SKILLS MISMATCH IN ETF PARTNER COUNTRIES

Cross country report (forthcoming, 2022)

Summary of preliminary findings regarding skills mismatch in Jordan[1]

Introduction

Skills mismatch is a fundamental concept for analysis of education relevance, labour market functioning and overall human capital development. Policy implications of skills mismatches are of paramount importance in the ETF Partner Countries as most of them are exposed to deep education-employment imbalances, inherent in a changing socio-economic context. The ETF launched in 2020 a study initiative for the calculation of incidence and typology of skills mismatches. The work covers selected countries from the South-Eastern Europe, Eastern Europe, Southern and Eastern Mediterranean and Central Asia.

The methodology used in this study is developed based on the ETF methodological note ETF (2012) another recent study on skills mismatches in ETF partner countries Kriechel and Vetter (2019), as well as other studies on skills mismatch by Flisi et al. (2014), Cedefop (2015), ILO (2014), the European Commission (2015) and Eurostat (2016).

There are two dimensions of skills mismatch taken into account in the study:

1. Vertical. Mismatch as a matter of skill/education level. In other words, a person may have the right skills for a specific task or occupation, but the level of the skill is lower than what would usually be required for the specific occupation or task. This is usually referred to as vertical mismatch, or over- and under-education and/or over- and under-skilling. Vertical skills mismatch can be of two types concerning either education (qualifications) or skills. While qualifications are usually the only measure available in labour force surveys, it could be misleading to use them as proxies for skills. Not always is a mismatch in education reflected in a mismatch in skills, or a mismatch in skills reflected in a mismatch in qualifications, as the JRC (2014) finds.
2. Horizontal mismatch. It occurs when the qualification level is sufficient, but the type or field of qualification does not adequately match. This is more common – and less problematic - if a person

[1] Please check out the following ETF webpage for further information on skills mismatch results (documents also available in Arabic) Cross country event on skills mismatch | ETF (europa.eu)

is working in a related field e.g., computer programmers, mathematicians, engineers, and more problematic if the fields of education and work differ significantly.

The approach we followed to calculate the indicators in this report differs from the previous studies as in most cases it directly involved the National Statistical Offices in the indicators construction, allowing them to learn how to analyse skills mismatch using the Labour Force Survey (LFS). Moreover, the indicators in this study are broken down by narrower categories e.g., are calculated for both VET and non-VET intermediate education, in order to provide policy insights on the effectiveness of vocational training qualifications. Another example of the innovations of this study is the calculation of the NEET rates both for several age groups and distinguishing the share of inactive NEET individuals from the share of the unemployed ones. Constructing the indicators for different groups of individuals allowed us to have more policy-informative results.

The following table provides an overview of the indicators used in this study to calculate skills mismatch. These indicators are based on Labour Force Survey data, which is widely available in all ETF partner countries.

MISMATCH INDICATORS: BRIEF DESCRIPTION

Indicator	Calculation / Description
Unemployment rates (context)	U/(E+U)
Ratios (context)	For example U/E, I/POP, E/POP, (U+I)/E...
Not in Employment, Education or Training rate	NEET/POP
Occupational mismatch (vertical mismatch)	The ratio of people with a given education level (ISCED) working at an inappropriate skill level (measured by the International Standard Classification of Occupations – ISCO) to all workers within that ISCED level
Horizontal Mismatch	Calculation of share of employed with horizontal mismatch: % not in occupations matched to field of studies;
Over-education, Under-education (Empirical method; following ILO recommendation)	Percentage with education level one at least one standard deviation above the mode of education in the occupation (group)
Coefficient of Variation (Optional)	Ratio of standard deviation to the mean, e.g., compares the distribution of skills within different groups in an attempt to determine the variation between the two distributions
Variance of relative (un)employment rates (Optional)	Calculation of the variance of the (un)employment rates of various groups shows how different are the (un)employment rates between these groups
Duration of unemployment by educational attainment levels (Optional)	The duration of unemployment by each level of educational attainment

Jordan – preliminary results of skills mismatch assessment

A number of skills mismatch indicators are calculated on the basis of Labour Force Survey 2016 (microdata available online). In the LFS Jordan (2016), field of education was harmonised based on country classifications, thereby it is recoded to ISCED-F classification.

1. Unemployment and inactivity

- In 2016 the inactivity rate in the country was higher than 50% and about one in eight people was unemployed
- Young people between 15 and 24 years old were more likely to be either unemployed or inactive
- Gender differences were stronger in the inactivity rate with women being almost as double as likely as men to be inactive
- The unemployment rate was higher among those with high education
- The inactivity rate was higher among those with either low or intermediate-VET education
- In 2016 the long-term unemployment rate was 5,3%, women were more likely than men to be long-term unemployed
- Youth between 15-24 years old was more likely to be unemployed than older people

UNEMPLOYMENT, INACTIVITY RATES BY GENDER, 2016

	Jordan
Unemployment rate (% of labour force)	
Total	12,5
Male	11,8
Female	16,1
Inactivity rate (% of population)	
Total	59,1
Male	36,5
Female	84,8

Notes: The population of reference is the one above 15 years old.
Source: Authors' calculation based on national LFS

UNEMPLOYMENT, INACTIVITY RATES BY AGE GROUP, 2016

	Jordan
Unemployment rate (% of labour force)	
15+	12,5
15-24	33,4
25-49	8,4

50+	3,6
Inactivity rate (% of population)	
15+	59,1
15-24	72,9
25-49	41,9
50+	82,7

Notes: The population of reference is the one above 15 years old.
Source: Authors' calculation based on national LFS

UNEMPLOYMENT, INACTIVITY RATES BY EDUCATION LEVEL, 201

Jordan	
Unemployment rate (% of labour force)	
Low	11,4
Medium-VET	8,0
Medium-GEN	11,6
High	21,0
Inactivity rate (% of population)	
Low	62,4
Medium-VET	62,2
Medium-GEN	19,4
High	37,7

Notes: The population of reference is the one above 15 years old..
Source: Authors' calculation based on national LFS

2. Youth not in employment, education or training

- In 2016 more than one third of youth between 15 and 29 years old was NEET
- Women were more than as double as likely as men to be NEET
- The NEET share is higher among those between 25 and 29 years old
- Among 15-29 years old the share of NEET among the inactive was higher than the share of NEET among the unemployed

NEET RATES BY GENDER, 2016

	Jordan
% of NEET (15-29 years old)	
Total	36,5
Male	22,8
Female	52,1
% of NEET (15-24 years old)	
Total	33,1
Male	24,6
Female	43,2
% of NEET (15-19 years old)	
Total	25,2
Male	22,5
Female	28,2
% of NEET (20-24 years old)	
Total	41,2
Male	26,7
Female	59,4

Source: Author´s calculation based on national LFSs

3. Occupational mismatch

- In 2016 the share of over-educated workers was as double as the share of under-educated workers
- The share of over-educated employees with upper-secondary education working in elementary occupations was higher than the share of employees with high education
- The share of over-educated employees with upper-secondary education was higher for women than men, while the opposite was true for employees with high education

OCCUPATIONAL MISMATCH BY GENDER, 2016

	Jordan
Employees with upper-secondary education working in elementary occupations*	
Total	10,5
Male	36,9
Female	8,9
Employees with tertiary education working in semi-skilled occupations**	
Total	8,3
Male	12,3
Female	1,9

Notes: Employees not in education; (*) % of all people with upper-secondary education; (**) % of all people with tertiary education.
Source: Authors' calculation based on national LFS

OCCUPATIONAL MISMATCH BY AGE GROUP, 2016

	Jordan
Employees with upper-secondary education working in elementary occupations*, 2019	
15+	10,5
15-24	9,2
25-49	10,7
50+	8,9
% of employees with tertiary education working in semi-skilled occupations, 2019**	
15+	8,3
15-24	10,2
25-49	8,6
50+	5,4

Notes: Employees not in education; (*) % of all people with upper-secondary education; (**) % of all people with tertiary education
Source. Authors' calculation based on national LFSs

4. Empirical method

- In 2016 the share of under-educated employees was higher than the share of over-educated employees
- The share of over-educated employees was higher among women than among men, while the opposite was true about the share of under-educated employees.

EMPIRICAL METHOD BY GENDER, 2016

	Jordan
% of over-educated employees	
Total	14,1
Male	8,3
Female	15,2
% of under-educated employees	
Total	7,3
Male	17,9
Female	5,2

Notes: Employees not in education. The threshold is the mode of education within the occupation defined according to ISCO-08 at the one digit level.

Source. Author´s calculation based on national LFS

EMPIRICAL METHOD BY AGE GROUP, 2016

	Jordan
% of over-educated employees	
15+	14,1
15-24	7,4
25-49	14,7
50+	18,3
% of under-educated employees	
15+	7,3
15-24	5,4
25-49	7,0
50+	11,8

Notes: Employees not in education; the threshold is the mode of education within the occupation defined according to ISCO-08 codes at the one digit level.

Source: Authors' calculation based on national LFSs.

5. Horizontal mismatch

- In 2016 the share of horizontally mismatched employees was higher for men than for women
- The indicator shows a lower share of mismatched employees among those with high education

HORIZONTAL MISMATCH BY GENDER, 2016

	Jordan
Total	86,2
Male	88,3
Female	77,6

Notes: Employees not in education.
Source: Authors' calculation based on national LFS.

HORIZONTAL MISMATCH BY AGE GROUP, 2016

	Jordan
% of employees with any level of education	
15+	86,2
20-34	85,7
25-49	86,3
% of employees with medium-GEN education	
15+	76,6
20-34	77,4
25-49	77,5
% of employees with medium-VET education	
15+	N/A
20-34	N/A
25-49	N/A
% of employees with tertiary education	
15+	53,5
20-34	50,4
25-49	54,6

Notes: Employees not in education.
Source: Authors' calculation based on national LFS.

Annex: Jordan (LFS survey, 2016)

Aggregated level	Country
	Jordan (national classification)
Low	Illiterate
	Read and write
	Primary
	Preparatory
	Lower secondary
Intermediate – non VET	Academic secondary
	Post-secondary or equivalent
Intermediate – VET	Professional/vocational
High	University
	High diploma
	Masters
	Phd