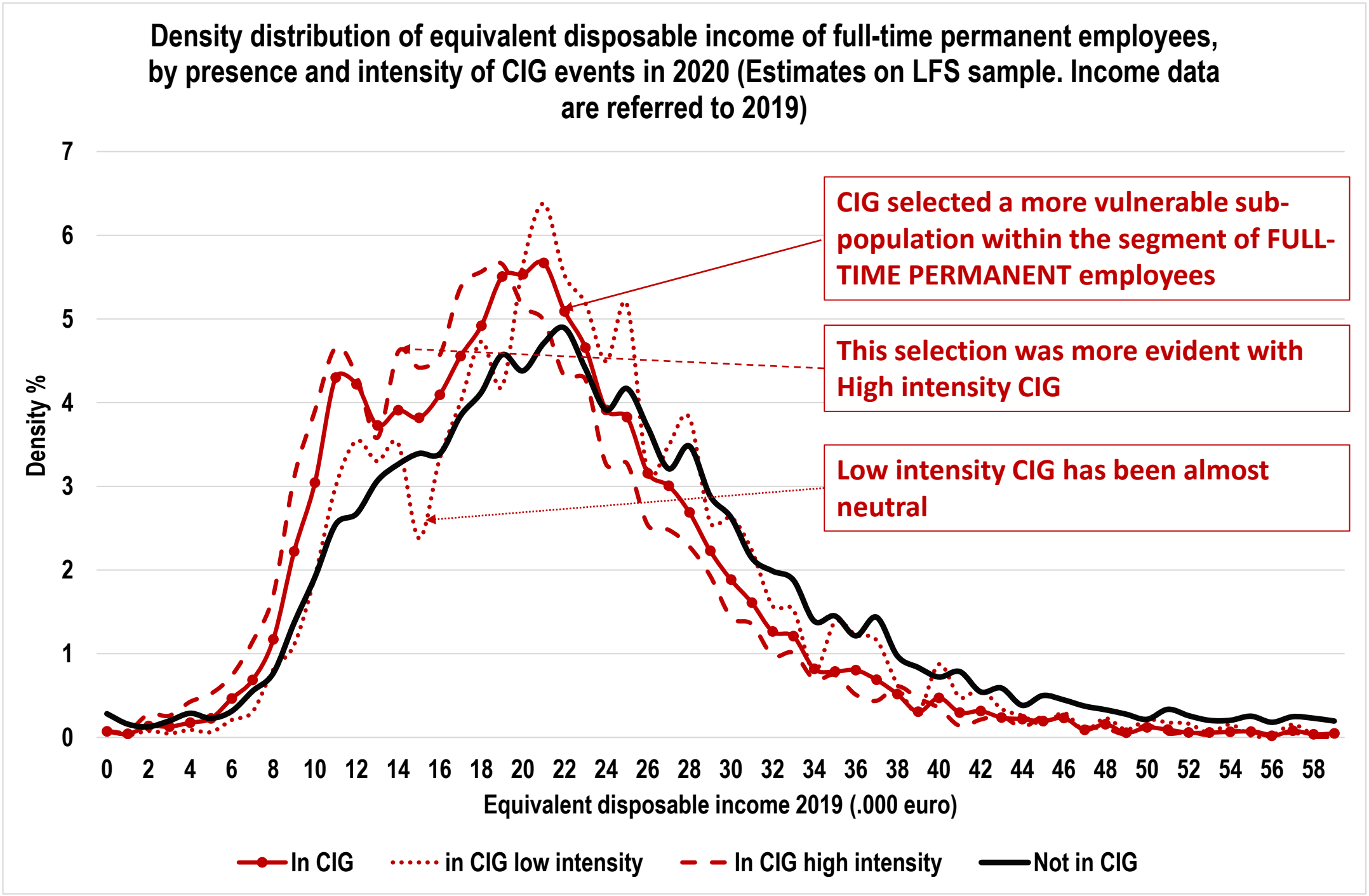
Employees in job retention schemes, by CIG intensity class. Year 2020 *(Estimates on LFS 2020 sample)*

	Employees		avg. months in CIG	Hours in CIG	Actual gross earnings	CIG compen-sations	Unpaid gross earnings	CIG impact on (%)	
Intensity class	N (.000)	%		*incid.%*	*per capita*	*per capita*	*per capita*	Employees	Employers
Low (<10% yearly & <50% monthly)	1.314	*18,8*	*2,1*	4,2	27.366	501	1.142	-2,2	*-4,0*
Low with monthly peaks (… & >50% monthly)	793	*11,4*	*2,0*	7,5	23.799	874	1.853	-3,8	*-7,2*
Medium (10-25% yearly & <80% monthly)	1.004	*14,4*	*4,3*	15,2	20.459	1.575	3.410	-7,7	*-14,3*
Medium with monthly peaks (… & >80% monthly)	1.806	*25,9*	*3,5*	16,8	18.489	1.849	3.564	-7,8	*-16,2*
High (>25% yearly)	2.066	*29,6*	*6,5*	41,1	11.520	3.845	7.389	-18,7	*-39,1*
Total	6.984	*100*	*4,1*	19,3	18.983	2.036	4.024	-8,6	*-17,5*

Employees in CIG

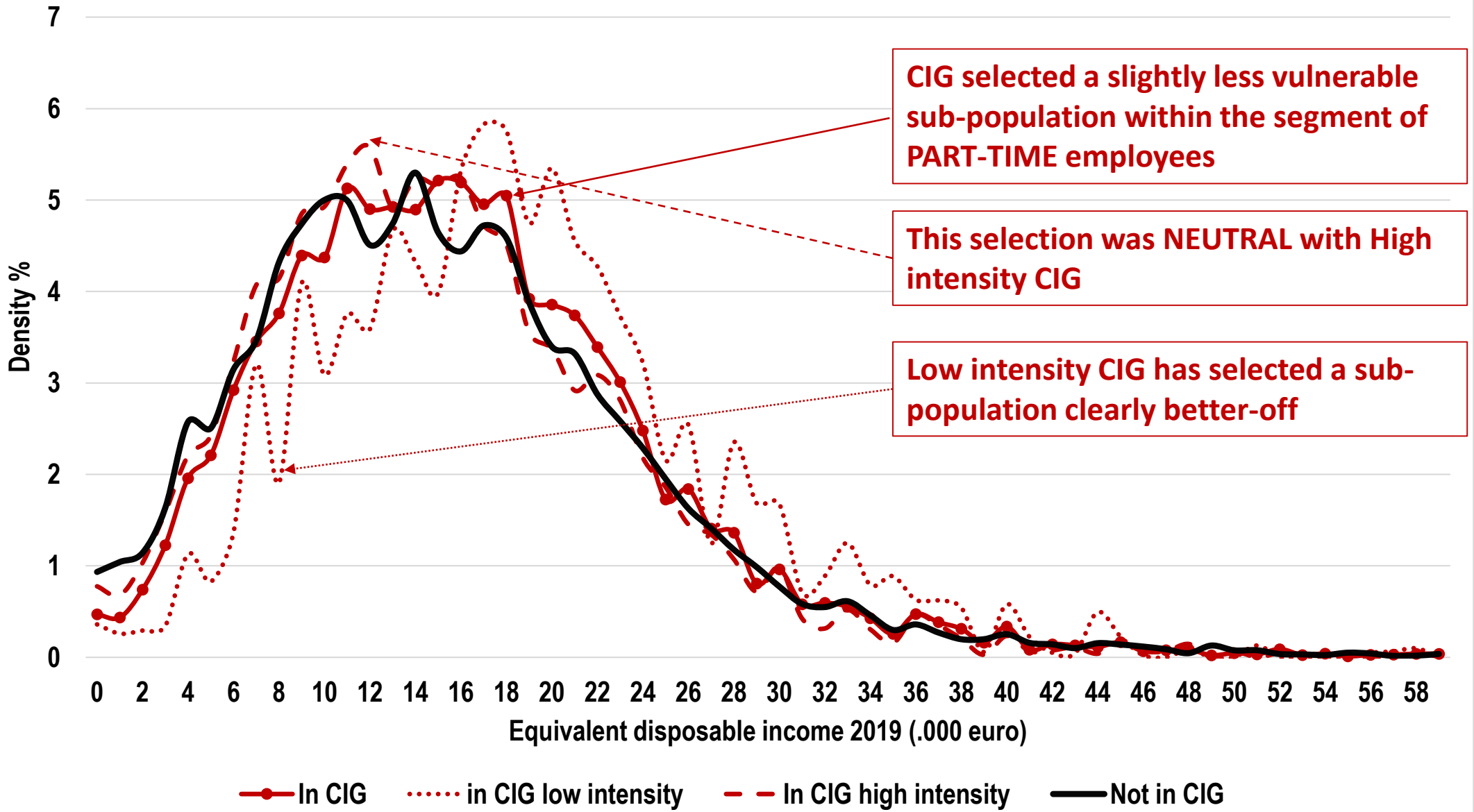
	Age	Gender	Terri-tory	Educa-tion	Citizen-ship	Type of HH	Part-time	Fixed term
Cohorts of entry & duration								
In CIG before March 2020	>45 yrs.	Men	South	Low	EU			
In CIG only in the first phase (narrow - til May)	<25 yrs.				EU			
Others in CIG only in the first phase (large - til July)				High				Fixed term in CIG
Others in CIG during first and second phase		Women	Centre			Single-parent	Part-time in CIG	Fixed term in CIG
Others entered in CIG in the second phase	<35 yrs.	Women	South	High		Single-parent Female		
Intensisty classes								
Low (<10% yearly & <50% monthly)	35-54	Men	North	High		Single		
Low with monthly peaks (… & >50% monthly)		Men	North	Medium-High	EU	Single and Single-		
Medium (10-25% yearly & <80% monthly)			North	High				
Medium with monthly peaks (… & >80% monthly)	<25 yrs.		South	Low	EU			
High (>25% yearly)	<25 yrs.	Women	Center-South	Low		Single-parent Female	Part-time in CIG	Fixed term in CIG

CIG selection: Full-time open-ended contracts



CIG selection: Part-time contracts

Density distribution of equivalent disposable income of part-time employees, by presence and intensity of CIG events in 2020 (Estimates on LFS sample. Income data are referred to 2019)



CIG selected a slightly less vulnerable sub-population within the segment of PART-TIME employees

This selection was NEUTRAL with High intensity CIG

Low intensity CIG has selected a sub-population clearly better-off

CIG & income

Equivalent disposable income in 2019 of the employees, by type of contract and involvement in job retention schemes. Year 2020
(Estimates on LFS 2020 sample)

	N. employees (.000)			Median income			Average income			% without available income data	
Type of contract	In CIG	Incidence % on total	Not in CIG	In CIG	Not in CIG	diff.%	In CIG	Not in CIG	diff.%	In CIG	Not in CIG
Total	6.984	*44,4*	8.746	18.700	19.190	*-2,5*	19.636	21.186	*-7,3*	0,1	0,4
Part-time	2.325	*45,8*	2.751	15.850	14.961	*5,9*	16.899	16.272	*3,9*	0,2	0,8
Fixed-term	1.095	*26,3*	3.067	14.899	14.812	*0,6*	15.766	16.133	*-2,3*	0,5	1,0
Part-time & Fixed term	524	*28,7*	1.305	13.994	13.108	*6,8*	14.733	14.197	*3,8*	0,7	1,3
Full-time open-ended	4.145	*49,2*	4.279	20.499	23.044	*-11,0*	21.518	25.760	*-16,5*	0,1	0,1

CIG impact

CIG impact on 2019 equivalent income, by cohort and intensity class ***(Estimates on LFS 2020 sample)***

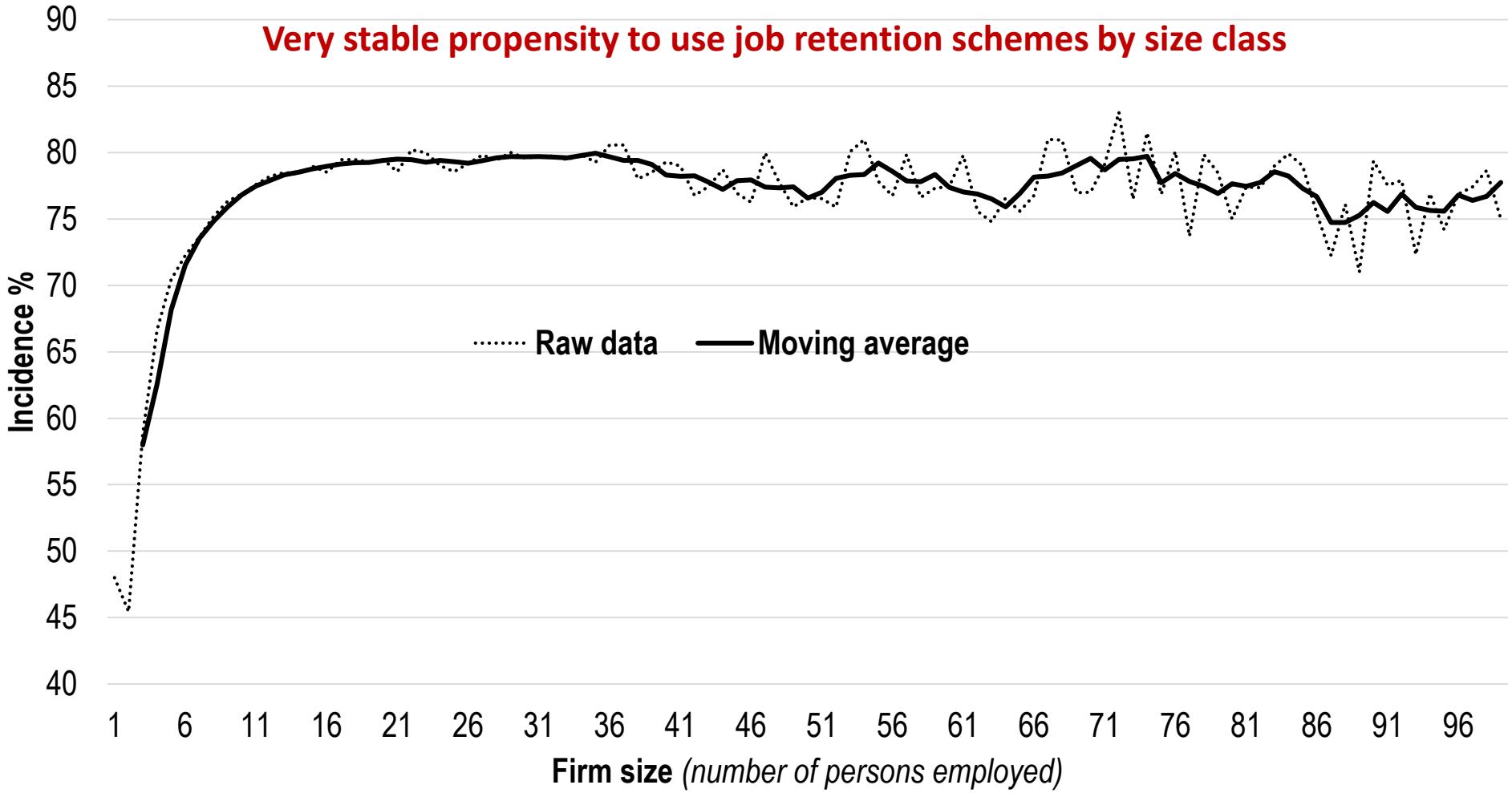
	Impact			
	Mean	First quartile	Median	Third quartile
Total employees in CIG	6,0	2,4	5,0	9,3
Cohort				
In CIG before March 2020	8,6	4,0	7,2	12,6
In CIG only in the first phase (narrow)	3,4	1,5	3,0	5,4
Others in CIG only in the fiorst phase (large)	5,2	2,6	4,9	8,5
Others in CIG during first and second phase	8,8	4,7	8,3	13,7
Others entered in CIG in the second phase	3,4	1,0	2,6	5,8
Intensity class				
Low	2,0	0,8	1,7	3,2
Low with monthly peaks	3,0	1,7	2,8	4,4
Medium	4,8	2,9	5,0	7,8
Medium with monthly peaks	5,9	3,4	5,4	8,2
High	11,6	6,3	10,7	16,7

FIRMS

Firms in job retention schemes by size

(% Incidence on total firms. Only firms with less than 100 persons employed. Raw data and moving averages with five terms, weighted with workable hours)

Source: Istat, Asia 2019, CIG-IUM 2020

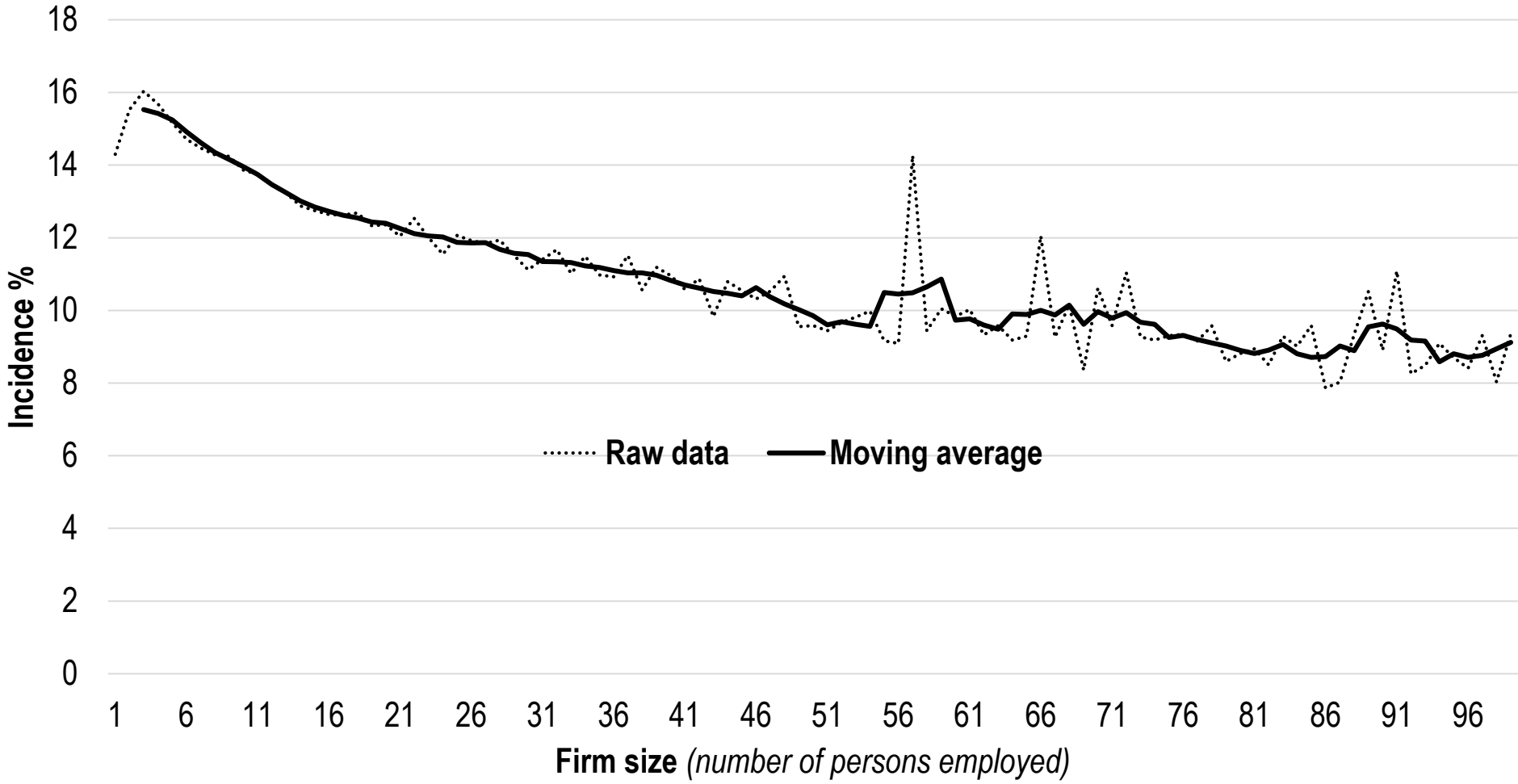


FIRMS

Workable hours in job retention schemes by firm size

(% Incidence on total workable hours. Only firms with less than 100 persons employed. Raw data and moving averages with five terms, weighted with workable hours)

Source: Istat, Asia 2019, CIG-IUM 2020



Use of CIG, part-time and fixed term

Incidence of jobs and workable hours within fixed-term or part-time contracts in the firms with employees, by size class and involvement in job retention schemes. Year 2020

	% fixed-term		% part-time		% part-time & fixed term		CIG intensity		
Size class (a)	Within the firms in CIG	Rest of the firms	Within the firms in CIG	Rest of the firms	Within the firms in CIG	Rest of the firms	Fixed term	Part-time	Part-time & fixed term
	JOBS								
0-3	18,5	27,4	53,6	60,9	10,3	16,6	22,5	30,7	23,0
3-10	14,2	19,3	41,9	46,3	7,1	10,0	20,3	29,6	21,5
10-50	13,7	14,8	24,0	26,2	4,9	6,0	18,1	27,8	19,6
50-250	12,3	10,6	20,5	14,9	4,5	3,3	16,2	22,5	15,9
250 +	15,2	6,7	28,0	13,0	5,9	1,7	6,2	18,8	8,2
Total	14,2	13,4	29,6	27,0	5,8	5,9	14,6	25,3	16,3
	WORKABLE HOURS								
0-3	15,9	23,2	38,6	44,6	6,4	10,7	16,6	21,5	17,3
3-10	11,4	15,5	29,2	32,6	4,1	5,9	14,9	19,7	16,0
10-50	11,1	12,0	15,8	17,3	2,7	3,4	12,2	17,6	14,0
50-250	10,1	9,1	13,5	10,0	2,5	1,9	9,6	12,9	10,2
250 +	12,7	5,9	18,8	9,1	3,3	1,0	3,3	10,6	5,1
Total	11,7	10,6	19,7	17,5	3,3	3,2	9,5	15,8	11,3

Conclusions

- Figures related to 2020 job retention schemes have been very huge:
  - ✓ 14 bln euro from social security, plus notional contributions
  - ✓ 28 bln of unpaid earnings saved by firms
  - ✓ 13-14 bln euro of gap for wage earners
- Examining job retention schemes in the year of the Covid outburst means studying the economic effects of pandemic and of the measures adopted to contrast it, and not the actual working of those schemes
  - ✓ this pre-existing automatic welfare measure has shown a quite adequate income protection, as the overall gap was only 8.6%
- The widespread use of those schemes has been exceptional and levelled off some of their «normal» biases
- Several effects overlap:
  - ✓ Usual – though smoothed - selection bias from CIG, visible clearly only on Permanent employees
  - ✓ Opposed bias when the selection works on part-time and fixed-term employees, where less vulnerable subjects are selected
- Great uniformity in firms behaviours, with smoothed importance of structure, performance, and dynamics indicators