

Transitions in the labour market under
COVID-19: Who endures, who doesn't and
the implications for inequality

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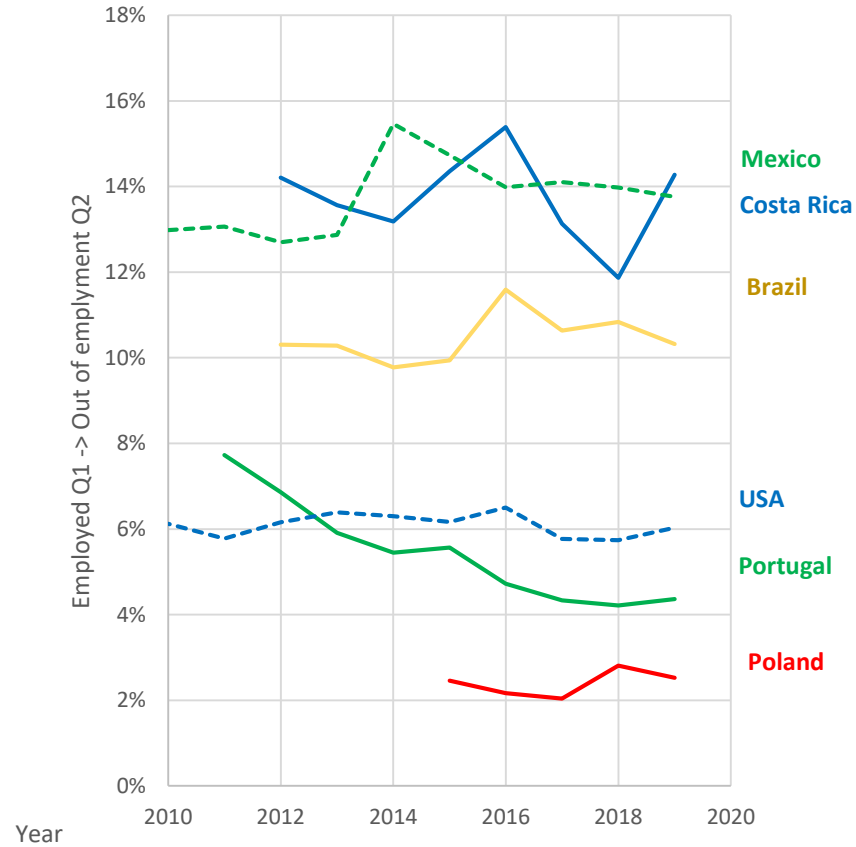
Research question: have labour market transitions during the Covid-19 Pandemic increased or decreased inequality in labour markets?

Research strategy: Compare transitions from Q1 → Q2 in 2019 with transitions 2020 Q1 → Q2 transitions. 2019 is the baseline and 2020 the “treatment period”.

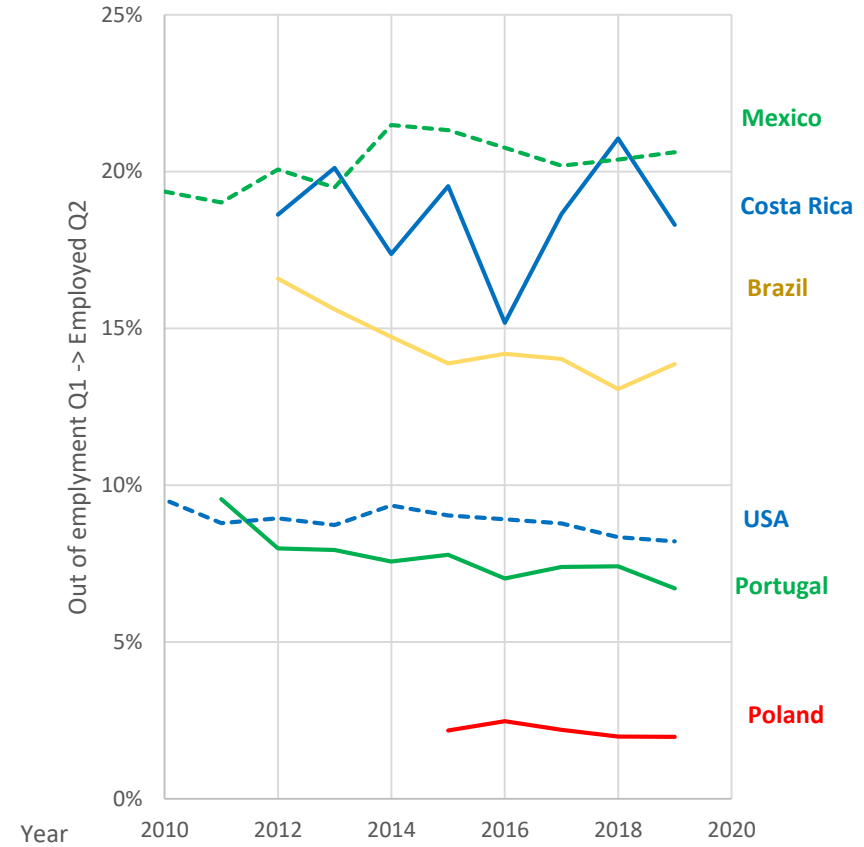
Identification hypothesis: 2019 was a “normal year”.

So, does the identification hypothesis hold?

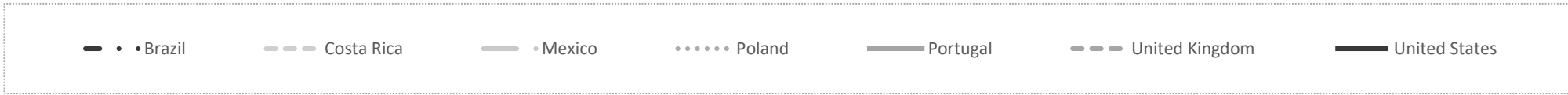
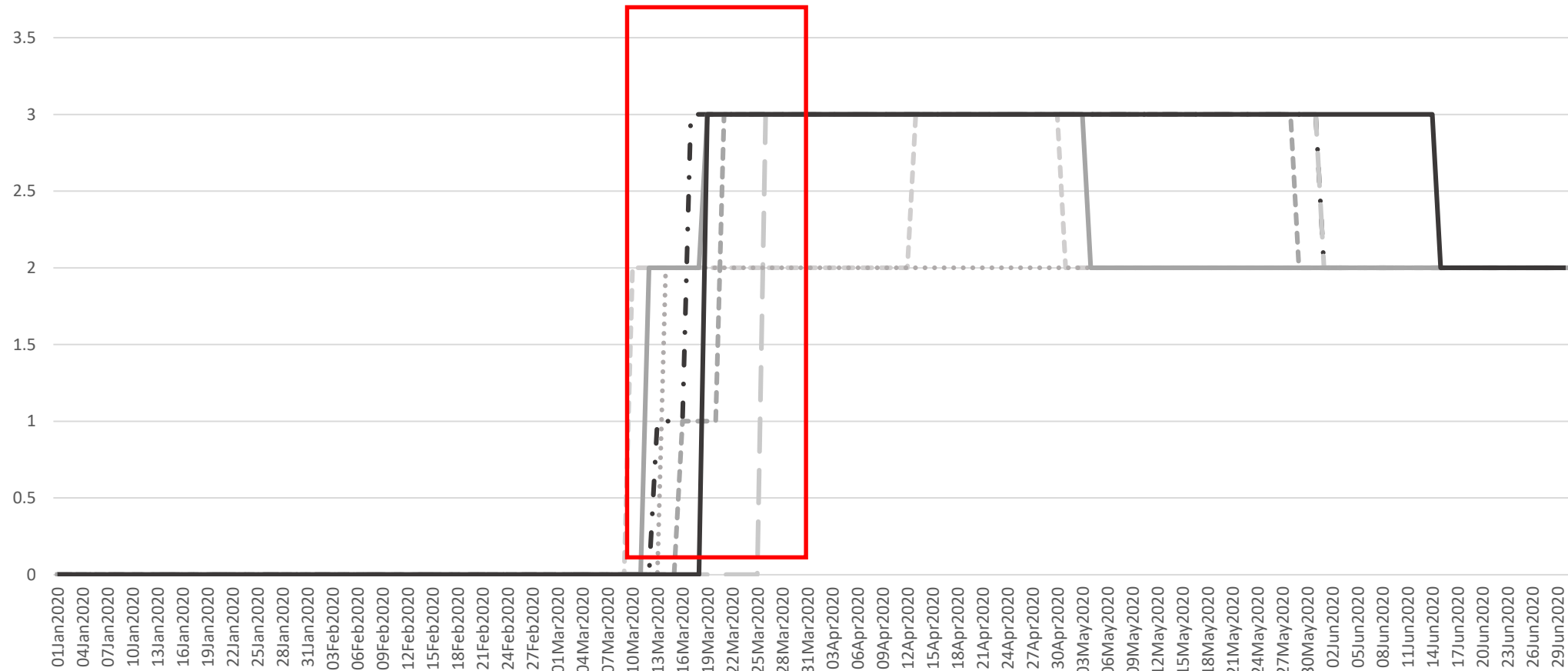
Panel 1 – From Employment to out of work



Panel 2 – From out of work to employment



Degree of workplace closures in response to COVID-19 pandemic



Additional spending in response to pandemic (%GDP)

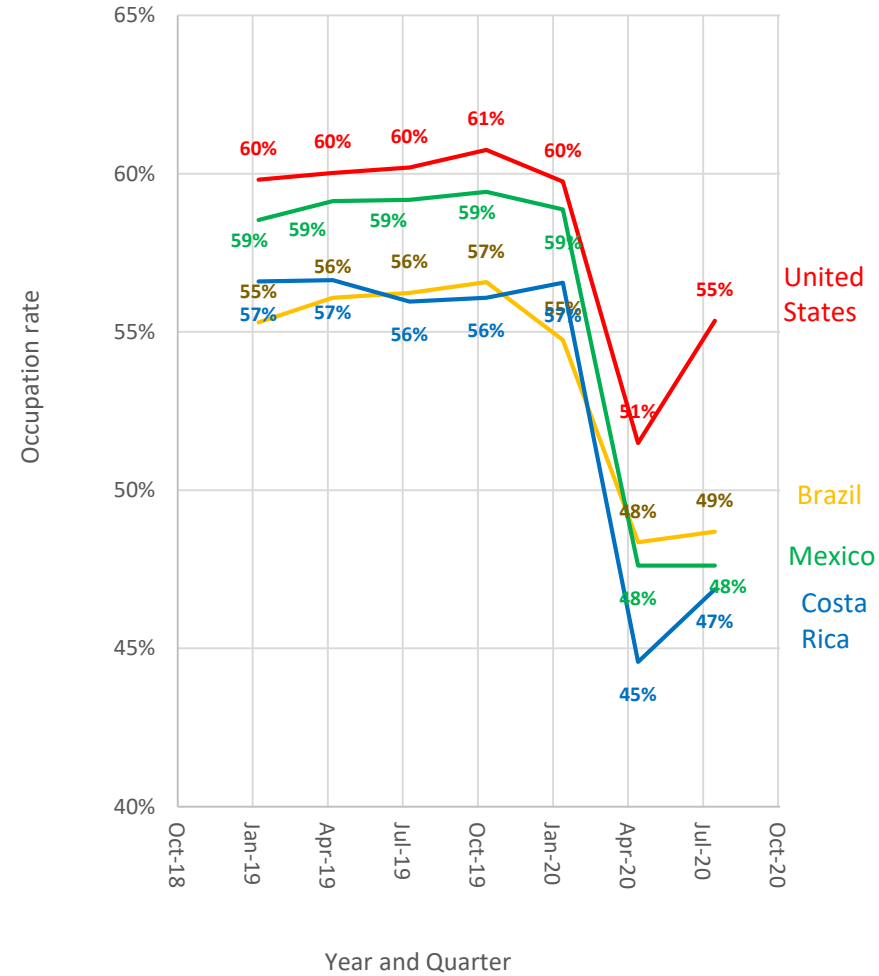
Country	Subtotal	Health sector	Non-health sector
Brazil	8.3	0.9	7.4
Costa Rica	1.4	0.3	1.1
Mexico	0.6	0.2	0.5
Poland	6.7	0.4	6.3
Portugal	3.2	0.8	2.4
United Kingdom	9.2	1.5	7.6
United States	11.8	1.5	10.3

The data

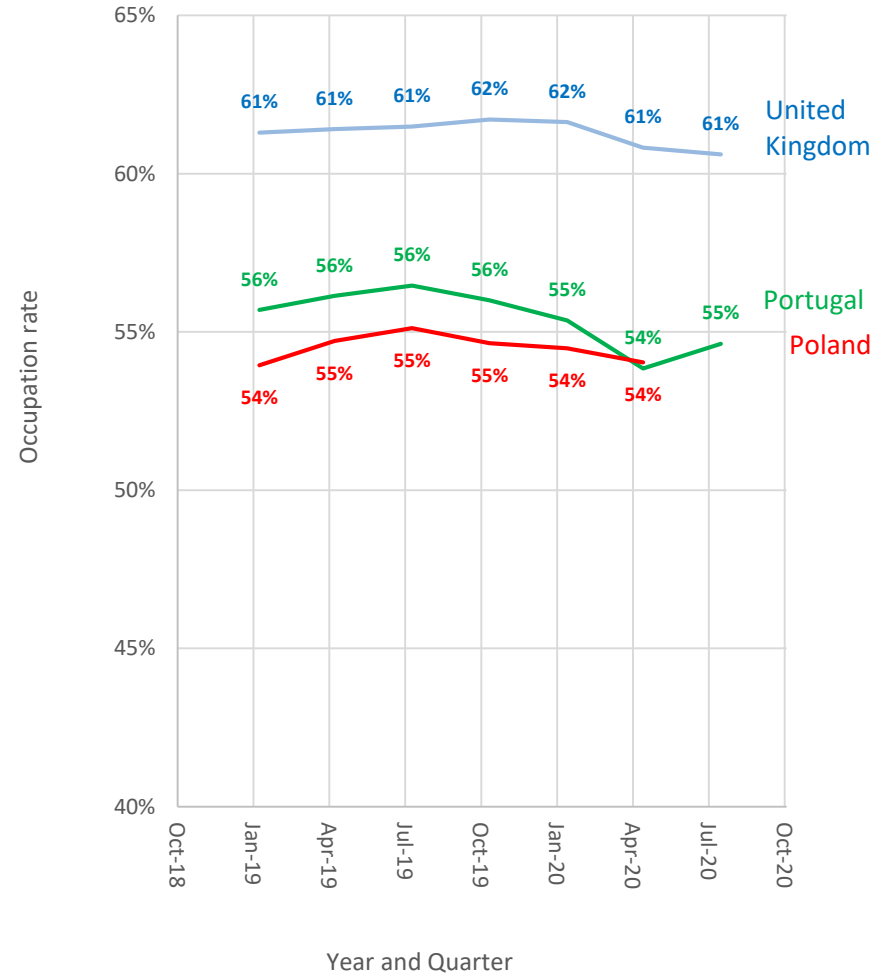
Country	Sample sizes (age 15 and over)				Panel size (15 +)	
	2019 Q1	2019 Q2	2020 Q1	2020 Q2	2019	2020
Brazil	439,002	437,466	388,559	296,588	322,138	239,487
Costa Rica	19,594	19,568	19,140	16,101	14,717	14,970
Mexico	300,547	302,541	311,771	70,160	239,628	15,347
Poland	58,222	54,964	52,209	55,593	26,876	44,856
Portugal	33,035	31,848	30,591	26,566	24,101	21,257
United Kingdom	69,793	72,300	62,279	56,641	25,175	23,438
United States	97,550	96,509	96,834	81,020	21,088	20,413

Descriptive context: Quarterly Employment Rates from Q1/2019 to Q3/2020

Panel A – The Americas



Panel B – Europe



Labour Force Status Transition Matrices (all in % of working age population)

2019 (baseline)			2020 (Covid)			Difference		
Brazil			Brazil			Brazil		
	Q2 employed	Q2 out of work		Q2 employed	Q2 out of work		Q2 employed	Q2 out of work
Q1 employed	49	6	Q1 employed	47	8	Q1 employed	-2	2
Q1 out of work	6	39	Q1 out of work	2	42	Q1 out of work	-4	4
Immobility	88		Immobility	89		Changes:	12	
Costa Rica			Costa Rica			Costa Rica		
	Q2 employed	Q2 out of work		Q2 employed	Q2 out of work		Q2 employed	Q2 out of work
Q1 employed	49	8	Q1 employed	41	15	Q1 employed	-7	6
Q1 out of work	8	35	Q1 out of work	3	41	Q1 out of work	-5	6
Immobility	84		Immobility	82		Changes:	24	
Mexico			Mexico			Mexico		
	Q2 employed	Q2 out of work		Q2 employed	Q2 out of work		Q2 employed	Q2 out of work
Q1 employed	51	8	Q1 employed	45	18	Q1 employed	-5	10
Q1 out of work	9	33	Q1 out of work	5	32	Q1 out of work	-4	-1
Immobility	83		Immobility	77		Changes:	19	
United States			United States			United States		
	Q2 employed	Q2 out of work		Q2 employed	Q2 out of work		Q2 employed	Q2 out of work
Q1 employed	57	4	Q1 employed	50	10	Q1 employed	-7	7
Q1 out of work	3	36	Q1 out of work	2	37	Q1 out of work	-1	1
Immobility	93		Immobility	87		Changes:	16	

Labour Force Status Transition Matrices (all in % of working age population) - cont

2019 (baseline)			2020 (Covid)			Difference	
Portugal			Portugal			Portugal	
	Q2 employed	Q2 out of work	Q2 employed	Q2 out of work	Q2 employed	Q2 out of work	
Q1 employed	53	3	50	3	-3	0	
Q1 out of work	3	41	3	44	0	2	
Immobility	94		94		Changes:	5	
Poland			Poland			Poland	
	Q2 employed	Q2 out of work	Q2 employed	Q2 out of work	Q2 employed	Q2 out of work	
Q1 employed	53	1	53	2	0	1	
Q1 out of work	1	45	1	44	0	-1	
Immobility	98		97		Changes:	1	
United Kingdom			United Kingdom			United Kingdom	
	Q2 employed	Q2 out of work	Q2 employed	Q2 out of work	Q2 employed	Q2 out of work	
Q1 employed	70	2	70	3	0	1	
Q1 out of work	2	26	2	25	0	0	
Immobility	96		96		Changes:	1	

By sex

	2019 baseline		2020 covid		2019 to 2020 change			
Country	Male	Female	Male	Female	Male	Female	$\Delta\Delta$	p-value
Employment to Employment rate								
Brazil	91%	88%	87%	83%	-0.03	-0.05	-0.02	0%
Costa Rica	90%	79%	79%	66%	-0.11	-0.13	-0.01	0%
Mexico	91%	79%	78%	63%	-0.13	-0.16	-0.03	0%
United States	95%	93%	85%	80%	-0.10	-0.13	-0.02	0%
Portugal	95%	96%	93%	93%	-0.02	-0.03	-0.01	0%
Poland	97%	98%	97%	95%	0.00	-0.02	-0.02	0%
United Kingdom	98%	97%	97%	96%	-0.01	-0.01	0.00	6%
Out of work to Employment rate								
Brazil	11%	8%	4%	3%	-0.06	-0.05	0.01	0%
Costa Rica	22%	15%	10%	5%	-0.13	-0.10	0.03	0%
Mexico	28%	17%	19%	10%	-0.09	-0.07	0.03	0%
United States	10%	7%	7%	5%	-0.03	-0.02	0.01	0%
Portugal	8%	6%	7%	4%	-0.01	-0.01	-0.01	1%
Poland	2%	2%	3%	2%	0.00	0.00	-0.01	12%
United Kingdom	8%	7%	9%	6%	0.01	-0.01	-0.02	7%

By age

Age	2019 baseline		2020 covid		2019 to 2020 change			
Country	Above 25	Youth	Above 25	Youth	Above 25	Youth	$\Delta \Delta$	p-value
Brazil	91%	83%	86%	79%	-0.04	-0.04	0.00	0%
Costa Rica	87%	79%	76%	61%	-0.11	-0.18	-0.08	0%
Mexico	87%	79%	74%	63%	-0.14	-0.16	-0.03	0%
United States	95%	88%	85%	70%	-0.10	-0.18	-0.08	0%
Portugal	96%	90%	94%	81%	-0.02	-0.09	-0.06	0%
United Kingdom	98%	95%	97%	92%	-0.01	-0.02	-0.02	2%
Out of Work to Employment rate								
Brazil	13%	15%	5%	6%	-0.08	-0.09	-0.01	0%
Costa Rica	19%	13%	7%	6%	-0.12	-0.08	0.04	0%
Mexico	21%	19%	14%	11%	-0.07	-0.08	-0.01	0%
United States	7%	13%	5%	9%	-0.02	-0.04	-0.02	0%
Portugal	7%	7%	6%	4%	-0.01	-0.02	-0.02	1%
United Kingdom	5%	13%	5%	13%	0.00	0.00	0.01	89%

By education

Schooling	2019 baseline		2020 covid		2019 to 2020 change			
Country	No higher	Higher	No higher	Higher	No higher	Higher	$\Delta \Delta$	p-value
Brazil	88%	95%	83%	91%	-0.05	-0.04	0.01	0%
Costa Rica	84%	90%	70%	87%	-0.14	-0.03	0.12	13%
Mexico	85%	90%	69%	81%	-0.16	-0.09	0.07	0%
United States	93%	95%	77%	86%	-0.16	-0.09	0.07	0%
Portugal	95%	98%	91%	96%	-0.03	-0.02	0.02	0%
Poland	97%	98%	95%	97%	-0.02	-0.01	0.01	3%
United Kingdom	97%	98%	96%	97%	-0.01	-0.01	0.00	5%
Out of Work to Employment rate								
Brazil	10%	16%	4%	7%	-0.06	-0.10	-0.04	0%
Costa Rica	18%	17%	7%	8%	-0.11	-0.08	0.02	1%
Mexico	20%	24%	12%	18%	-0.07	-0.07	0.01	2%
United States	7%	9%	5%	7%	-0.02	-0.03	0.00	0%
Portugal	6%	14%	5%	8%	-0.01	-0.06	-0.05	0%
Poland	2%	5%	2%	3%	0.00	-0.02	-0.02	4%
United Kingdom	7%	8%	6%	10%	-0.01	0.01	0.02	23%

By labour earnings

Labour Earnings	2019 baseline		2020 covid		2019 to 2020 change		$\Delta \Delta$	p-value
	Qt1 - Qt3	Qt4	Qt1 - Qt3	Qt4	Qt1 - Qt3	Qt4		
Brazil	88%	96%	82%	94%	-0.06	-0.02	0.04	0%
Costa Rica	85%	95%	71%	93%	-0.14	-0.02	0.12	1%
Mexico	85%	93%	68%	82%	-0.17	-0.11	0.06	0%
United States	93%	98%	84%	94%	-0.09	-0.11	0.06	0%
United Kingdom*	97%	99%	96%	99%	-0.01	0.00	0.01	47%

By hours

Hours worked	2019 baseline		2020 covid		2019 to 2020 change			
	Part-time	Fulltime	Part-time	Fulltime	Part-time	Fulltime	$\Delta \Delta$	p-value
Brazil	81%	92%	75%	88%	-0.06	-0.04	0.01	0%
Costa Rica	72%	90%	54%	81%	-0.19	-0.09	0.10	0%
Mexico	74%	88%	54%	75%	-0.20	-0.13	0.07	0%
United States	86%	96%	65%	86%	-0.20	-0.09	0.11	0%
Portugal	85%	97%	77%	95%	-0.08	-0.02	0.06	0%
United Kingdom	95%	98%	95%	97%	-0.01	-0.01	0.00	0%

By labour market insertion (employee vs self-employed)

Labour Market Insertion	2019 baseline		2020 covid		2019 to 2020 change		$\Delta \Delta$	p-value
	Employee	Self employed	Employee	Self employed	Employee	Self employed		
Brazil	91%	87%	86%	84%	-0.05	-0.03	0.02	0%
Costa Rica	87%	82%	78%	63%	-0.09	-0.20	-0.11	0%
Mexico	88%	81%	76%	59%	-0.12	-0.22	-0.09	0%
United States	94%	92%	82%	85%	-0.12	-0.07	0.05	0%
Portugal	97%	89%	94%	87%	-0.03	-0.03	0.00	1%
United Kingdom	97%	97%	97%	95%	-0.01	-0.01	-0.01	3%

By public vs private employer

Public employment	2019 baseline		2020 covid		2019 to 2020 change		$\Delta \Delta$	p-value
	Private	Public	Private	Public	Private	Public		
Brazil	90%	96%	85%	91%	-0.05	-0.05	0.00	0%
Costa Rica	85%	94%	74%	96%	-0.11	0.01	0.13	30%
Mexico	88%	93%	74%	89%	-0.14	-0.04	0.10	0%
United States	94%	95%	84%	87%	-0.10	-0.09	0.02	0%
Portugal	97%	99%	94%	98%	-0.03	-0.01	0.02	0%
Poland	97%	98%	96%	97%	-0.01	-0.01	0.01	0%
United Kingdom	97%	99%	96%	98%	-0.01	0.00	0.01	58%

By type of contract (temporary vs permanent)

Temporary	2019 baseline		2020 covid		2019 to 2020 change			
	Permanent	Temp.	Permanent	Temp.	Permanent	Temp.	$\Delta \Delta$	p-value
Brazil	90%	83%	86%	76%	-0.04	-0.07	-0.03	0%
Costa Rica	87%	69%	75%	50%	-0.12	-0.19	-0.07	0%
Mexico	87%	84%	75%	66%	-0.12	-0.18	-0.06	0%
Portugal	96%	92%	95%	83%	-0.02	-0.10	-0.08	0%
United Kingdom	98%	90%	97%	88%	-0.01	-0.02	-0.02	25%

By type of insertion (formal vs informal)

Informality (employees only)	2019 baseline		2020 covid		2019 to 2020 change		$\Delta \Delta$	p-value
	Formal	Informal	Formal	Informal	Formal	Informal		
Brazil	94%	83%	90%	75%	-0.04	-0.08	-0.04	0%
Costa Rica	92%	75%	88%	56%	-0.04	-0.19	-0.15	0%
Mexico	92%	84%	85%	65%	-0.07	-0.19	-0.12	0%

By occupation (manager vs other)

Occupation: Manager	2019 baseline		2020 covid		2019 to 2020 change		Δ Δ	p-value
	Other	Manager	Other	Manager	Other	Manager		
Brazil	89%	96%	85%	95%	-0.04	-0.01	0.04	36%
Costa Rica	86%	98%	74%	92%	-0.12	-0.06	0.06	9%
Mexico	86%	92%	71%	80%	-0.15	-0.12	0.02	14%
United States	94%	96%	81%	92%	-0.13	-0.04	0.09	0%
Portugal	95%	98%	93%	98%	-0.03	0.00	0.03	61%
United Kingdom	97%	98%	96%	97%	-0.01	-0.01	0.00	9%

By occupation (technical and professional vs other)

Occupation: Technical	2019 baseline		2020 covid		2019 to 2020 change		$\Delta \Delta$	p-value
	Other	Technical	Other	Technical	Other	Technical		
Brazil	88%	95%	84%	91%	-0.05	-0.04	0.01	0%
Costa Rica	84%	91%	71%	85%	-0.13	-0.06	0.07	0%
Mexico	86%	88%	70%	79%	-0.16	-0.09	0.06	0%
United States	93%	96%	81%	87%	-0.12	-0.09	0.04	0%
Portugal	95%	98%	91%	97%	-0.03	-0.01	0.02	4%
United Kingdom	97%	98%	96%	98%	-0.01	0.00	0.00	10%

Conclusions

- Different profiles for Europe and Americas
- Covid appears to be increasing inequality in employment on all dimensions.
- The most important dimensions are: earnings, schooling, informality.
- Surprises on public vs private in USA and Brazil.
- No pattern for employee vs self-employed.