Estimating labour market transitions from labour force surveys:

The case of Viet Nam

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Workshop on *Changing Labour Market Transitions and Life Courses in Asia and the Pacific*,
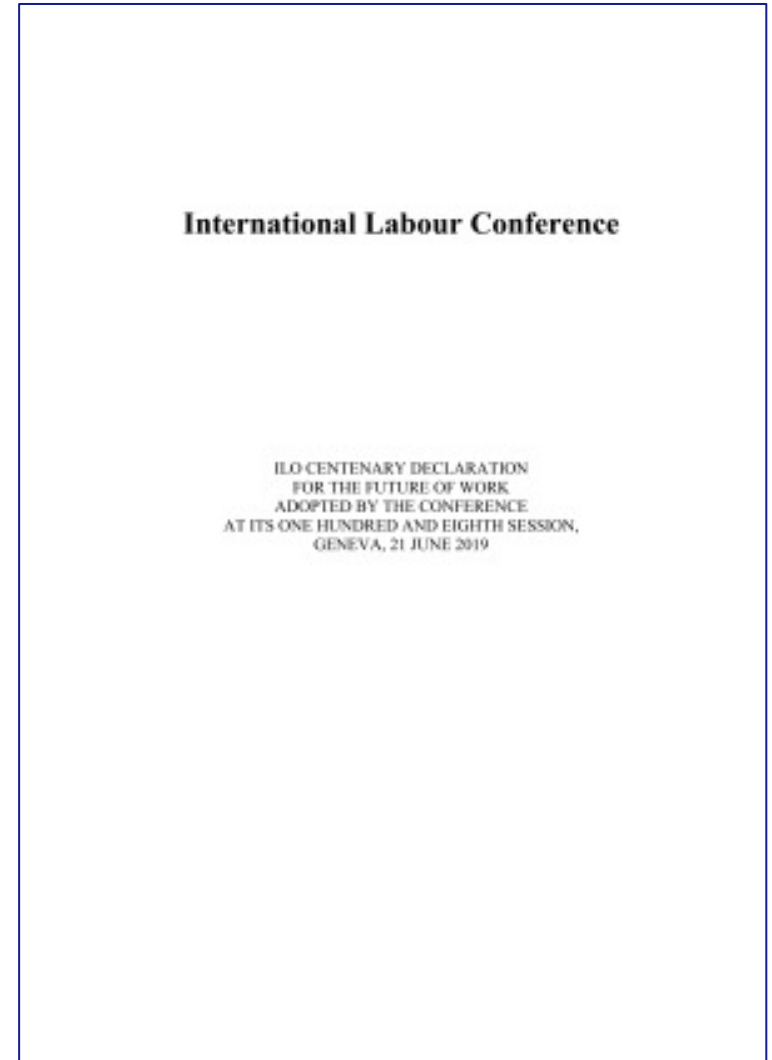14 December 2021

Overview

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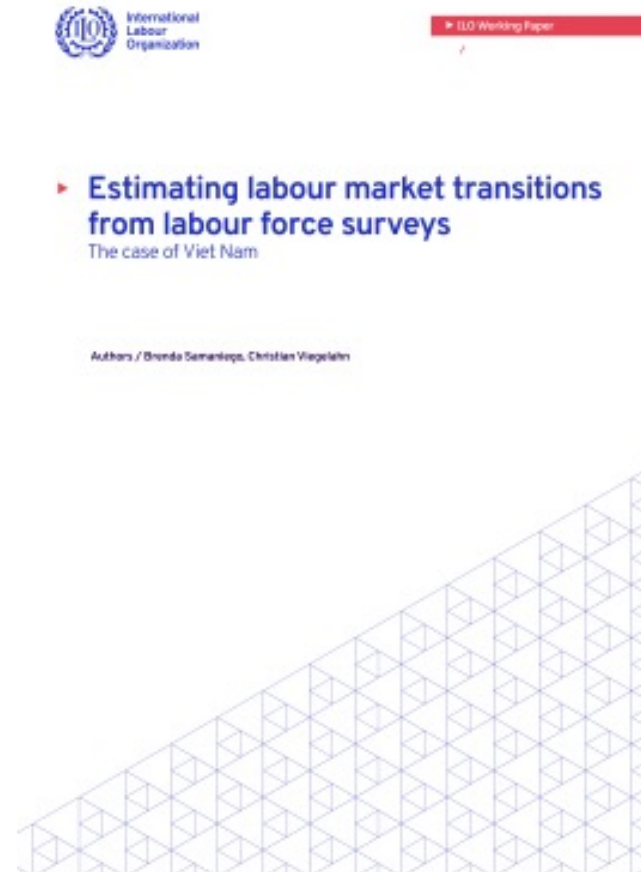
Introduction

Motivation

▶ *The Conference calls upon all Members […] to further develop its human-centred approach to the future of work by: Strengthening the capacities of all people to benefit from the opportunities of a changing world of work through […]* *effective measures to support people through the transitions* *they will face throughout their working lives.* (ILO Centenary Declaration, 2019)

▶ *All workers will need* *support through the increasing number of labour market transitions* *over the course of their lives.* (ILO Report of the Global Commission on the Future of Work, 2019)

International Labour Conference

ILO CENTENARY DECLARATION
FOR THE FUTURE OF WORK
ADOPTED BY THE CONFERENCE
AT ITS ONE HUNDRED AND EIGHTH SESSION,
GENEVA, 21 JUNE 2019

International Labour Organization

What are labour market transitions?

▶ Traditional labour market analysis focuses on the stock (number/share) of workers that are in a particular situation on the labour market

▶ It looks at changes over time

▶ But: changes are driven by the flow (transitions) of workers that move from one situation to another one on the labour market
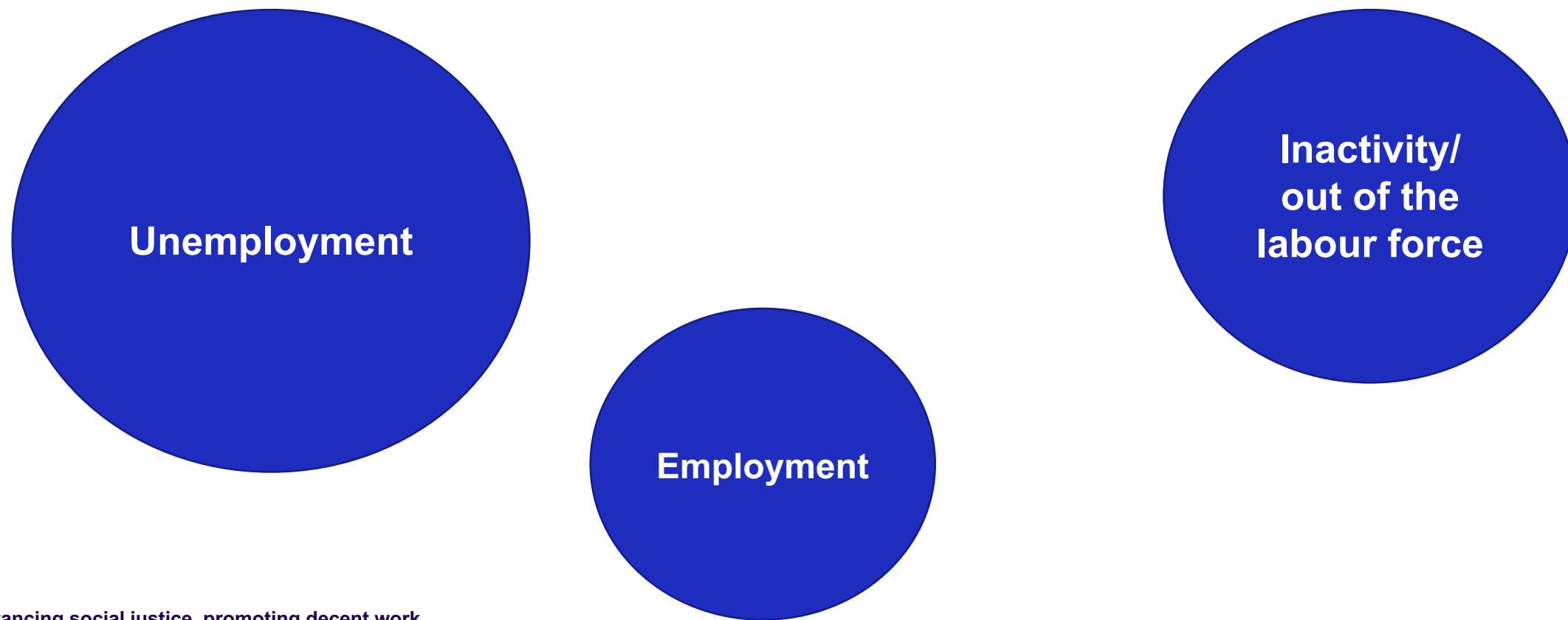
Example: Transitions by labour force status
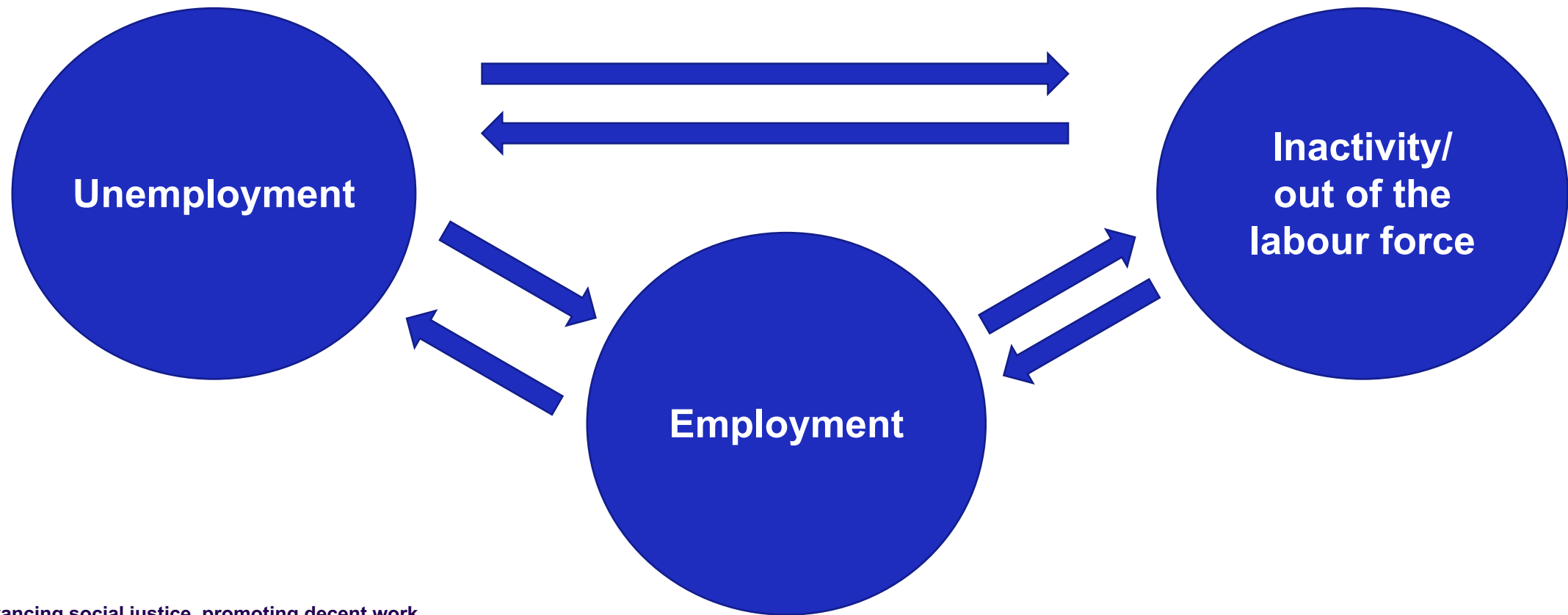
Unemployment

Inactivity/ out of the labour force
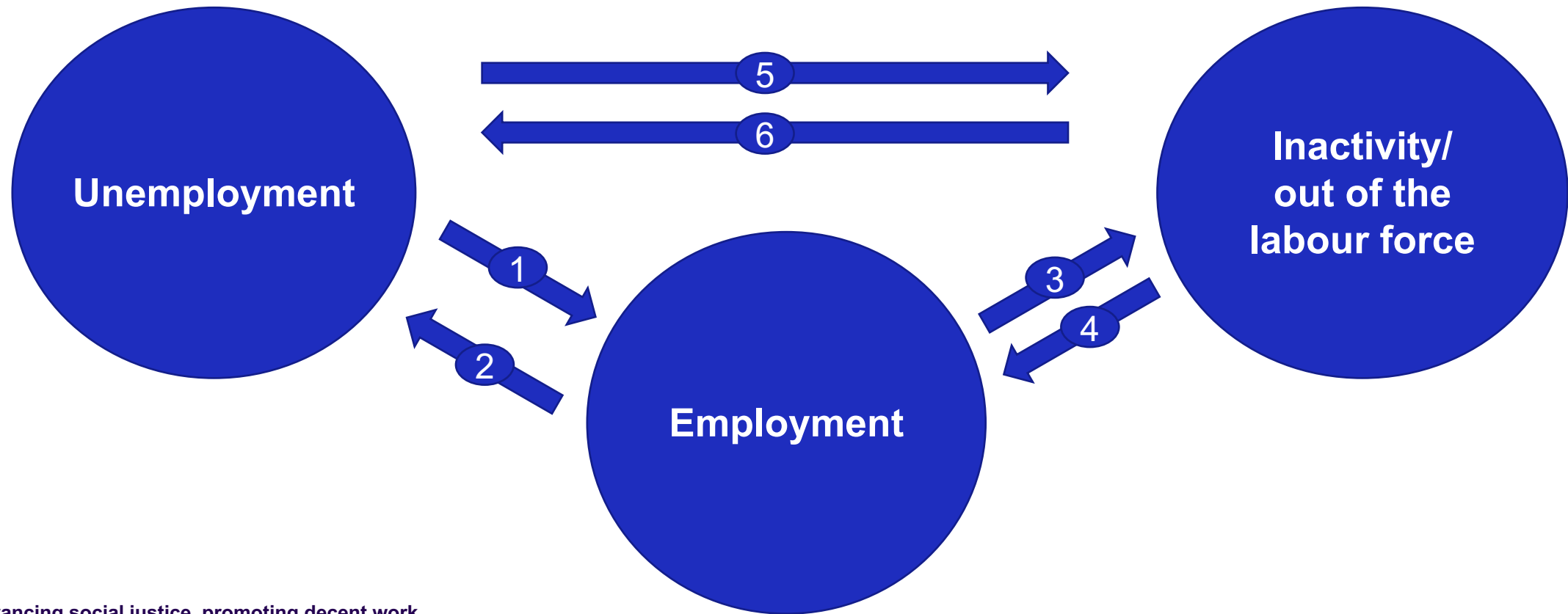
Employment

Example: Transitions by labour force status

Unemployment

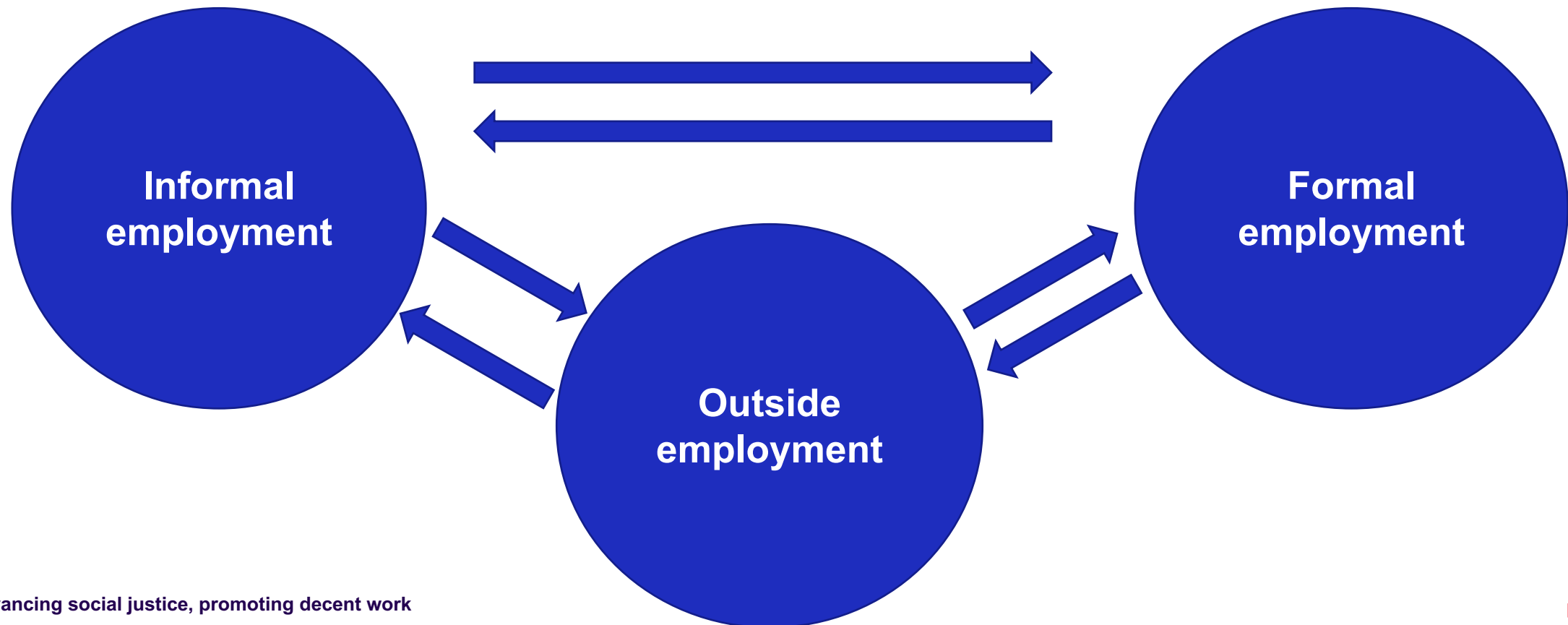**Inactivity/ out of the labour force**

Employment

Example: Transitions by labour force status
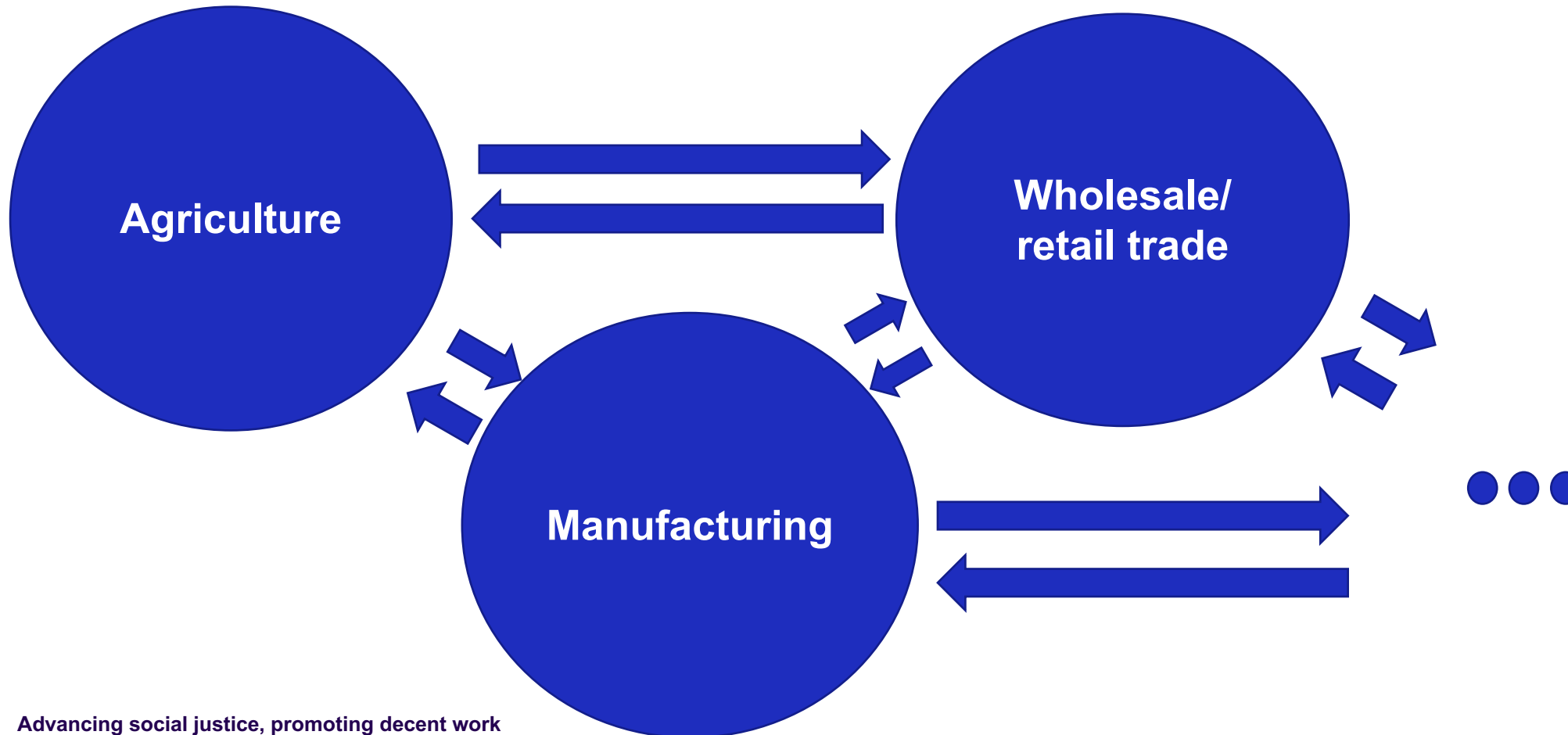
Example: Transitions by labour force status
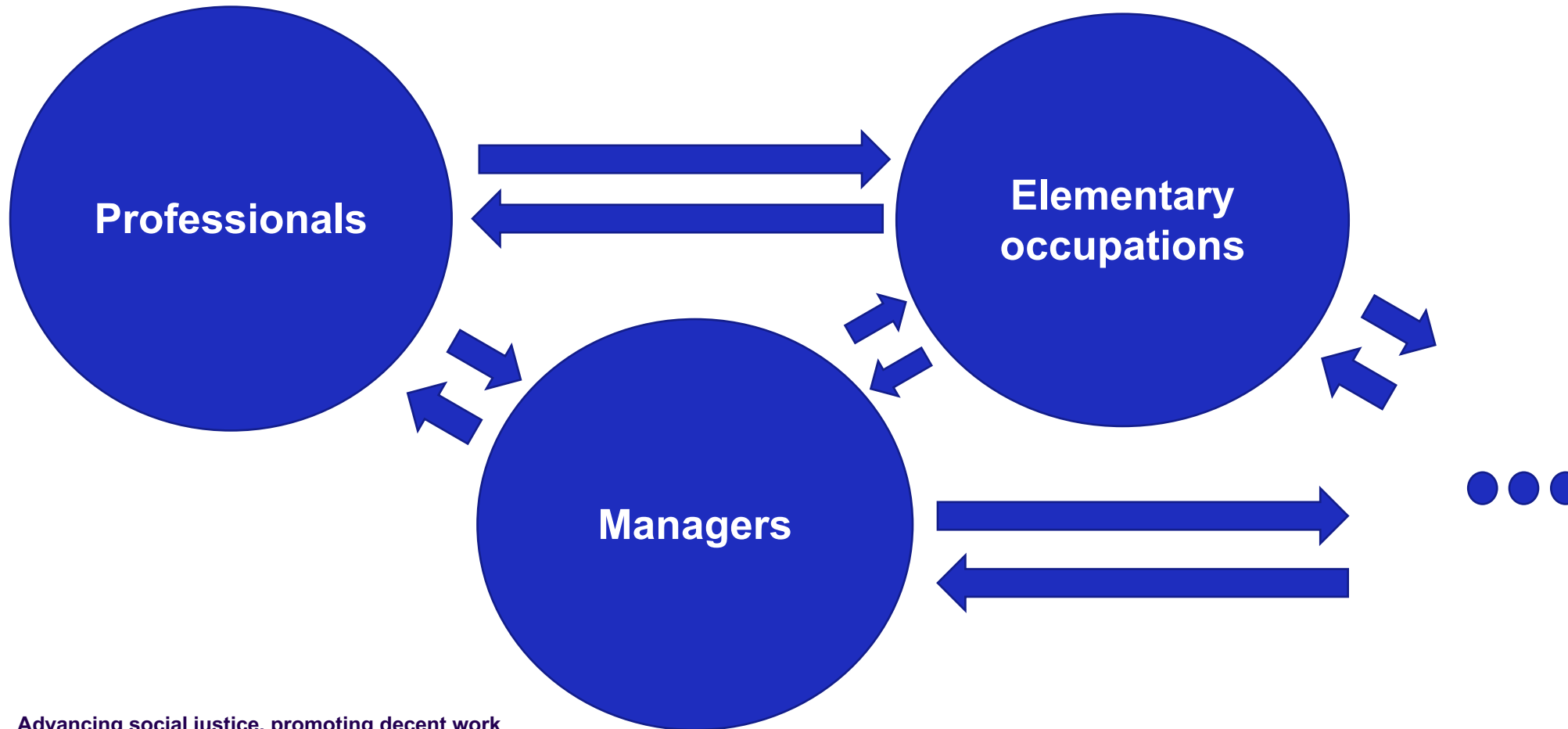
Example: Transitions by (in)formality status

Example: Transitions between sectors

Agriculture

Wholesale/ retail trade

Manufacturing

Example: Transitions between occupations

Professionals

Elementary occupations

Managers

Why is it useful to look at labour market transitions? A few examples

▶ Detailed labour market analysis:

➢ Identify sources of change in unemployment, informal employment etc

➢ High transition rates between sectors indicate transferability of skills across occupations

➢ Transitions between sectors and between occupations can be used to assess career progression or the lack thereof

➢ Analysis of sensitivity to economic shocks

➢ Wage differences as a driver of labour market transitions

Why is it useful to look at labour market transitions? A few examples

▶ Improving forecast precision (see e.g. Barnichon and Nekarda, 2012; Barnichon and Garda, 2016)

▶ Decompositions of variations in the employment rate within any job type, industry or occupation over time; decomposition into

➢ changes in the inflow rate

➢ changes in the outflow rate

➢ changes in the composition of the workforce

Literature review

Initially, the focus has been on transitions by labour force status in developed economies…

▶ Hall (1972), Feldstein (1976): Crucial role of transitions in understanding unemployment

▶ Darby et al (1986), Hall (2005), Shimer (2012): Determinants of cyclical fluctuations in unemployment – e.g. does unemployment in recessions rise due to higher job separation probabilities or due to lower job finding probabilities?

▶ Elsby et al. (2015): Labour force participation margin important

▶ Fallick and Fleischman (2001, 2004): Movements between different employers

…but now more and more studies focus on transitions into and out of informality in developing economies

See, for example:

▶ Bosch and Maloney (2006): Mexico

▶ Herrera at al. (2005): Peru

▶ Tanzel and Ozdemir (2019): Egypt

▶ Gutierrez et al. (2019): Bangladesh

Data and methodology

Data from labour force survey

▶ Viet Nam labour force survey is a rotating panel; individuals can be tracked across two consecutive quarters

▶ There is a sufficiently large sample (e.g. transitions are observed in each quarter for about 60-70,000 observations)

Transitions across different categories

▶ **Labour force status**: employed, unemployed, out of the labour force

▶ **Formal production unit**: employed at a formal production unit, employed at an informal production unit, not employed

▶ **Formal employment**: formally employed, informally employed, not employed

▶ **Industry**: 86 2-digit categories or 524 4-digit industry classification categories, plus a not employed group

▶ **Occupation**: 11 2-digit categories or 568 4-digit occupational classification categories, plus a not employed group

International
Labour
Organization

What are possible measures of transition?

Measures:

▶ Number of workers that transit from one labour market state to another one

▶ Probability of a worker to transit from one labour market state to another one

Timing:

▶ Quarterly data: estimates of quarterly transition probabilities

▶ Possibility to derive estimates of monthly, annual etc probabilities

▶ Possibility to derive estimates of continuous transition rates

Biases

▶ Attrition bias

- ➢ Labour market transitions are not observable for individuals that cannot be matched across different survey waves
- ➢ Bias if probability of dropping from the sample is not random

▶ Misclassification bias

▶ Time aggregation bias

- ➢ With quarterly data, labour market transitions are only observable from one quarter to the next one; transitions that occur within the quarter are not observable

Weights

▶ Sampling weights (provided by GSO)

▶ Revised sampling weights that correct for attrition bias

  ➢ Corrects for bias that might arise from the fact that the sub-sample of individuals who cannot be matched across different survey waves is not random

  ➢ Follow Fallick and Fleischman (2001)

  ➢ Estimate probability of dropping from the sample for different groups, and then give higher weights to individuals that are more likely to drop off the sample, as a compensation

Results

Transitions by labour force status

Quarterly transition probabilities for a worker to move out of employment (%)
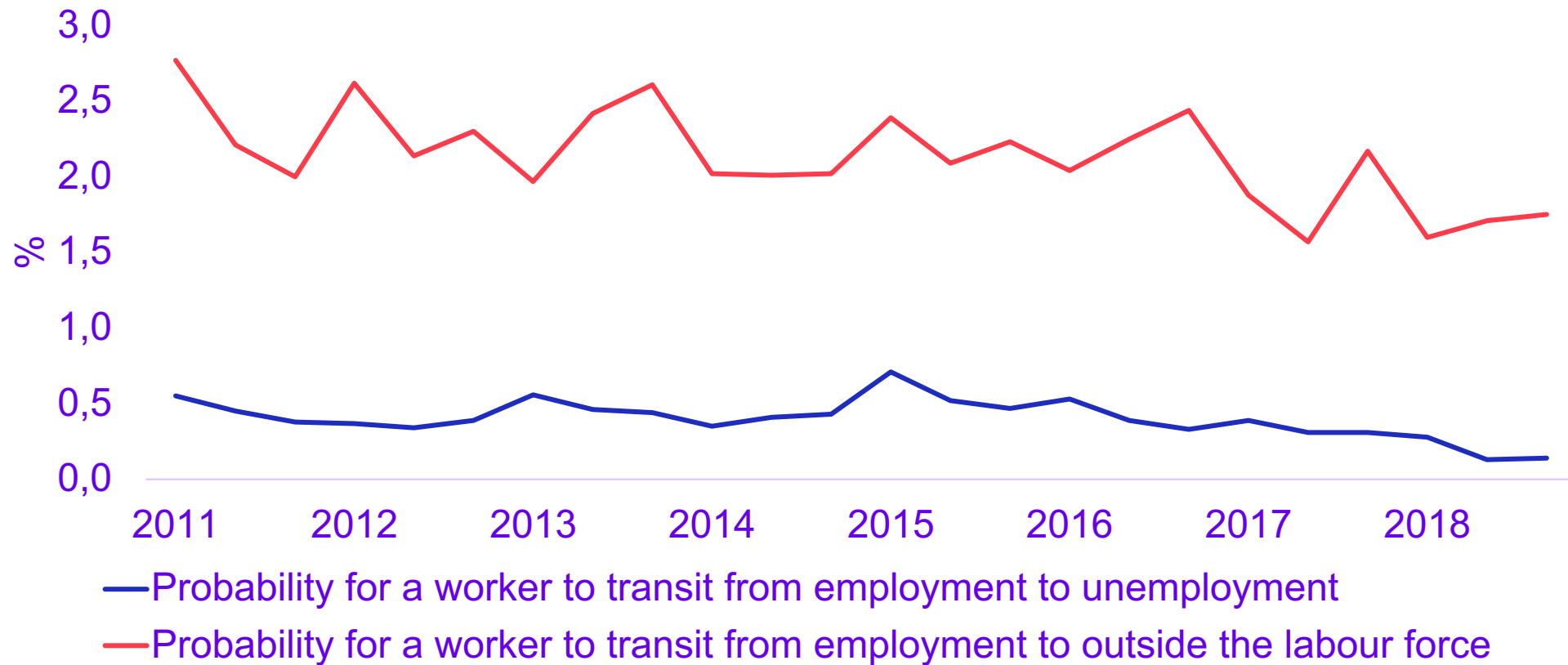
—— Probability for a worker to transit from employment to unemployment

—— Probability for a worker to transit from employment to outside the labour force

Transitions by labour force status

Quarterly transition probabilities for a worker to move into employment (%)
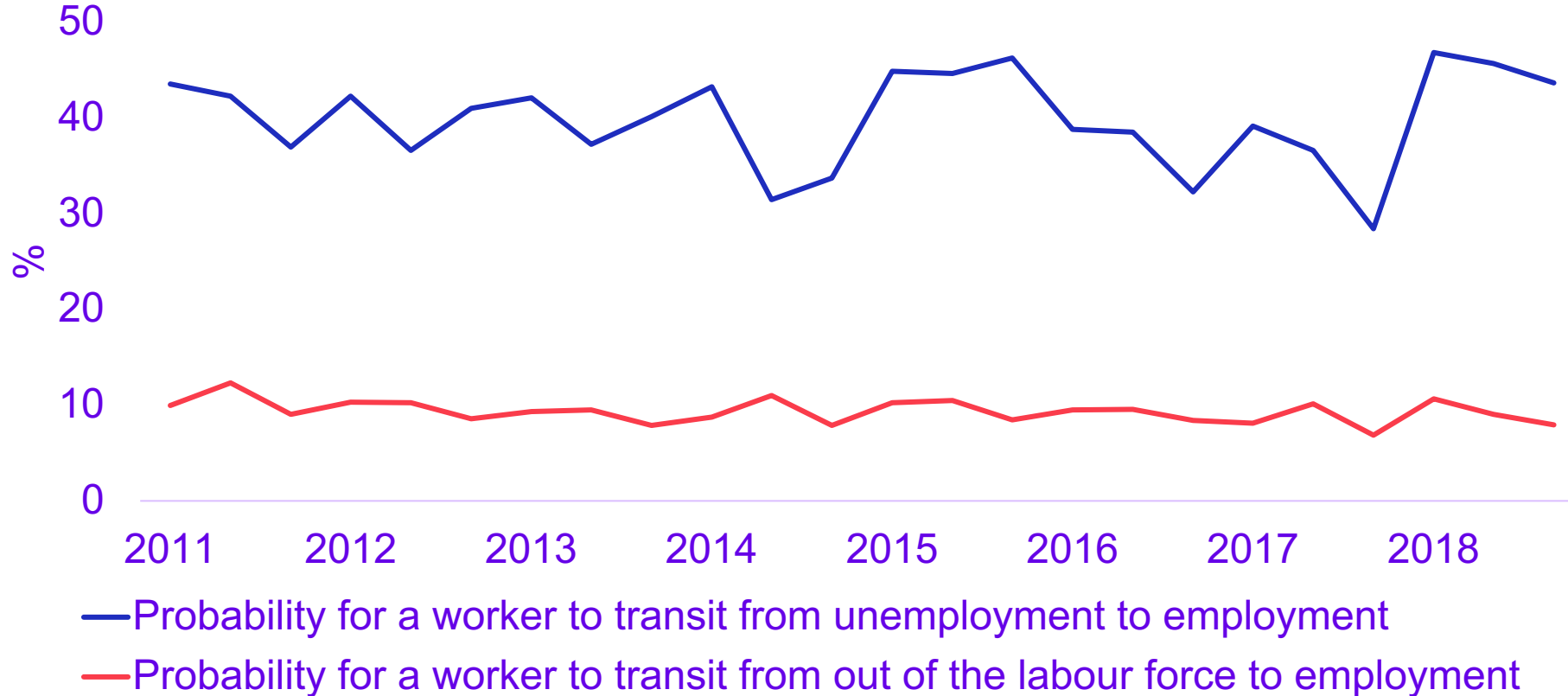
—— Probability for a worker to transit from unemployment to employment

—— Probability for a worker to transit from out of the labour force to employment

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Transitions between formal employment, informal employment and non-employment

Quarterly transition probability for a worker to change status in the next quarter (%)
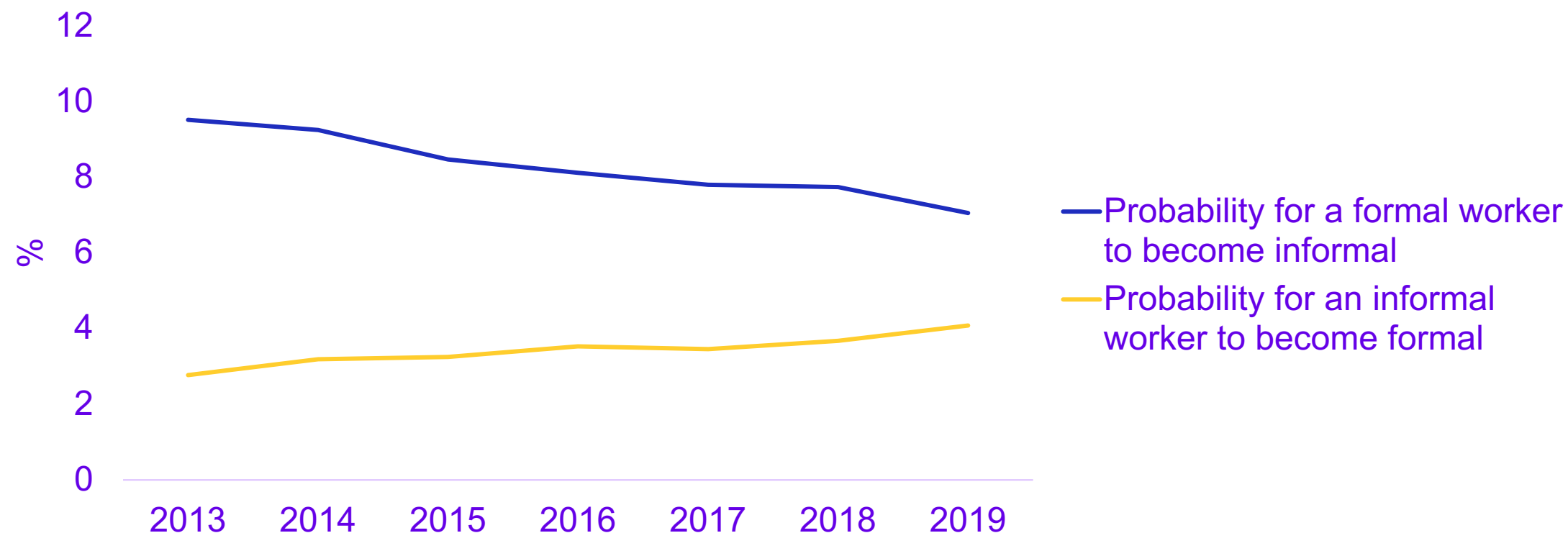
Probability for a formal worker to become informal

Probability for an informal worker to become formal

Transitions between formal employment, informal employment and non-employment

Quarterly transition probabilities by level of educational attainment, 2019
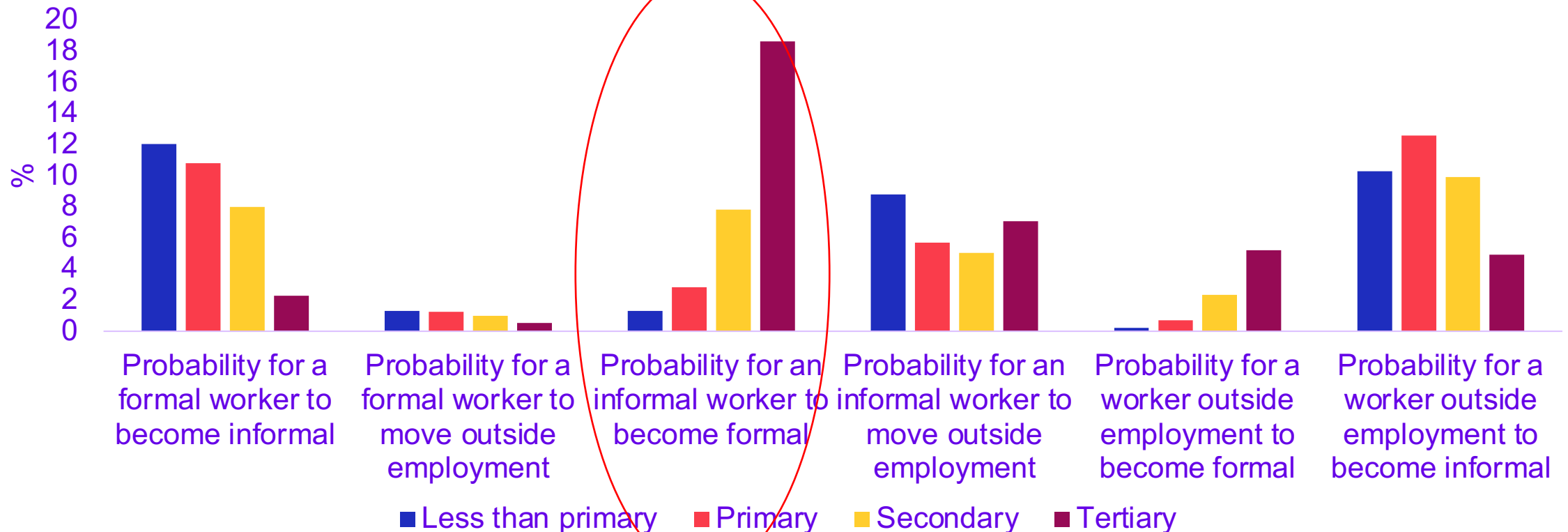
Less than primary   ■ Primary   ■ Secondary   ■ Tertiary

Advancing social justice, promoting decent work

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Job-to-job transitions between sectors
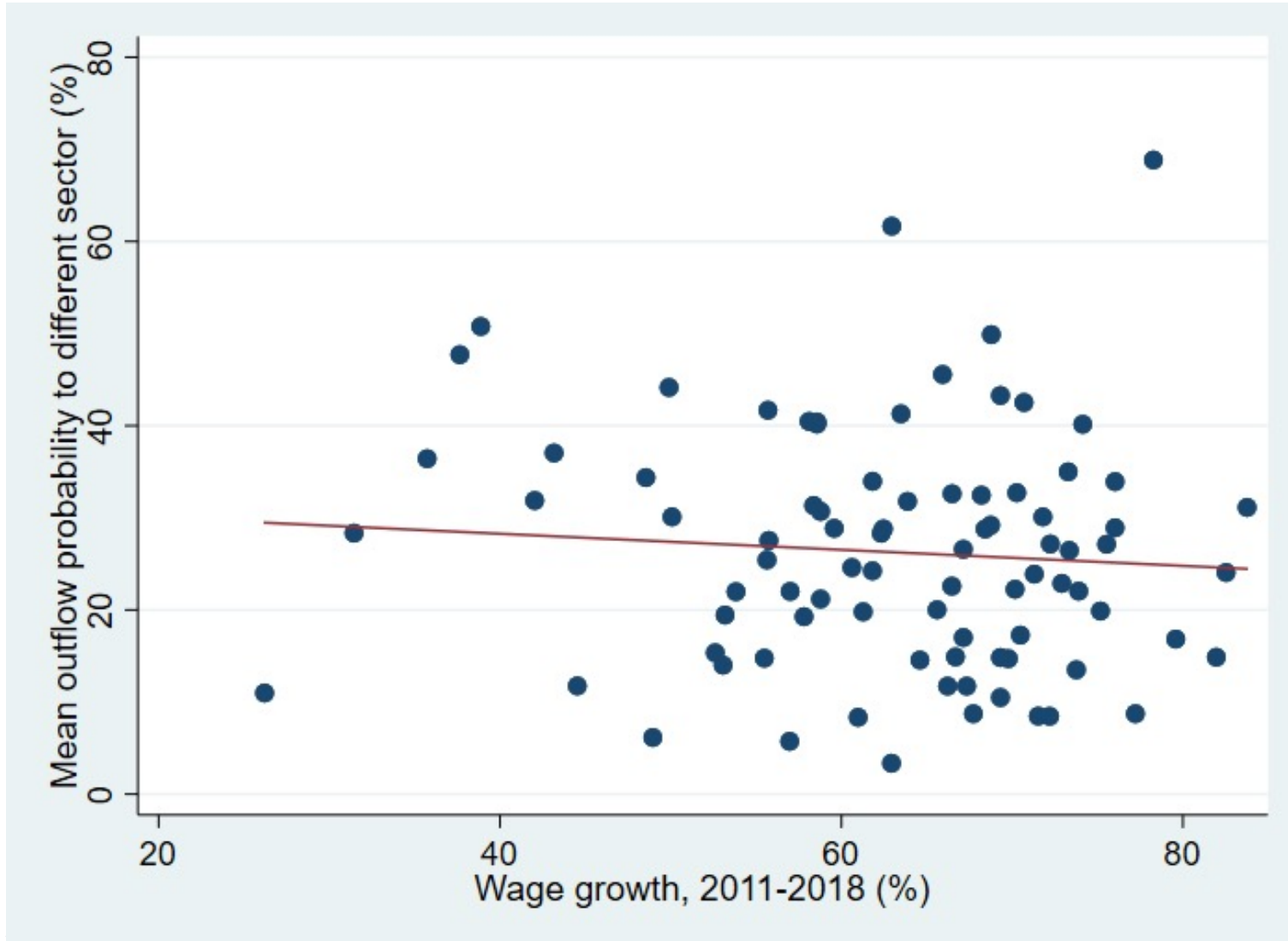
Quarterly transition probabilities (%), 2011-19 average

ISIC 2-digit code and description	Probability to transit to new sector	Probability to transit to non-employment
Total transitions	**13.3**	**2.7**
63 – Information service activities	68.8	3.9
70 – Activities of head offices; management consultancy activities	61.7	0.0
02 – Forestry and logging	50.8	3.2
33 – Repair and installation of machinery and equipment	49.9	1.9
…		
84 – Public administration and defense; compulsory social security	8.5	1.0
01 – Crop and animal production, hunting and related service activities	8.3	4.1
64 – Financial service activities, except insurance and pension funding	6.1	1.1
86 – Human health activities	5.7	0.9
85 – Education	3.4	1.1

org

Job-to-job transitions between sectors

Quarterly transition probabilities to another sector (%) and wage growth in 2011-18 (%)

The higher the wage growth, the lower the probability to move to another sector

▶ ilo.org

Job-to-job transitions between occupations

Quarterly transition probabilities (%), 2011-19 average

ISCO 2-digit code and description	Probability to transit to new occupation	Probability to transit to non-employment
Total transitions	**15.3**	**2.7**
4 – Clerical support workers	37.0	2.0
3 – Technicians and associate professionals	30.4	1.4
6 – Skilled agricultural, forestry and fishery workers	23.1	3.5
0 – Armed forces occupations	21.8	0.8
7 – Craft and related trades workers	17.8	1.9
1 – Managers	17.3	0.8
8 – Plant and machine operators, assemblers	15.2	1.4
9 – Elementary occupations	12.7	3.9
2 – Professionals	11.8	0.8
5 – Services and sales workers	10.4	2.5

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Job-to-job transitions between occupations
Quarterly transition probabilities (%), 2011-19 average

Current quarter's occupation	Next quarter's occupation											
(code – description)	1	2	3	4	5	6	7	8	9	0	X	NE
1 – Managers	**82**	7	2	3	2	0	1	0	1	0	0	1
2 – Professionals	1	**87**	5	2	2	0	1	0	0	0	0	1
3 – Technicians and associate professionals	1	11	**68**	5	6	0	4	2	2	0	0	1
4 – Clerical support workers	2	8	10	**61**	8	1	2	2	4	0	0	2
5 – Services and sales workers	0	1	1	1	**87**	1	1	1	5	0	0	2
6 – Skilled agricultural, forestry, fishery workers	0	0	0	0	2	**73**	2	0	19	0	0	4
7 – Craft and related trades workers	0	0	1	0	2	1	**80**	5	8	0	0	2
8 – Plant and machine operators, assemblers	0	0	1	1	1	1	7	**83**	5	0	0	1
9 – Elementary occupations	0	0	0	0	2	5	3	1	**83**	0	0	4
0 – Armed forces occupations	1	8	3	3	5	0	1	1	1	**77**	0	1
X – Not elsewhere classified	4	12	15	8	1	6	15	6	14	0	**0**	17
17NE – Not employed	0	0	0	0	2	1	1	1	5	0	0	**89**

Conclusion

Conclusion

▶ Estimates of labour market transitions can be produced by countries that run labour force surveys with a rotating panel design

▶ Very often, the panel dimension of labour force survey data is not being exploited

▶ Estimates provide plenty of entry points for future research

➢ Do we see an impact of COVID-19 on transitions?

➢ Do workers get stuck in certain low-paid sectors/occupations? What are these sectors/occupations? What are the characteristic of these workers?

➢ Can we provide some micro-level information on structural transformation?

➢ …

Thank you

▶ Contact: viegelahn@ilo.org

International Labour Organization
▶ ILO Working Paper

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