



International
Labour
Organization

Variable derivation guide

for ILO Model LFS questionnaire for PAPI

Job-type start (v4)

July 2020

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INTRODUCTION

This guide describes how the ILO model LFS questionnaire for PAPI (“Job type start”, v4) captures information to produce statistics on essential labour concepts (e.g. employed, unemployed, informal employment, etc.) and how the relevant derived variables should be computed to be in line with the latest standards adopted by the International Conference of Labour Statisticians (ICLS). The guide is limited to key derived variables that require use of several model LFS questions to be computed. Many other variables should be produced for dissemination as part of the core set of labour force statistics.

Detailed information on how to measure and compute each derived variable is provided following a step-by-step approach covering:

- A. **Basic international definition** as per the latest ICLS standards
- B. **Measurement strategy and question mapping** of all relevant survey questions and modules
- C. **Flow charts** showing the relevant question sequences and reference syntax
- D. **Basic syntax** to compute the derived variable in STATA

Following the modular approach of the ILO LFS model questionnaire, the guide makes reference to all core and additional modules as relevant. Users will need to adapt the syntax for the derivation of the key variables depending on the modules ultimately selected for national use. The step-by-step modular format facilitates this. For example, countries not including the module OPG (Own use production of others goods) will need to exclude this step when constructing the derived variable for “Own-use producers of goods”.

As illustration and to minimize ambiguity, the question mapping and flow charts (sections B and C) generally list more questions than may be ultimately used in the variable computation (section D). This is because the mapping and flow charts show all the questions (and modules) used by the survey to measure a given concept while the actual variable computation may only require use of a few final questions in the sequence to determine the appropriate treatment.

Some particular points of note about the derivations include:

- The derivations are in line with the latest ICLS standards, in particular Resolutions I of the 19th and 20th ICLS¹ and other relevant guidelines and standards.
- Where explicit standards or operational guidelines do not exist, the derivations are based on current ILO recommendations or derivations used by the ILO when processing country micro-data for global dissemination.
- The derivations are meant as model illustrations only. They are based on the assumption that all core questions within the sequence are included. In other words, it is assumed that no questions have been excluded other than those which have been specifically marked as optional in the corresponding model LFS questionnaire for PAPI.
- No specific guidance is provided on the treatment of missing values or DON'T KNOW answers in the core variables.
- Countries may wish to derive composite variables, such as an overall labour force status variable. The derivations indicated below can be adapted for that purpose.
- A basic syntax is provided in STATA following ILOs micro-data processing routines² which use a component approach that takes into account the different criteria specified in the international recommendations for computing selected variables or indicators. Additional code may need to be specified to take account of possible missing data in core variables, new response options introduced

¹ See: <https://ilostat.ilo.org/resources/methods/#standards>

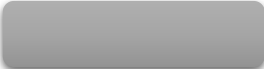
² See : https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_651746.pdf

at national level, additional checks using supplementary information captured in the survey, and other such national adaptations.

- The basic syntax may be adapted to other programming languages (R, SPSS, SAS, etc) as per national use. Special note should be taken of the appropriate positioning of parentheses to ensure the derivations are accurate.
- Users will almost certainly assign variable names other than the question numbers, in which case they should substitute in the variable names in place of the question numbers.
- Please note appropriate age limits will need to be identified and programmed to ensure derivations only reflect the working age population, defined as per the national context.

FLOW CHARTS KEY

The diagram below shows the different symbols used in the flow charts and their intended meaning. Users should refer to this key when interpreting the flow charts used in this guide.

	Initial condition(s)
	Variable / model question
	Value of the variable
	Decision point for optional modules or previous status / classification
	Module
	Target derived variable
	Previously derived variable
	Other ending status / classification

EMPLOYED PERSONS AND SELECTED JOB CHARACTERISTICS

Employed persons

A. International definition

The **employed** are all those persons of working age who, during a short reference period (*seven days or one week*), were engaged in any activity to produce goods or provide services in exchange for pay or to generate profit.

They comprise:

- *employed persons “at work”*, i.e. who worked in a job for at least one hour;
- *employed persons “not at work”* due to temporary absence from a job, or to working-time arrangements (such as shift work, flexitime and compensatory leave for overtime)

“*for pay or profit*” refers to work done in expectation of obtaining a remuneration in the form of wages or salaries for time worked or work done, or in the form of profits from the sale or exchange of goods and services. This includes remuneration in cash or in kind, whether paid directly to the person performing the work or indirectly to a household or family member (as can occur in family-run businesses).

The distinction between employment and own-use production of goods is based on the main intended destination of the production. Production of goods mainly intended for sale or exchange are included in employment.

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraph 27, 19th ICLS (2013).

Additional resources: Measuring employment in labour force surveys: Main findings from ILO LFS pilot studies: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_635732.pdf

B. Measurement strategy and question mapping

Measurement strategy	The ILO model LFS questionnaire based on the “Job-type start” approach uses a 3-part strategy to identify all persons employed in the reference period: • Part I: Persons employed who worked 1 or more hours in the reference week are identified first (Module ATW). • Part II: Persons with a job but absent from work in the reference period are identified next (Module ABS). • Part III: Lastly, a separate module (AGF) is used to identify persons working in agriculture or fishing on their own account and to establish the main intended destination of production. This last module is necessary in contexts where some part of the population is engaged in subsistence agriculture and/or fishing to separate persons in employment from own-use producers of goods.
Relevant modules	• Module ATW (Employed at work) • Module ABS (Temporary Absence) • Module AGF (Agricultural work and market orientation)
Relevant questions	• ATW_1, ATW_2, ATW_3 • ABS_1, ABS_2, ABS_2A, ABS_3, ABS_4 • AGF_1b, AGF_1a, AGF_2, AGF_2b, AGF_2c

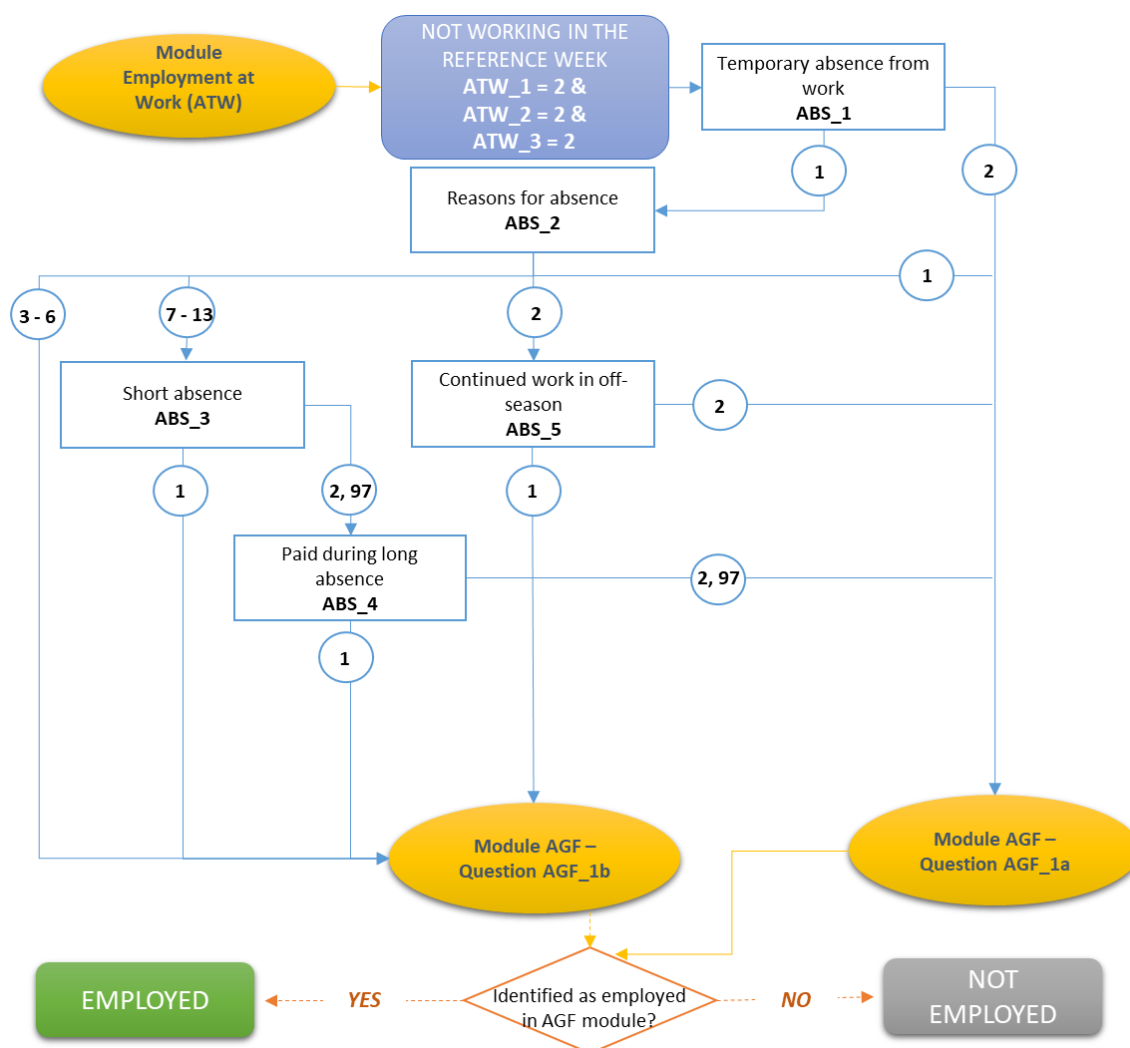
C. Flow charts and reference syntax

Part I: Module 2 (Employed at work)



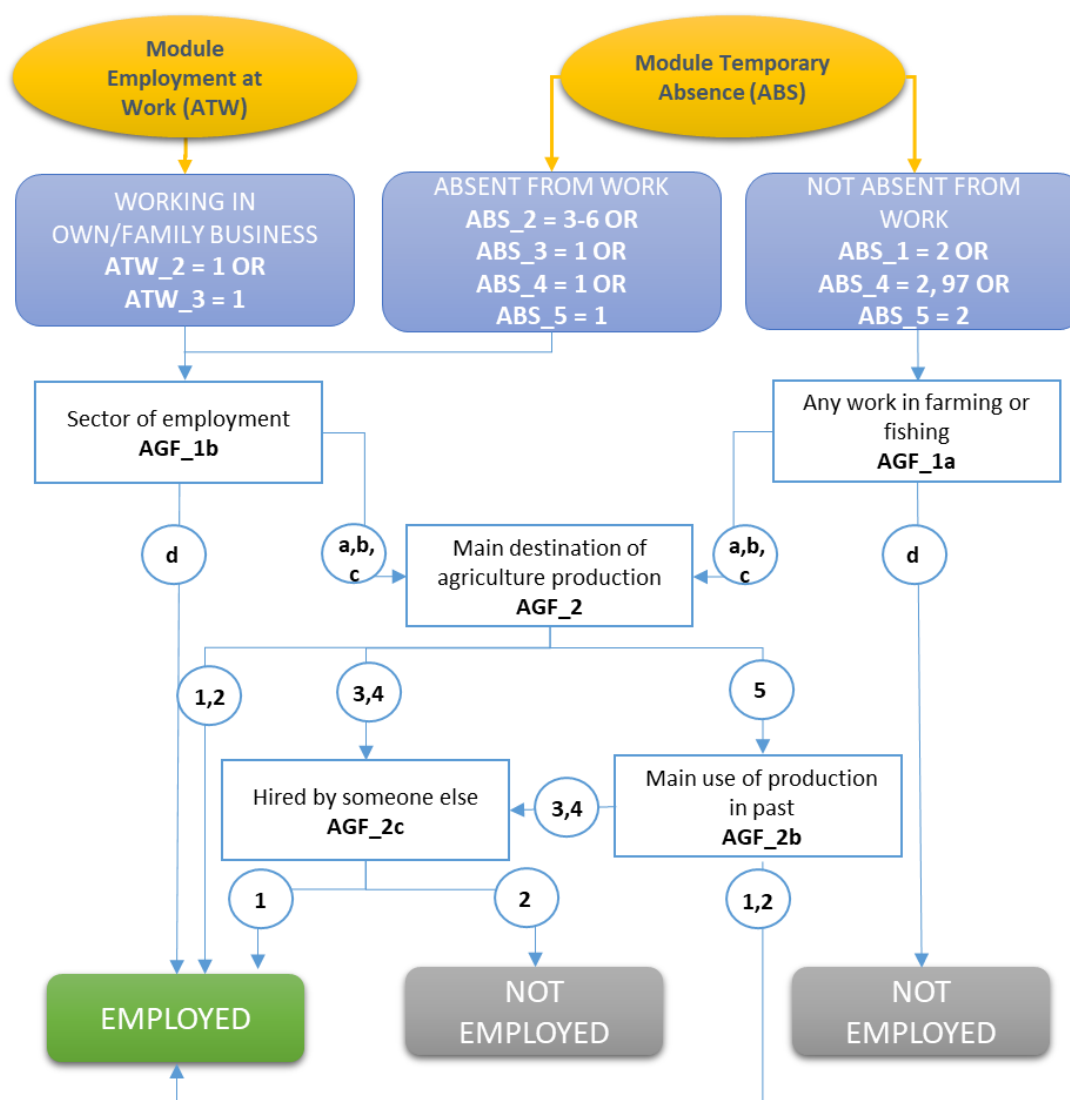
Reference Syntax (Module 2)	Status
IF (DEM_6 >= N AND (ATW_1=1))	EMPLOYED
IF (DEM_6>N AND (ATW_2=1 OR ATW_3=1))	GO TO MODULE AGF
IF (DEM_6 >= N AND (ATW_1=2 AND ATW_2=2 AND ATW_3=2))	GO TO MODULE ABS

Part II: Module 3 (Temporary Absence)



Reference Syntax (Module 3)	Status
IF (ABS_1=1 AND ((ABS_2=2 AND ABS_2A=1) OR (ABS_2=3,4,5,6) OR (ABS_2=7,8,9,10,11,12,13 AND (ABS_3=1 OR (ABS_3=2,97 AND ABS_4=1))))))	GO TO MODULE AGF QUESTION AGF_1b
IF (ABS_1=2 OR (ABS_1=1 AND (ABS_2=1 OR (ABS_2=2 AND ABS_2A =2) OR (ABS_2=7,8,9,10,11,12,13 AND ABS_3=2,97 AND ABS_4=2,97))))	GO TO MODULE AGF QUESTION AGF_1a

Part III: Module 4 (Agricultural Work and Market Orientation)



Reference Syntax (module 4)	Status
IF (AGF_1b=d OR ((AGF_1b=a,b,c OR AGF_1a=a,b,c) AND (AGF_2=1,2 OR (AGF_2=3,4 AND AGF_2c=1) OR (AGF_2=5 AND (AGF_2b=1,2 OR (AGF_2b=3,4 AND AGF_2c=1))))))	EMPLOYED
IF (AGF_1a=d OR ((AGF_1b=a,b,c OR AGF_1a=a,b,c) AND ((AGF_2=3,4 AND AGF_2c=2) OR (AGF_2=5 AND AGF_2b=3,4 AND AGF_2c=2))))	NOT EMPLOYED

D. Basic syntax for Variable Derivation in Stata

```

*****
/* Working age population as per national context */
/*NOTE: the minimum age limit N is to be defined based on national practice*/
*****

gen ilo_wap=.
    replace ilo_wap=1 if ilo_age>=N & ilo_age!=.
    label define label_ilo_wap 1 "1 - Working-age Population"
    label value ilo_wap label_ilo_wap
    label var ilo_wap "Working-age population"

*****

/*Persons employed*/
/* To be used when MODULE AGF is implemented*/
/* The generated derived variable uses two categories (1,2) to identify the employed*/
*****

gen ilo_lfs_emp=.
    replace ilo_lfs_emp=1 if ATW_1==1 & ilo_wap==1
    replace ilo_lfs_emp=1 if (ATW_2==1 | ATW_3==1) & (AGF_1b_d==1 | inlist(AGF_2,1,2) |
inlist(AGF_2b,1,2) | AGF_2c==1) & ilo_wap==1
    replace ilo_lfs_emp=1 if (AGF_1a_a==1 | AGF_1a_b==1 | AGF_1a_c==1) & (inlist(AGF_2,1,2) |
inlist(AGF_2b,1,2) | AGF_2c==1) & ilo_wap==1
    replace ilo_lfs_emp=2 if (ABS_1==1 & (inlist(ABS_2,3,4,5,6) | ABS_3==1 | ABS_4==1 | ABS_2_a==1)) &
(AGF_1b_d==1 | inlist(AGF_2,1,2) | inlist(AGF_2b,1,2) | AGF_2c==1) & ilo_wap==1
    replace ilo_lfs_emp=3 if (AGF_1a_d==1 | AGF_2c==2) & ilo_wap==1
    lab def lfs_emp_lab 1 "Employed, at work" 2 "Employed, on temporary absence" 3 "Not employed"
    lab values ilo_lfs_emp lfs_emp_lab
    lab var ilo_lfs_emp "Employment"

```

Status in employment

A. International definitions

Status in employment refers to the type of work relationship a person has in his/her job, taking into account the kind of economic risk and degree of authority that the person experiences in their job. Status in employment may be specified with reference to the main, second job or any previous job.

The latest international classification of status in employment (ICSE-18) is contained in *Resolution I concerning statistics on work relationships*, adopted by the 20th ICLS in 2010PA.

The categories of ICSE-18 may be arranged in alternative hierarchies depending on user needs:

ICSE-18-A (by type of authority)	ICSE-18-R (by type of risk)
<i>Independent workers</i> A. Employers 11. Employers in corporations 12. Employers in household market units B. Independent workers without employees 21. Owner-operators of corporations without employees 22. Own-account workers in household market units without employees <i>Dependent workers</i> C. Dependent contractors 30. Dependent contractors D. Employees 41. Permanent employees 42. Fixed-term employees 43. Short-term and casual employees 44. Paid apprentices, trainees and interns E. Contributing family workers 51. Contributing family workers	<i>Workers in employment for profit</i> F. Independent workers in household market units 12. Employers in household market units 22. Own-account workers in household market units without employees C. Dependent contractors 30. Dependent contractors E. Contributing family workers 51. Contributing family workers <i>Workers in employment for pay</i> G. Owner-operators of corporations 11. Employers in corporations 21. Owner-operators of corporations without employees D. Employees 41. Permanent employees 42. Fixed-term employees 43. Short-term and casual employees 44. Paid apprentices, trainees and interns

Definitions for each main status in employment category, and relevant detailed categories, are presented separately, with their corresponding flow charts and reference syntax. The basic syntax in STATA to derive all main and detailed categories of ICSE-18 is presented last.

Source: Resolution I concerning statistics of work, relationships, 20th ICLS (2018), available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_647343.pdf

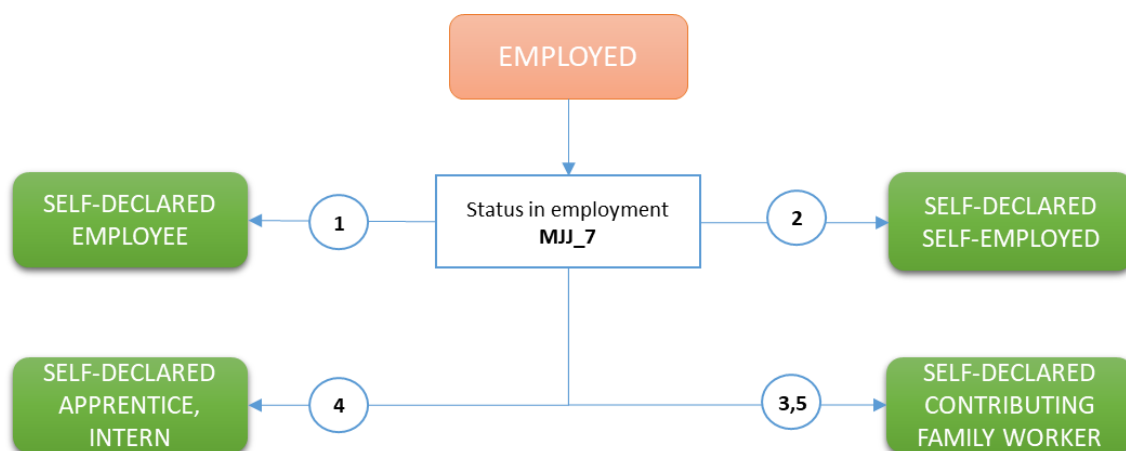
Additional resources: Data collection guidelines for ICSE-18, available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_63603SRH.pdf

A. Measurement strategy and Question mapping

<i>Measurement strategy</i>	The ILO model LFS questionnaire uses a multi-step strategy to establish the status in employment of persons with reference to their main or second jobs. The derivations presented here make reference to the main job only: • The first step is to establish the status in employment based on self-declaration by the respondent (MJJ_7). • Once the self-declared status in employment is captured, respondents are directed to different sets of questions that serve to confirm or re-assign a corrected, new or more detailed status in employment, in line with ICSE-18, based on concrete criteria that allow more detailed characterization of the employment relationship.
<i>Relevant modules</i>	• Module MJJ (Characteristics of Main Job)
<i>Relevant questions</i>	• MJJ_7 (Status in employment as self-declared (ICSE-93)) • MJJ_8 (Decision-making in family business) • MJJ_9 (hiring of employees) • MJJ_10a (Type of pay) • MJJ_10l (Responsibility for income tax deduction) • MJJ_11b (Business incorporation) • MJJ_9a, MJJ_9b (Independent price setting) • MJJ_10g, MJJ_10h (Contract type and duration) • MJJ_10m (Social security contribution by employer) • MJJ_10i, MJJ_10e (Type of temporary agreement, minimum guaranteed hours)

Status in Employment as self-declared

B. Flow chart and reference syntax



Reference Syntax (MJJ module)	Status
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=1)	SELF-DECLARED EMPLOYEE
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=2)	SELF-DECLARED SELF- EMPLOYED
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=4)	SELF-DECLARED APPRENTICE, INTERN
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=3,5)	SELF-DECLARED CONTRIBUTING FAMILY WORKER

Employers (ICSE-18-A)

A. International definition

Employers are independent workers who own the economic unit in which they work and control its activities on their own account or in partnership with others, and in this capacity regularly employ one or more employees. The economic unit which they own and control may be incorporated or unincorporated, and its employees may be formal, informal, working full-time, part-time, or on a casual basis.

ICSE-18-A identifies the following two detailed categories of **employers**:

11. Employers in corporations are independent workers who, on their own account or in partnership with others, own and control the activities of an incorporated enterprise that regularly employs one or more employees.

Corporations (or incorporated enterprises) are economic units set up for purposes of engaging in market production, capable of generating profit or other financial gain for their owners, and recognized by law as separate legal entities from their owners who enjoy limited liability.

12. Employers in household market enterprises are independent workers who, on their own account or in partnership with others, own and control the activities of an unincorporated market enterprise that regularly employs one or more employees.

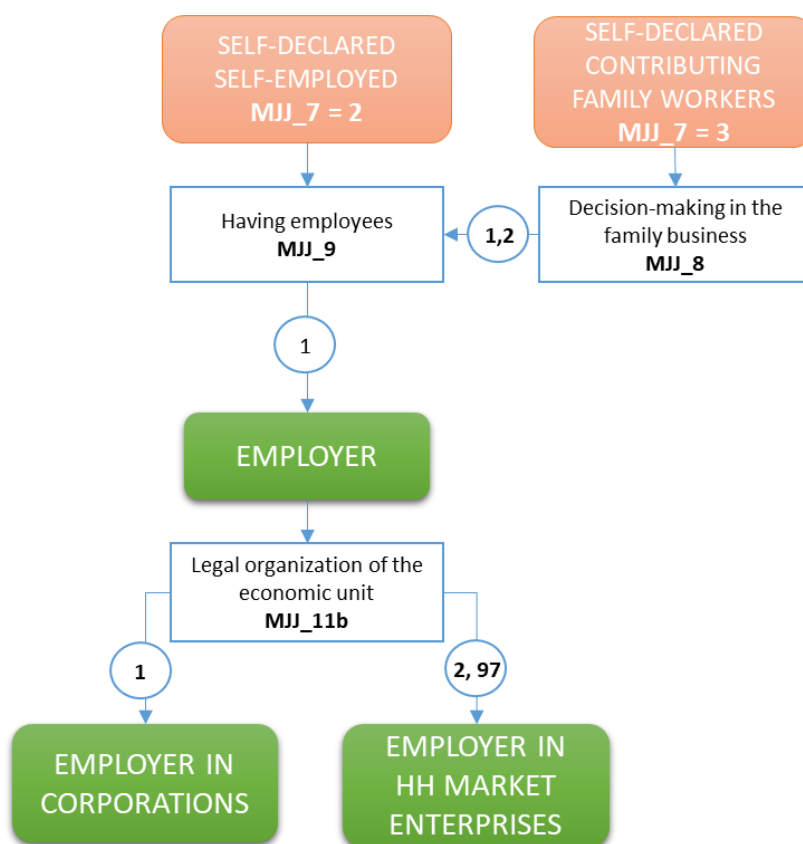
Unincorporated market enterprises (including quasi-corporations) are economic units set up for purposes of engaging in market production, capable of generating profit or other financial gain for their owners, not recognized by law as separate legal entities from their owners.

The two detailed categories of employers may also be arranged in different major groups as part of ICSE-18-R, based on the type of economic risk experienced (see pages 29-30).

To compute derived variables for **employers** and its detailed groups using the ILO model questionnaire, the following two groups need to be considered:

- *Self-declared self-employed persons* who hire one or more paid employees on a regular basis
- *Self-declared contributing family workers* who are regularly involved in making decisions about the running of the family business, and the business hire one or more paid employees on a regular basis

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYED AND (SELF-DECLARED SELF-EMPLOYED OR (MJJ_7=3 AND MJJ_8=1,2)) AND MJJ_9=1)	EMPLOYER
IF (CLASSIFIED AS EMPLOYER AND MJJ_11B=1)	EMPLOYER IN CORPORATIONS
IF (CLASSIFIED AS EMPLOYER AND MJJ_11B=2,97)	EMPLOYER IN UNINCORPORATED MARKET UNITS

Independent workers without employees (ICSE-18-A)

A. International definition

Independent workers without employees are independent workers who operate an economic unit, alone or in partnership with others, that does not employ any employees on a regular basis. The economic unit which they operate may be incorporated or unincorporated.

ICSE-18-A identifies the following two detailed categories of **independent workers without employees**:

21. Owner-operators of corporations without employees are independent workers who hold a job as owner-operator of an incorporated enterprise in which they do not regularly employ any employees.

Corporations (or incorporated enterprises) are economic units set up for purposes of engaging in market production, capable of generating profit or other financial gain for their owners, and recognized by law as separate legal entities from their owners who enjoy limited liability.

22. Own-account workers in household market enterprises without employees are independent workers who operate an unincorporated market enterprise, and do not regularly employ any employees.

Unincorporated market enterprises (including quasi-corporations) are economic units set up for purposes of engaging in market production, capable of generating profit or other financial gain for their owners, that are not recognized by law as separate legal entities from their owners.

The two detailed categories of independent workers without employees may also be arranged in different major groups as part of ICSE-18-R, based on the type of economic risk experienced (see pages 29-30).

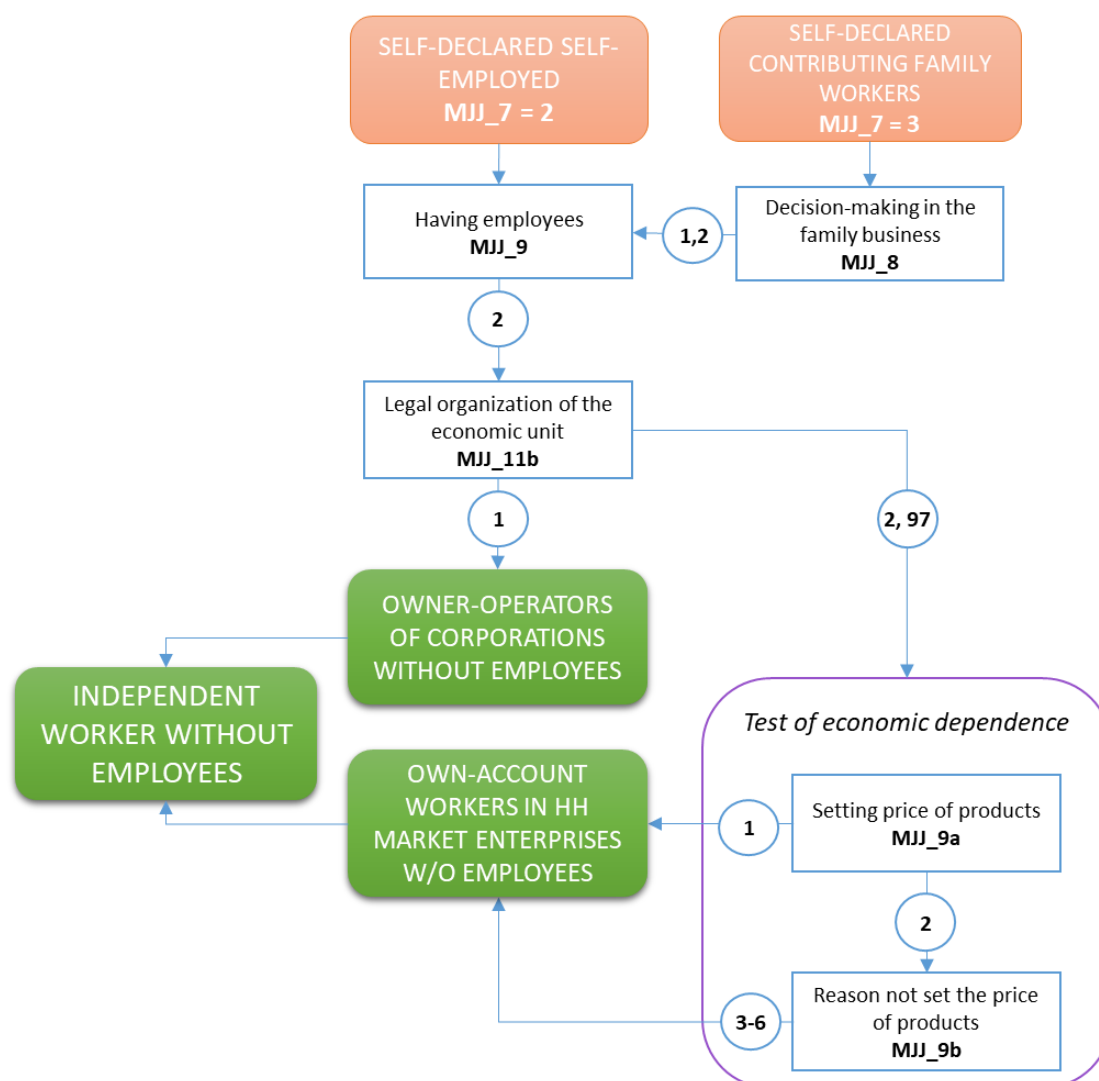
To compute derived variables for **independent workers without employees** using the ILO model questionnaire, the following two groups need to be considered:

- *Self-declared self-employed persons* who do not hire any paid employees on a regular basis
- *Self-declared contributing family workers* who are regularly involved in making decisions about the running of the family business, and the business does not hire any paid employees on a regular basis

In addition, to distinguish this group from **dependent contractors**, the ILO model questionnaire uses “control over price-setting” as a test to assess the existence of economic dependence. Additional criteria may be used to assess economic dependence, in line with the international standards concerning statistics on work relationships (20th ICLS, 2018).

This operationalization may be subject to revisions as evidence on the identification of dependent contractors is accumulated at the international level, based on country practice.

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYED AND (SELF-DECLARED SELF-EMPLOYED OR (MJJ_7=3 AND MJJ_8=1,2)) AND MJJ_9=2 AND MJJ_11B=1)	OWNER-OPERATORS OF CORPORATIONS WITHOUT EMPLOYEES
IF (CLASSIFIED AS EMPLOYED AND (SELF-DECLARED SELF-EMPLOYED OR (MJJ_7=3 AND MJJ_8=1,2)) AND MJJ_9=2 AND MJJ_11B=2,97 AND (MJJ_9A=1 OR (MJJ_11B=2,97 AND MJJ_9A=2 AND MJJ_9B=3,4,5,6)))	OWN-ACCOUNT WORKERS IN HOUSEHOLD MARKET ENTERPRISES WITHOUT EMPLOYEES
IF (CLASSIFIED AS OWNER-OPERATORS OF CORPORATIONS WITHOUT EMPLOYEES OR CLASSIFIED AS OWN-ACCOUNT WORKERS IN HOUSEHOLD MARKET ENTERPRISES WITHOUT EMPLOYEES)	INDEPENDENT WORKER WITHOUT EMPLOYEES

Dependent contractors (ICSE-18-A; ICSE-18-R)

A. International definition

Dependent contractors are workers who have contractual arrangements of a commercial nature to provide goods or services for or through another economic unit on which they are dependent for the organization and execution of the work, income or access to the market. They include:

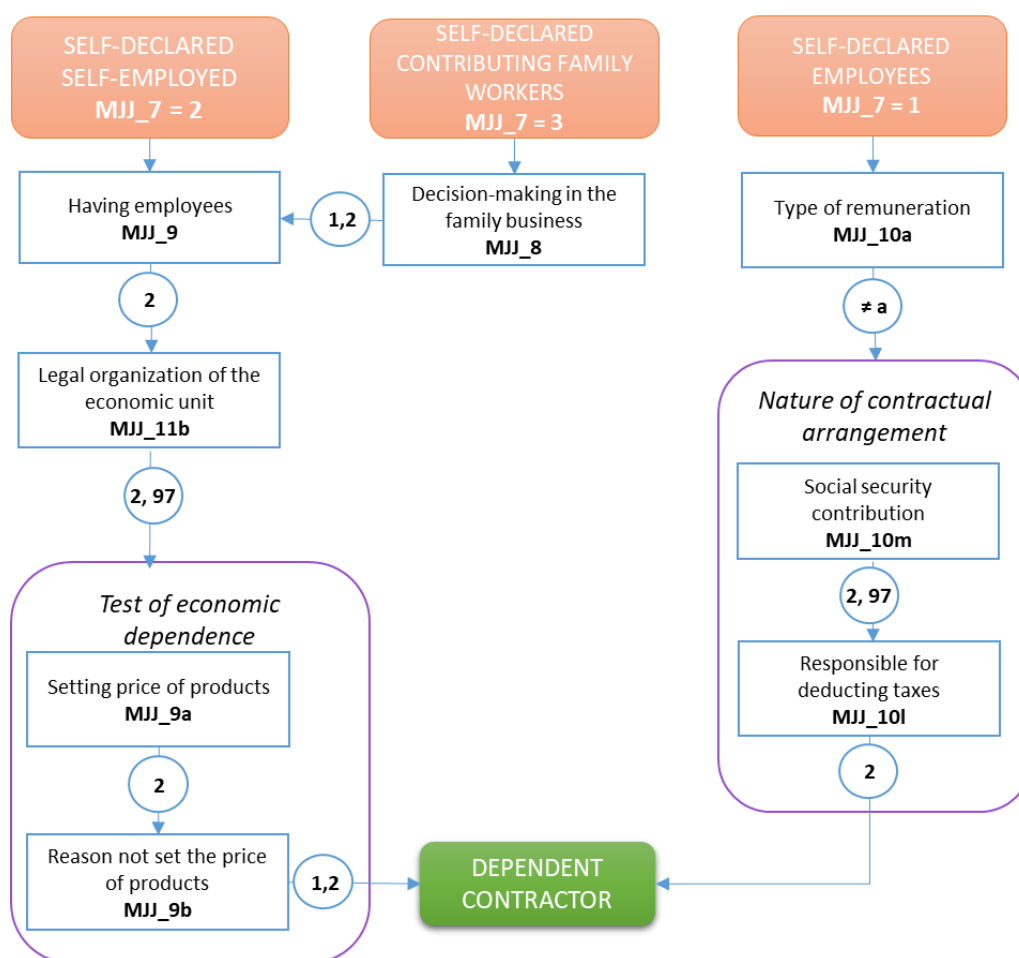
- Workers who provide their labour to others but have contractual arrangements corresponding to those of self-employment.
- Workers who have committed significant financial or material assets to an unincorporated enterprise which they own and operate, but do not have full control or authority over their work or the activities of the enterprise.

To compute a derived variable for **dependent contractors** using the ILO model questionnaire, the following groups need to be considered:

- *Self-declared employees* who do not receive a wage or salary and show evidence of having an agreement of a commercial nature. The existence of a commercial agreement is assessed on the basis of their answers to questions on “social security contribution by employer” and “responsibility for tax deduction.”
- *Self-declared self-employed workers* who operate an unincorporated market enterprise in which they do not regularly hire any employees and who show evidence of economic dependency on another unit. The existence of economic dependence is assessed on the basis of their answers to a question on “control over price-setting.”
- *Self-declared contributing family workers* regularly involved in making decisions about the family business, who operate an unincorporated market enterprise in which they do not regularly hire any employees and who show evidence of economic dependency on another unit. The existence of economic dependency is assessed on the basis of their answers to a question on “control over price-setting.”

This operationalization may be subject to revisions as evidence on the identification of **dependent contractors** is accumulated at the international level, based on country practice.

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYED AND ((SELF-DECLARED SELF-EMPLOYED OR (MJJ_7=3 AND MJJ_8=1,2)) AND MJJ_9=2 AND MJJ_11B=2,97 AND MJJ_9A=2 AND MJJ_9B=1,2) OR (MJJ_7=1 AND MJJ_10A≠a AND MJJ_10M=2,97 AND MJJ_10L=2))	DEPENDENT CONTRACTOR

Employees (ICSE-18-A; ICSE-18-R)

A. International definition

Employees are workers employed for pay, on a formal or informal basis, who do not hold controlling ownership of the economic unit in which they are employed. They are remunerated in cash or in kind in return for time worked, or, in some cases, for each task or piece of work done or for services provided including sales (by the piece or commission).

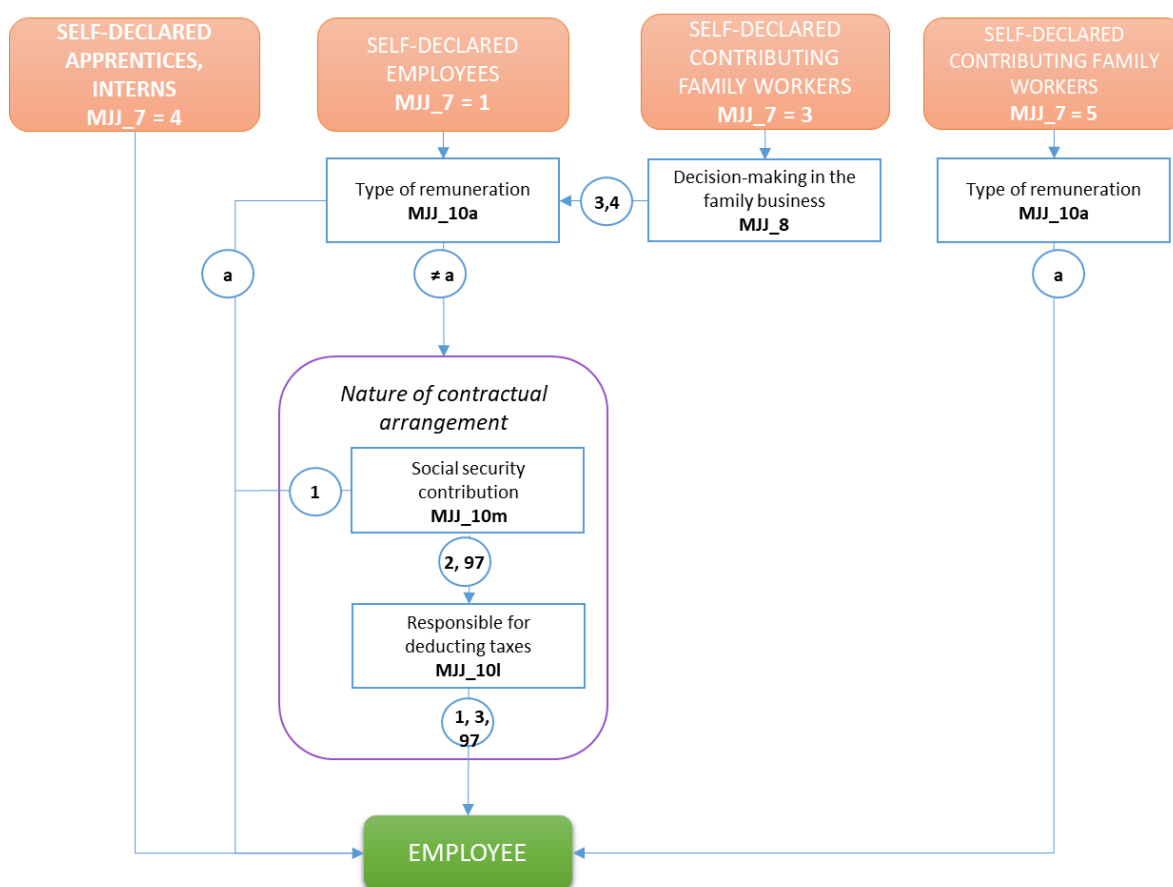
To compute a derived variable for **employees** using the ILO model questionnaire, the following groups need to be considered:

- *Self-declared employees* who receive a wage or salary
- *Self-declared employees* who do not receive a wage or salary, but report another type of payment, and show evidence of having a contract/agreement of employment (vis-à-vis a commercial agreement)
- *Self-declared contributing family workers* who are not regularly involved in making decisions about the running of the family business, and who receive a wage or salary for this work
- *Self-declared contributing family workers* who help with the paid job of a family member and receive a wage or salary for this work

To distinguish this group from **dependent contractors**, the ILO model questionnaire uses answers to questions on “social security contribution by employer” and “responsibility for tax deduction” as evidence of the existence of a contract/agreement of employment.

This operationalization may be subject to revisions as evidence on the identification of **dependent contractors** is accumulated at the international level, based on country practice.

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYED AND ((MJJ_7=1,4,5 OR (MJJ_7=3 AND MJJ_8=3,4)) AND MJJ_10A=a) OR ((SELF-DECLARED EMPLOYEE OR (MJJ_7=3 AND MJJ_8=3,4)) AND MJJ_10A≠a AND (MJJ_10M=1 OR (MJJ_10M=2,97 AND MJJ_10L=1,3,97))))	EMPLOYEE

Permanent employees (ICSE-18-A; ICSE-18-R)

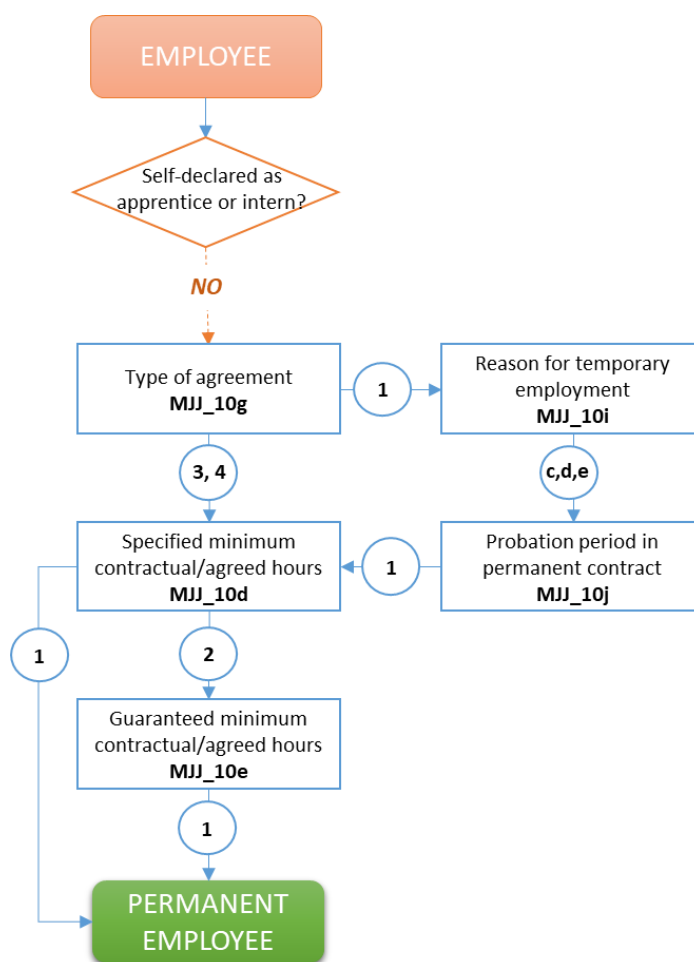
A. International definition

41. Permanent employees (or with contracts without limit of time) are employees who are employed on an ongoing or indefinite basis and guaranteed a minimum number of hours or amount of work. It includes recently appointed employees with jobs that are subject to an initial trial period but who are expected to continue indefinitely.

To compute a derived variable for **permanent employees** using the ILO model questionnaire, the following groups should be considered when the contract or agreement guarantees the worker a minimum amount of work, or hours of work:

- *Employees with permanent contracts or until retirement age*
- *Employees with open-ended agreements, whether written or verbal, without a specified end-date*

B. Flow charts and reference syntax



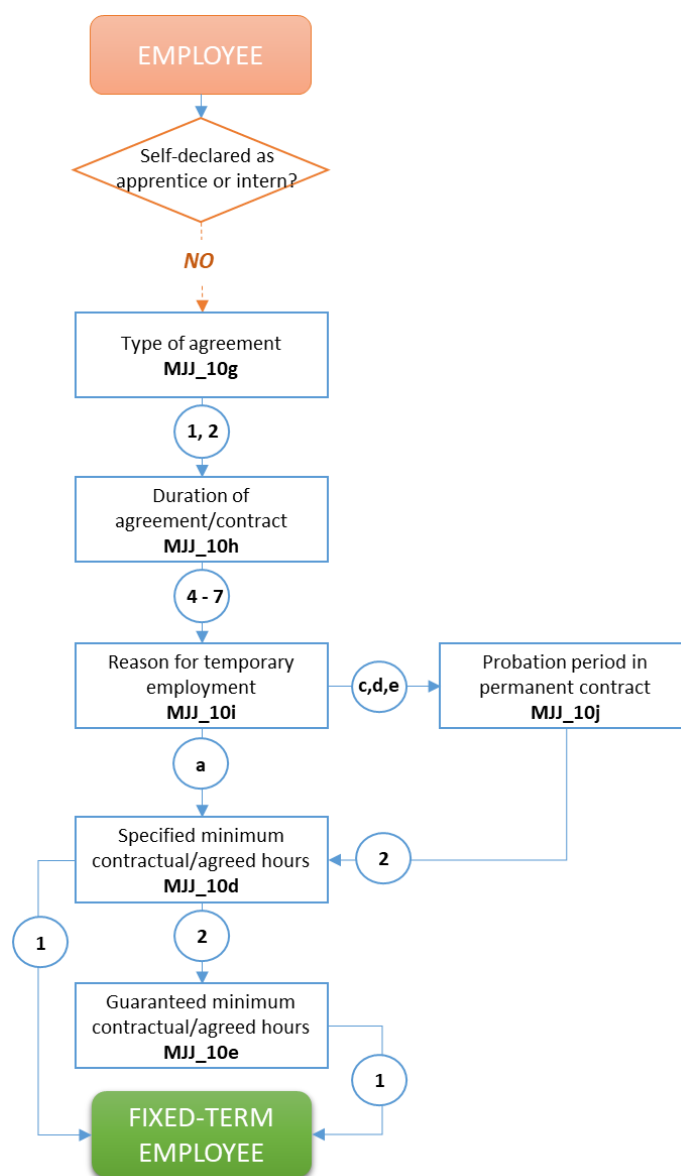
Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYEE AND MJJ_7≠4 AND ((MJJ_10G=1 AND MJJ_10I=c,d,e AND MJJ_10J=1) OR MJJ_10G=3,4) AND (MJJ_10D=1 OR (MJJ_10D=2 AND MJJ_10E =1)))	PERMANENT EMPLOYEE

Fixed-term employees (ICSE-18-A; ICSE-18-R)

A. International definition

42. Fixed-term employees are employees who are employed on a time-limited basis for a period of three months or more and who are guaranteed a minimum number of hours or amount of work.

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYEE AND MJJ_7≠4 AND MJJ_10G=1,2 AND MJJ_10H=4,5,6,7 AND ((MJJ_10I=c,d,e AND MJJ_10J=2) OR MJJ_10I=a) AND (MJJ_10D=1 OR (MJJ_10D=2 AND MJJ_10E =1)))	FIXED-TERM EMPLOYEE

Short-term and casual employees (ICSE-18A; ICSE-18-R)

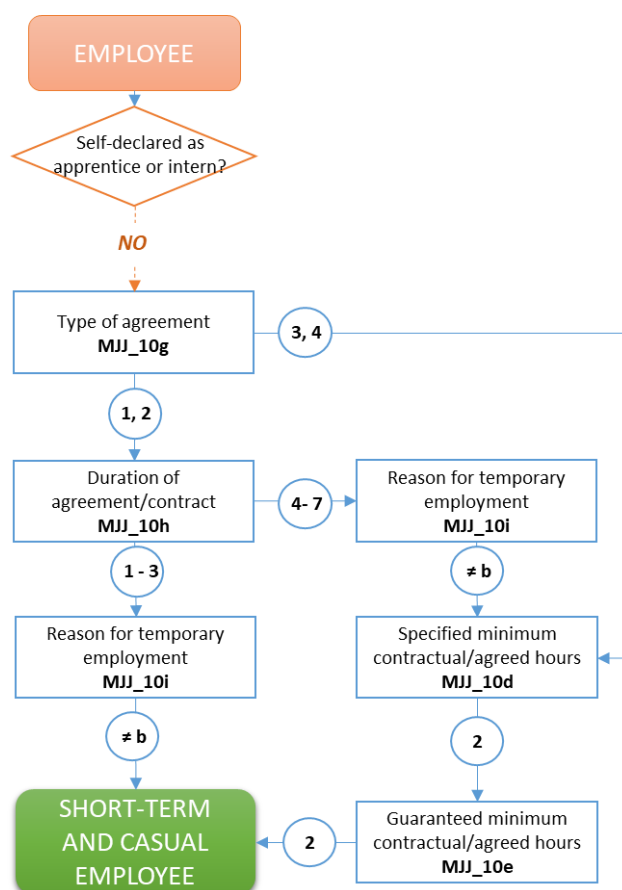
A. International definition

43. Short-term and casual employees are employees with short-term employment arrangements and/or without a guaranteed minimum number of hours or amount of work per pay period. It excludes paid apprentices, interns, trainees with short-term employment arrangements.

To compute a derived variable for **short-term and casual employees** using the ILO model questionnaire, the following groups need to be considered:

- *Short-term employees*: who are guaranteed a minimum number of hours or amount of work, engaged on a time-limited basis with an expected duration of less than three months
- *Casual and intermittent employees*: who do not have a guaranteed minimum number of hours or amount of work

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYEE AND MJJ_7≠4 AND (MJJ_10G=1,2 AND MJJ_10H=1,2,3 AND MJJ_10I≠b) OR ((MJJ_10G=1,2 AND MJJ_10H=4,5,6,7 AND MJJ_10I≠b) OR MJJ_10G=3,4) AND MJJ_10D=2 AND MJJ_10E =2))	SHORT-TERM AND CASUAL EMPLOYEES

Paid apprentices, trainees and interns (ICSE-18-A; ICSE-18-R)

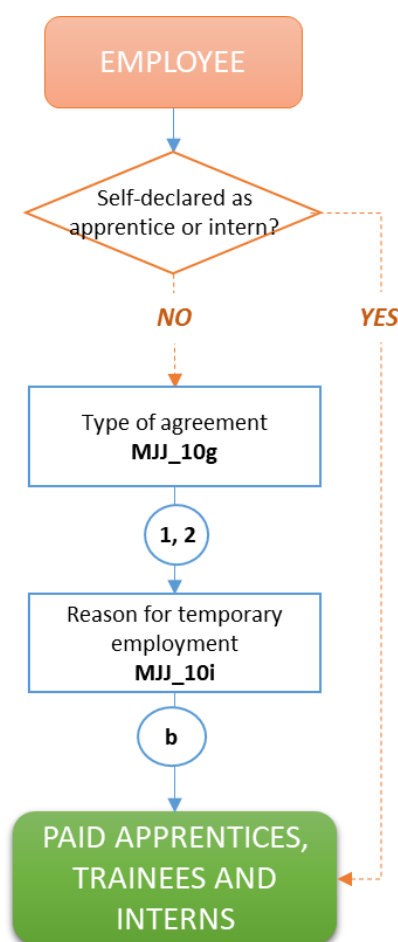
A. International definition

44. Paid apprentices, trainees and interns are employees who work for pay in an economic unit in order to acquire workplace experience or skills in a trade or profession. They may be formal or informal and may or may not receive a certification for the training experience.

To compute a derived variable for **short-term and casual employees** using the ILO model questionnaire, the following groups need to be considered:

- *Self-declared paid apprentices, interns or trainees*
- *Self-declared employees with temporary contracts covering a period of training*

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYEE AND MJJ_7=4 OR (MJJ_7≠4 AND MJJ_10G=1,2 AND MJJ_10I=b))	PAID APPRENTICES, TRAINEES AND INTERNS

Contributing family workers (ICSE-18-A; ICSE-18-R)

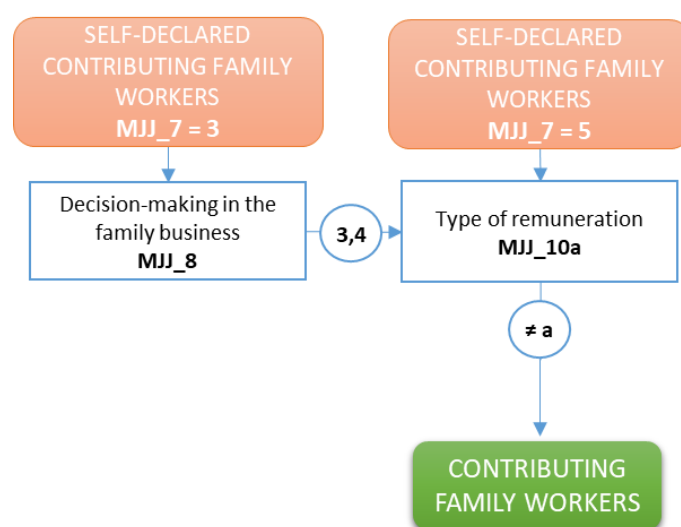
A. International definition

51. Contributing family workers are workers who help, without receiving regular pay, in a job or market oriented enterprise held or operated by a household or family member.

To compute a derived variable for **contributing family workers** using the ILO model questionnaire, the following groups need to be considered:

- *Self-declared helpers in household or family businesses* who are not regularly involved in making decisions about the running of the business and do not receive a wage or salary for this work
- *Self-declared helpers in paid jobs held by a household or family member* who do not receive a wage or salary for this work

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYED AND (MJJ_7=5 OR (MJJ_7=3 AND MJJ_8=3,4)) AND MJJ_10A≠a)	CONTRIBUTING FAMILY WORKER

Independent workers in household market enterprises (ICSE-18-R)

A. International definition

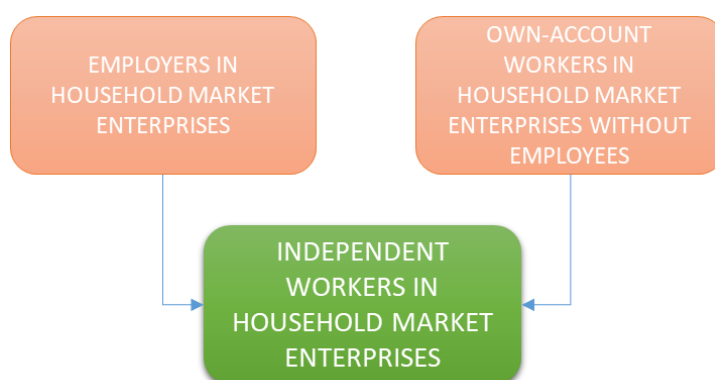
F. Independent workers in household market enterprises are workers who operate an unincorporated household market enterprise, alone or with one or more partners or contributing family workers.

Unincorporated market enterprises are economic units set up for purposes of engaging in market production, capable of generating profit or other financial gain for their owners, that are not recognized by law as separate legal entities from their owners.

To compute a derived variable for **independent workers in household market enterprises** using the ILO model questionnaire, the following two groups need to be considered:

- *Employers in household market enterprises* (see page 16)
- *Own-account workers in household market enterprises* (see page 18)

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYERS IN HOUSEHOLD MARKET ENTERPRISES OR CLASSIFIED AS OWN-ACCOUNT WORKERS IN HOUSEHOLD MARKET ENTERPRISES WITHOUT EMPLOYEES)	INDEPENDENT WORKERS IN HOUSEHOLD MARKET ENTERPRISES

Owner-operators of corporations (ICSE-18-R)

A. International definition

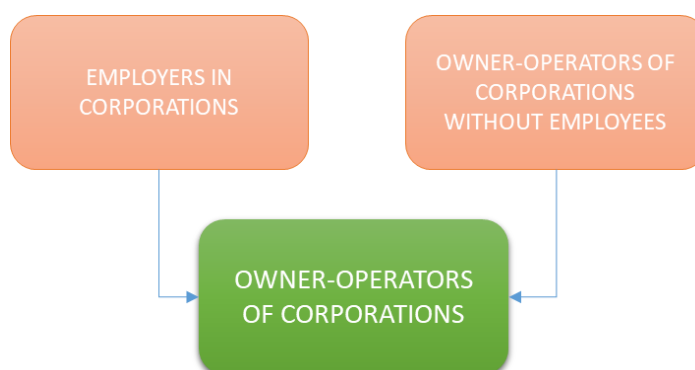
G. Owner-operators of corporations are workers who hold a job in an incorporated enterprise in which they hold controlling ownership of the enterprise, alone or together with one or more partners and/or with family members.

Incorporated enterprises (or corporations) are economic units set up for purposes of engaging in market production, capable of generating profit or other financial gain for their owners, and recognized by law as separate legal entities from their owners who enjoy limited liability.

To compute a derived variable for **Owner-operators of corporations** using the ILO model questionnaire, the following two groups need to be considered:

- *Employers in corporations* (see page 16)
- *Owner-operators of corporations without employees* (see page 18)

B. Flow charts and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYERS IN CORPORATIONS OR OWNER-OPERATORS OF CORPORATIONS WITHOUT EMPLOYEES)	OWNER-OPERATORS OF CORPORATIONS

D. Basic syntax for Variable Derivation in Stata

```

*****
/* Status in employment in main job based on self-declaration (ICSE 93) */
*****

gen status_self_declared=.
    replace status_self_declared =1 if inlist(MJJ_7,1,4) & inlist(ilo_lfs_emp,1,2)
    replace status_self_declared =2 if MJJ_7==2 & inlist(ilo_lfs_emp,1,2)
    replace status_self_declared =3 if inlist(MJJ_7,3,5) & inlist(ilo_lfs_emp,1,2)
    label def label_status_self_declared 1 "1 – Self-declared employees" 2 "2 – Self-declared self-
employed" 3 "3 – Self-declared contributing family workers"
    label val status_self_declared label_status_self_declared
    label var status_self_declared "Status self-declared - Main job"

*****

/* Status in employment in main job (ICSE 18A) – Main categories */
/*Generates a single derived variable for the 5 main categories of ICSE-18-A*/
*****

gen ilo_job1_ste_mc_icse18A=.
/* Employers*/
    replace ilo_job1_ste_mc_icse18A=1 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==1) &
inlist(ilo_lfs_emp,1,2)
/* Independent workers without employees */
    replace ilo_job1_ste_mc_icse18A=2 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
MJJ_11b==1) & inlist(ilo_lfs_emp,1,2)
    replace ilo_job1_ste_mc_icse18A=2 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
inlist(1MJJ_11b,2,97) & (MJJ_9a==1 | inrange(MJJ_9b,3,6))) & inlist(ilo_lfs_emp,1,2)
/* Dependent contractors */
    replace ilo_job1_ste_mc_icse18A=3 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
inlist(MJJ_11b,2,97) & inlist(MJJ_9b,1,2)) & inlist(ilo_lfs_emp,1,2)
    replace ilo_job1_ste_mc_icse18A=3 if (MJJ_7==1 & MJJ_10a_a!=1 & inlist(MJJ_10m,2,97) & MJJ_10l=2) &
inlist(ilo_lfs_emp,1,2)
/* Employees */
    replace ilo_job1_ste_mc_icse18A=4 if ((inlist(MJJ_7,1,4,5) | (MJJ_7==3 & inlist(MJJ_8,3,4))) &
MJJ_10a_a==1) & inlist(ilo_lfs_emp,1,2)
    replace ilo_job1_ste_mc_icse18A=4 if ((inlist(MJJ_7,1,4 | (MJJ_7==3 & inlist(MJJ_8,3,4))) & MJJ_10a_a!=1)
& (MJJ_10m==1 | (inlist(MJJ_10m,2,97) & inlist(MJJ_10l,1,3,97)))) & inlist(ilo_lfs_emp,1,2)
/* Contributing family workers */
    replace ilo_job1_ste_mc_icse18A=5 if ((MJJ_7==5 | (MJJ_7==3 & inlist(MJJ_8,3,4))) & MJJ_10a_a!=1 &
(MJJ_10a_b==1 | MJJ_10a_c==1 | MJJ_10a_d==1 | MJJ_10a_e==1 | MJJ_10a_f==1 | MJJ_10a_g==1 |
MJJ_10a_h==1 | MJJ_10a_i==1)) & inlist(ilo_lfs_emp,1,2)
    replace ilo_job1_ste_mc_icse18A=6 if ilo_job1_ste_mc_icse18=. & inlist(ilo_lfs_emp,1,2)
    label def label_ilo_ste_mc_icse18A 1 "1 - Employers" 2 "2 - Independent workers without employees" 3
"3 - Dependent contractors" 4 "4 - Employees" 5 "5 - Contributing family workers" 6 "X - Workers not
classifiable by status"
    label val ilo_job1_ste_mc_icse18A label_ilo_ste_mc_icse18A
    label var ilo_job1_ste_mc_icse18A "Status in employment (ICSE 18A) - Main categories"

*****

```

```

/* Detailed status in employment in main job as per ICSE 18-A */
/*Generates a single derived variable for the 10 detailed categories of ICSE-18-A*/
*****
gen ilo_job1_ste_icse18A=.
/* Employers in corporations (ICSE-18A) */
  replace ilo_job1_ste_icse18A=1 if ilo_job1_ste_mc_icse18A==1 & MJJ_11b==1
/* Employers in household market enterprises (ICSE-18A) */
  replace ilo_job1_ste_icse18A=2 if ilo_job1_ste_mc_icse18A==1 & inlist(MJJ_11b,2,97)
/* Owner-operators of corporations without employees (ICSE-18A) */
  replace ilo_job1_ste_icse18A=3 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
MJJ_11b==1) & inlist(ilo_lfs_emp,1,2)
/* Own-account workers in household market enterprises without employees (ICSE-18A) */
  replace ilo_job1_ste_icse18A=4 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
inlist(MJJ_11b,2,97) & (MJJ_9a==1 | inrange(MJJ_9b,3,6))) & inlist(ilo_lfs_emp,1,2)
/* Dependent contractors (ICSE-18A) */
  replace ilo_job1_ste_icse18A=5 if ilo_job1_ste_mc_icse18A==3
/* Permanent employees (ICSE-18A) */
  replace ilo_job1_ste_icse18A=6 if ilo_job1_ste_mc_icse18A==4 & MJJ_7!=4 & ((inlist(MJJ_10g,3,4) |
(MJJ_10g==1 & (MJJ_10i_c==1 | MJJ_10i_d==1 | MJJ_10i_e==1))) & (MJJ_10d==1 | MJJ_10e ==1))
/* Fixed-term employees (ICSE-18A) */
  replace ilo_job1_ste_icse18A=7 if ilo_job1_ste_mc_icse18A==4 & MJJ_7!=4 & inlist(MJJ_10h,4,5,6,7) &
MJJ_10i_b!=1 & (MJJ_10i_a==1 | ((MJJ_10i_c==1 | MJJ_10i_d==1 | MJJ_10i_e==1) & MJJ_10j==2)) &
(MJJ_10d==1 | MJJ_10e ==1)
/* Short-term and casual employees (ICSE-18A) */
  replace ilo_job1_ste_icse18A=8 if ilo_job1_ste_mc_icse18A==4 & MJJ_7!=4 & ((inlist(MJJ_10h,1,2,3) &
MJJ_10i_b!=1) | (inlist(MJJ_10h,4,5,6,7) & MJJ_10i_b!=1 & MJJ_10e ==2) | (inlist(MJJ_10g,3,4) & MJJ_10e
==2))
/* Paid apprentices, trainees and interns (ICSE-18A) */
  replace ilo_job1_ste_icse18A=9 if ilo_job1_ste_mc_icse18A==4 & ((MJJ_7!=4 & MJJ_10i_b==1) |
MJJ_7==4)
/* Contributing family workers (ICSE-18A) */
  replace ilo_job1_ste_icse18A=10 if ilo_job1_ste_mc_icse18A==5
  replace ilo_job1_ste_icse18A=11 if ilo_job1_ste_icse18A=. & inlist(ilo_lfs_emp,1,2)
  label def label_ilo_ste_icse18A 1 "11 - Employers in corporations" 2 "12 - Employers in household market
enterprises" 3 "21 - Owner-operators of corporations without employees" 4 "22 - Own-account workers in
household market enterprises without employees" 5 "30 - Dependent contractors" 6 "41 - Permanent
employees" 7 "42 - Fixed-term employees" 8 "43 - Short-term and casual employees" 9 "44 - Paid
apprentices, trainees and interns" 10 "51 - Contributing family workers" 11 "X - Workers not classifiable by
status"
  label val ilo_job1_ste_icse18A label_ilo_ste_icse18A
  label var ilo_job1_ste_icse18A "Status in employment (ICSE 18A) - Main job"

```

```

*****
/* Status in employment in main job (ICSE 18R) – Main categories */
/*Generates a single derived variable for the 5 main categories of ICSE-18-R*/
*****

gen ilo_job1_ste_mc_icse18R=.
/* Independent workers in household market units */
    replace ilo_job1_ste_mc_icse18R=1 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & inlist(MJJ_11b,2,97)
    & (MJJ_9a==1 | inrange(MJJ_9b,3,6))) & inlist(ilo_lfs_emp,1,2)
/* Dependent contractors */
    replace ilo_job1_ste_mc_icse18R=2 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
inlist(MJJ_11b,2,97) & inlist(MJJ_9b,1,2)) & inlist(ilo_lfs_emp,1,2)
    replace ilo_job1_ste_mc_icse18R=3 if (MJJ_7==1 & MJJ_10a_a!=1 & inlist(MJJ_10m,2,97) & MJJ_10l=2) &
inlist(ilo_lfs_emp,1,2)
/* Contributing family workers */
    replace ilo_job1_ste_mc_icse18R=3 if ((MJJ_7==5 | (MJJ_7==3 & inlist(MJJ_8,3,4))) & MJJ_10a_a!=1 &
(MJJ_10a_b==1 | MJJ_10a_c==1 | MJJ_10a_d==1 | MJJ_10a_e==1 | MJJ_10a_f==1 | MJJ_10a_g==1 |
MJJ_10a_h==1 | MJJ_10a_i==1)) & inlist(ilo_lfs_emp,1,2)
/* Owner-operators of corporations */
    replace ilo_job1_ste_mc_icse18R=4 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==1 &
MJJ_11b==1) & inlist(ilo_lfs_emp,1,2)
    replace ilo_job1_ste_mc_icse18R=4 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
MJJ_11b==1) & inlist(ilo_lfs_emp,1,2)
/* Employees */
    replace ilo_job1_ste_mc_icse18R=5 if ((inlist(MJJ_7,1,4,5) | (MJJ_7==3 & inlist(MJJ_8,3,4))) &
MJJ_10a_a==1) & inlist(ilo_lfs_emp,1,2)
    replace ilo_job1_ste_mc_icse18R=4 if ((inlist(MJJ_7,1,4 | (MJJ_7==3 & inlist(MJJ_8,3,4))) & MJJ_10a_a!=1)
& (MJJ_10m==1 | inlist(MJJ_10m,2,97) & inlist(MJJ_10l,1,3,97))) & inlist(ilo_lfs_emp,1,2)
    label def label_ilo_ste_mc_icse18R 1 "1 - Independent workers in household market units " 2 "2 -
Dependent contractors " 3 "3 - Contributing family workers " 4 "4 - " 5 "5 - Employees " 6 "X - Workers not
classifiable by status"
    label val ilo_job1_ste_mc_icse18R label_ilo_ste_mc_icse18R
    label var ilo_job1_ste_mc_icse18R "Status in employment (ICSE 18R) - Main categories"

*****

/* Detailed status in employment in main job as per ICSE 18-R */
/*Generates a single derived variable for the 10 detailed categories of ICSE-18-R*/
*****

gen ilo_job1_ste_icse18R=.
/* Employers in household market units (ICSE-18R)*/
    replace ilo_job1_ste_icse18R=1 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==1 &
inlist(MJJ_11b,2,97)) & inlist(ilo_lfs_emp,1,2)
/* Own-account workers in household market units without employees (ICSE-18R) */
    replace ilo_job1_ste_icse18R=2 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
inlist(MJJ_11b,2,97) & (MJJ_9a==1 | inrange(MJJ_9b,3,6))) & inlist(ilo_lfs_emp,1,2)
/* Dependent contractors (ICSE-18R)*/
    replace ilo_job1_ste_icse18R=3 if ilo_job1_ste_mc_icse18R==2
/* Contributing family workers (ICSE-18R)*/
    replace ilo_job1_ste_icse18R=4 if ilo_job1_ste_mc_icse18R==3
/* Employers in corporations (ICSE-18R) */

```

```

    replace ilo_job1_ste_icse18R=5 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==1 &
MJJ_11b==1) & inlist(ilo_lfs_emp,1,2)
/* Owner-operators of corporations without employees (ICSE-18R) */
    replace ilo_job1_ste_icse18R=6 if ((MJJ_7==2 | (MJJ_7==3 & inlist(MJJ_8,1,2))) & MJJ_9==2 &
MJJ_11b==1) & inlist(ilo_lfs_emp,1,2)
/* Permanent employees (ICSE-18R) */
    replace ilo_job1_ste_icse18R=7 if ilo_job1_ste_mc_icse18R==5 & MJJ_7!=4 & ((inlist(MJJ_10g,3,4) |
(MJJ_10g==1 & (MJJ_10i_c==1 | MJJ_10i_d==1 | MJJ_10i_e==1))) & (MJJ_10d==1 | MJJ_10e ==1))
/* Fixed-term employees (ICSE-18R) */
    replace ilo_job1_ste_icse18R=8 if ilo_job1_ste_mc_icse18R==5 & MJJ_7!=4 & inlist(MJJ_10h,4,5,6,7) &
MJJ_10i_b!=1 & (MJJ_10i_a==1 | ((MJJ_10i_c==1 | MJJ_10i_d==1 | MJJ_10i_e==1) & MJJ_10j==2)) &
(MJJ_10d==1 | MJJ_10e ==1)
/* Short-term and casual employees (ICSE-18R) */
    replace ilo_job1_ste_icse18R=9 if ilo_job1_ste_mc_icse18R==5 & MJJ_7!=4 & ((inlist(MJJ_10h,1,2,3) &
MJJ_10i_b!=1) | (inlist(MJJ_10h,4,5,6,7) & MJJ_10i_b!=1 & MJJ_10e ==2) | (inlist(MJJ_10g,3,4) & MJJ_10e
==2 ))
/* Paid apprentices, trainees and interns (ICSE-18R) */
    replace ilo_job1_ste_icse18R=10 if ilo_job1_ste_mc_icse18R==5 & ((MJJ_7!=4 & MJJ_10i_b==1) |
MJJ_7==4)
    replace ilo_job1_ste_icse18R=11 if ilo_job1_ste_icse18R=. & inlist(ilo_lfs_emp,1,2)
11.  label def label_ilo_ste_icse18R 1 "13 - Employers in household market units " 2 "12 - Own-account
workers in household market units without employees" 3 "30 - Dependent contractors " 4 "51 -
Contributing family workers" 5 "12 - Employers in corporations" 6 "22 - Owner-operators of
corporations without employees" 7 "45 - Permanent employees" 8 "46 - Fixed-term employees" 9
"47 - Short-term and casual employees" 10 "48 - Paid apprentices, trainees and interns" 11 "X -
Workers not classifiable by status"
    label val ilo_job1_ste_icse18R label_ilo_ste_icse18R
    label var ilo_job1_ste_icse18R "Status in employment (ICSE 18R) - Main job"

*****
/* Type of authority */
/*Generates an aggregated derived variable of status in employment by type of authority*/
*****
gen ilo_job1_ste_icse18_authority=.
    replace ilo_job1_ste_icse18_authority=1 if inlist(ilo_job1_ste_icse18A,1,2,3,4)
    replace ilo_job1_ste_icse18_authority=2 if inlist(ilo_job1_ste_icse18A,5,6,7,8,9,10)
    replace ilo_job1_ste_icse18_authority=3 if inlist(ilo_job1_ste_icse18A,11)
    lab def ste_icse18_authority_lab 1 "1 - Independent workers" 2 "2 - Dependent workers" 3 "X -
Workers not classifiable by status"
    lab val ilo_job1_ste_icse18_authority ste_icse18_authority_lab
    label var ilo_job1_ste_icse18_authority "Status in employment according to type of authority (ICSE-18-
A) - Main job"

```

```

*****
/* Type of economic risk */
/*Generates an aggregated derived variable of status in employment by type of economic risk*/
*****

gen ilo_job1_ste_icse18_risk=.
  replace ilo_job1_ste_icse18_risk=1 if inlist(ilo_job1_ste_icse18R,1,2,3,4)
  replace ilo_job1_ste_icse18_risk=2 if inlist(ilo_job1_ste_icse18R,5,6,7,8,9,10)
  replace ilo_job1_ste_icse18_risk=3 if inlist(ilo_job1_ste_icse18R,11)
  lab def ste_icse18_risk_lab 1 "1 - Workers in employment for profit" 2 "2 - Workers in employment for
pay" 3 "X - Workers not classifiable by status"
  lab val ilo_job1_ste_icse18_risk ste_icse18_risk_lab
  label var ilo_job1_ste_icse18_risk "Status in employment according to type of economic risk (ICSE-
18-R) - Main job"

```

Institutional sector of employment

A. International definition

Institutional sector of employment refers to the kind of economic unit in which the person is employed, as defined by its legal organisation, principal functions, behaviour and objectives. It is a characteristic of the economic unit in which the person is employed and may thus be specified with respect to the main or second job.

The ILO model LFS questionnaire allows identification of persons employed in the following institutional sectors, as relevant for labour statistics:

- *Public sector*: Refers to all government institutions or state-owned enterprises (i.e. with ownership of 50% or more by the State), including government-controlled non-profit institutions.
- *Private sector*: Refers to incorporated and unincorporated market enterprises (i.e. economic units set up for purposes of engaging in market production, capable of generating profit or other financial gain for their owners)
- *Non-profit sector*: Refers to non-profit institutions that provide their services or products to households or the community at large (excluding government-controlled non-profit institutions).
- *Household sector*: Refers to private households as employers of domestic workers only
- *International institutions*: Refers to public institutions but owned by foreign or international institutions such as foreign embassies, etc.

These categories do not fully align with the institutional units as defined in the System of National Accounts (2008). The categories can nevertheless be mapped to the corresponding institutional units as per the SNA 2008. For this, additional information is needed to separately distinguish between corporations and unincorporated market enterprises. The latter group (unincorporated market enterprises –excluding quasi-corporations) is treated by the SNA 2008 as part of the Household sector.

Source: System of National Accounts 2008, available at:
<https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

B. Measurement strategy and Question mapping

Measurement strategy The ILO model LFS questionnaire captures the institutional sector of employment with respect of the main job using a strategy based on the self-declared status in employment of the worker:

- For persons working in their own business, the institutional sector of employment is inferred to be the private sector;
- For all other status in employment categories, an additional single question is asked to establish the institutional sector of employment.

This operationalization may be subject to revisions as evidence on the identification and treatment of **dependent contractors** is accumulated at the international level, based on country practice.

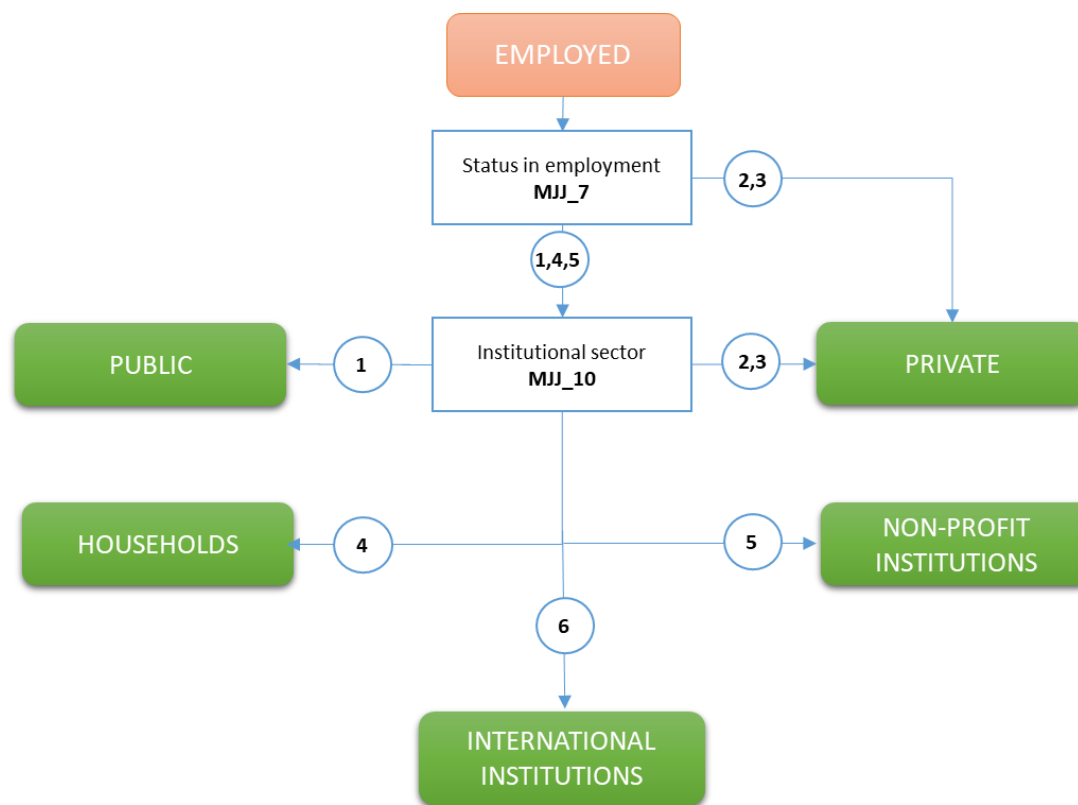
Relevant modules

- Module MJJ (Characteristics of Main Job)

Relevant questions

- MJJ_7 (Status in employment)
- MJJ_10 (Institutional sector)

C. Flow chart and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=2,3 OR (MJJ_7=1,4,5 AND MJJ_10=2,3))	PRIVATE SECTOR
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=1,4,5 AND MJJ_10=1)	PUBLIC SECTOR
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=1,4,5 AND MJJ_10=4)	HOUSEHOLDS
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=1,4,5 AND MJJ_10=5)	NON-PROFIT INSTITUTIONS
IF (CLASSIFIED AS EMPLOYED AND MJJ_7=1,4,5 AND MJJ_10=6)	INTERNATIONAL INSTITUTIONS

D. Basic syntax for Variable Derivation in Stata

```

*****
/* Institutional sector of employment in main job */
*****

gen ilo_job1_ins_sector=.
  replace ilo_job1_ins_sector=1 if MJJ_10==1 & inlist(ilo_lfs_emp,1,2)
  replace ilo_job1_ins_sector=2 if (inlist(MJJ_10,2,3) | inlist(MJJ_7,2,3)) & inlist(ilo_lfs_emp,1,2)
  replace ilo_job1_ins_sector=3 if MJJ_10==4 & inlist(ilo_lfs_emp,1,2)
  replace ilo_job1_ins_sector=4 if MJJ_10==5 & inlist(ilo_lfs_emp,1,2)
  replace ilo_job1_ins_sector=5 if MJJ_10==6 & inlist(ilo_lfs_emp,1,2)
  lab def ins_sector_lab 1 "1 - Public" 2 "2 - Private" 3 "3 - Households" 4 "4 – Non-profit institutions" 5 "5
– International institutions"
  lab values ilo_job1_ins_sector ins_sector_lab
  lab var ilo_job1_ins_sector "Institutional sector (private/public) of economic activities - main job"

```

Nature of the economic unit (informal/formal/household)

A. International definitions

The derived variable **nature of the economic unit** is used to identify persons employed in informal sector units.

Informal sector units are unincorporated household market enterprises without complete sets of accounts that are not registered with the national competent authority.

Persons employed in the informal sector may be identified with respect to the characteristics of the economic unit in which they hold their main, second or other jobs.

Source: Resolution concerning statistics of employment in the informal sector, 15th ICLS (1993), available at:
https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087484.pdf

Additional resources: Measuring informality: A statistical manual on the informal sector and informal employment
https://www.ilo.org/stat/Publications/WCMS_222979/lang--en/index.htm

B. Measurement strategy and Question mapping

Measurement strategy To accommodate the recent changes in the international statistical recommendations regarding the concepts and definitions of work and employment and the new international classification of status in employment (ICSE-18), the ILO model questionnaire uses the following approach to identify persons employed in the informal sector. Updated internationally agreed standards on the measurement of informality are expected by 2023. The derivations presented here refer to the main job only:

- First, the confirmed status in employment, following ICSE-18 needs to be derived in order to identify the five major groups of: employers, independent workers without employees, contributing family workers, employees and dependent contractors.
- For confirmed *employers, independent workers without employees and contributing family workers*: questions on the legal organization, registration and bookkeeping practices of the economic unit are used to identify those with informal sector units.
- For confirmed *employees*: the question on institutional sector is used to identify those working in the private sector. Among private sector employees, questions on the legal organization, registration and bookkeeping practices of the economic unit are used to identify those employed in informal sector units.
- For those with DON'T KNOW ANSWERS only, different proxy criteria are used to decide on their treatment. For confirmed *employees* in the private sector: a question "social security contribution by the employer" is used as proxy criterion under the assumption that employers that contribute to social security for their employees are likely to have an incorporated company, or at a minimum a registered business. For other cases: criteria such as "place of work" and "size of economic unit" (less than five) may be used as proxy information.
- For *dependent contractors*: the questions on self-declared status in employment is used to determine the approach to be used to identify those employed in the informal sector, as described above.

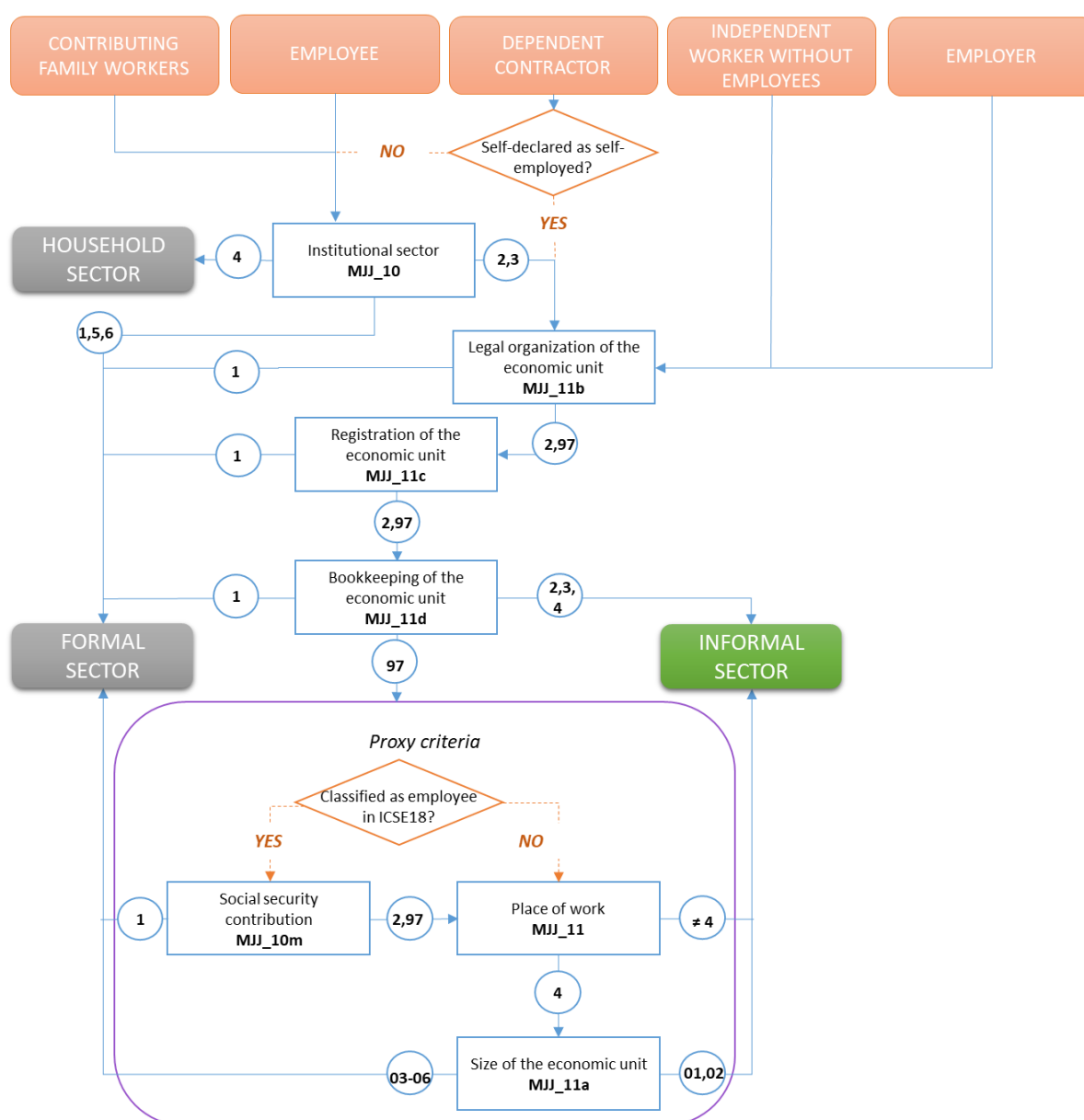
Relevant modules

- Module MJJ (Characteristics of Main Job)

Relevant questions

- MJJ_10 (institutional sector)
- MJJ_11b (business incorporation)
- MJJ_11c, MJJ_11d (business registration and type of accounts)
- MJJ_11a (establishment size)
- MJJ_11 (type of place of work)
- MJJ_10m, MJJ_10n, MJJ_10o (Informal employment among employees)

C. Flow charts and reference syntax



Reference Syntax	Status
IF (((CLASSIFIED AS CONTRIBUTING FAMILY WORKER OR CLASSIFIED AS EMPLOYEE OR (CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7≠2) AND MJJ_10=2,3) OR ((CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7=2) OR CLASSIFIED AS INDEPENDENT WORKER WITHOUT EMPLOYEES OR CLASSIFIED AS EMPLOYER)) AND ((MJJ_11B=2,97 AND MJJ_11C=2,97 AND MJJ_11D=2,3,4) OR ((MJJ_11B=2,97 AND MJJ_11C=2,97 AND MJJ_11D=97) AND ((CLASSIFIED AS EMPLOYEE AND MJJ_10M=2,97) OR NOT CLASSIFIED AS EMPLOYEE) AND (MJJ_11=1,2,3,5,6,7,8,9 OR (MJJ_11=4 AND MJJ_11A =01,02))))))	EMPLOYED IN INFORMAL SECTOR
IF ((CLASSIFIED AS CONTRIBUTING FAMILY WORKER OR CLASSIFIED AS EMPLOYEE OR (CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7≠2)) AND MJJ_10=4)	EMPLOYED IN THE HOUSEHOLD SECTOR
IF ((CLASSIFIED AS CONTRIBUTING FAMILY WORKER OR CLASSIFIED AS EMPLOYEE OR (CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7≠2) AND MJJ_10=1,5,6) OR (((CLASSIFIED AS CONTRIBUTING FAMILY WORKER OR CLASSIFIED AS EMPLOYEE OR (CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7≠2) AND MJJ_10=2,3) OR ((CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7=2) OR CLASSIFIED AS INDEPENDENT WORKER WITHOUT EMPLOYEES OR CLASSIFIED AS EMPLOYER)) AND MJJ_11B=1 OR (MJJ_11B=2,97 AND MJJ_11C=1) OR (MJJ_11B=2,97 AND MJJ_11C=2,97 AND MJJ_11D=1) OR ((MJJ_11B=2,97 AND MJJ_11C=2,97 AND MJJ_11D=97) AND ((CLASSIFIED AS EMPLOYEE AND MJJ_10M=1) OR (NOT CLASSIFIED AS EMPLOYEE AND MJJ_11=4 AND MJJ_11A=03,04,05,06))))))	EMPLOYED IN THE FORMAL SECTOR

D. Basic syntax for Variable Derivation in Stata

/ Nature of economic unit: Informal, Formal, Household */*

gen ilo_job1_ife_prod=.

```

replace ilo_job1_ife_prod=3 if inlist(ilo_lfs_emp,1,2) & MJJ_10==4
replace ilo_job1_ife_prod=2 if inlist(ilo_lfs_emp,1,2) & ilo_job1_ife_prod!=3 & (inlist(MJJ_10,1,5,6) |
MJJ_11b==1 | (inlist(MJJ_11b,2,97) & MJJ_11c==1) | (inlist(MJJ_11b,2,97) & inlist(MJJ_11c,2,97) &
MJJ_11d==1) | (inlist(MJJ_11b,2,97) & inlist(MJJ_11c,2,97) & MJJ_11d==97 &
((inlist(ilo_job1_ste_icse18,6,7,8,9) & MJJ_10m==1) | (!inlist(ilo_job1_ste_icse18,6,7,8,9) & MJJ_11==4 &
inlist(MJJ_11a,3,4,5,6))))))
replace ilo_job1_ife_prod=1 if inlist(ilo_lfs_emp,1,2) & !inlist(ilo_job1_ife_prod,2,3)
lab def ilo_ife_prod_lab 1 "1 - Informal" 2 "2 - Formal" 3 "3 - Household"
lab val ilo_job1_ife_prod ilo_ife_prod_lab
lab var ilo_job1_ife_prod "Nature of economic unit"

```

Nature of the job (informal/formal)

A. International definition

The derived variable **nature of the job (informal/formal)** is used to identify persons in informal employment (i.e. persons with informal jobs).

Persons in informal employment are workers employed in *informal jobs* whether carried out in formal sector enterprises, informal sector enterprises, or households.

The identification of *informal jobs* is dependent on the status in employment of the worker. To accommodate the recent changes in the international statistical recommendations regarding the concepts and definitions of work and employment and the new international classification of status in employment (ICSE-18), the ILO model questionnaire uses the following approach to identify persons in informal employment. Updated internationally agreed standards on the measurement of informality are expected by 2023:

- *Independent workers* are considered to have informal jobs if the economic unit in which they work is an informal sector enterprise.

Among *dependent workers*:

- *Contributing family workers*, are classified as having informal jobs, irrespective of whether they work in formal or informal sector enterprises
- *Employees* are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to social protection or entitlement to certain employment benefits (in particular paid annual or sick leave).

The criteria to classify *dependent contractors* as having informal jobs is dependent on their self-declared status in employment:

- *Self-declared self-employed* persons reclassified as *dependent contractors* have informal jobs if the economic unit they operate is an informal sector enterprise.
- *Self-declared employees* reclassified as *dependent contractors* are all treated as having informal jobs.

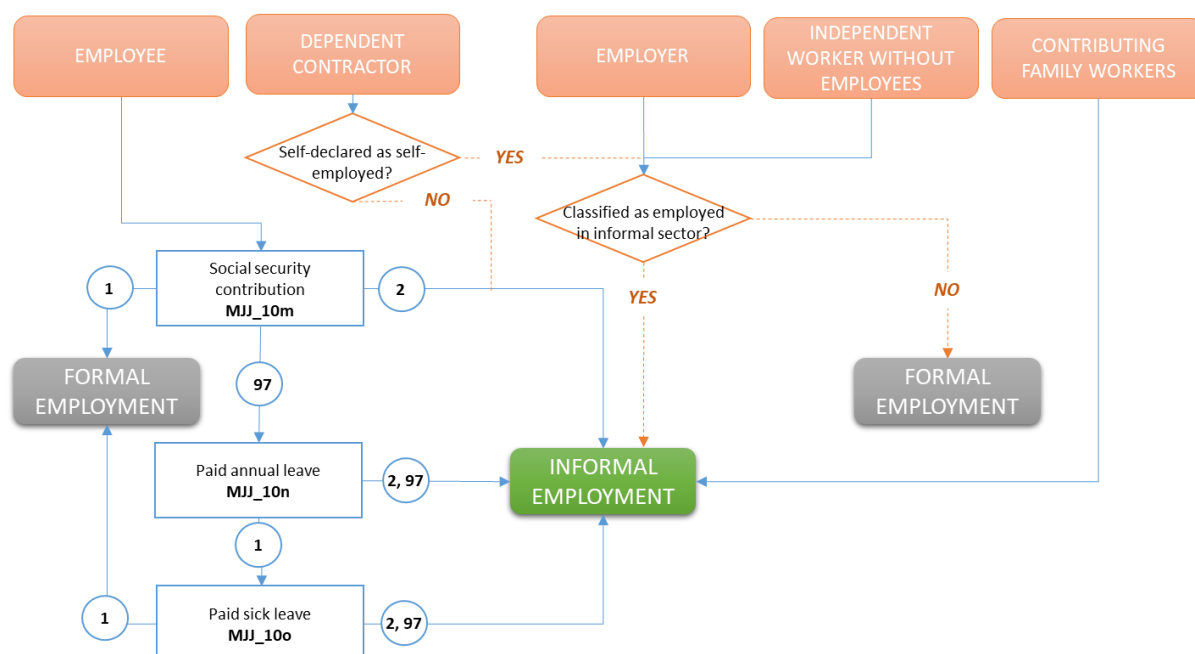
Source: Guidelines concerning a statistical definition of informal employment, 17th ICLS (1998), available at: https://www.ilo.org/wcmsp5/groups/public/---dqreports/---stat/documents/normativeinstrument/wcms_087622.pdf

Additional resources: Measuring informality: A statistical manual on the informal sector and informal employment https://www.ilo.org/stat/Publications/WCMS_222979/lang--en/index.htm

B. Measurement strategy and Question mapping

<i>Measurement strategy</i>	The ILO model LFS questionnaire uses a multi-step strategy to identify persons in informal employment. The derivations presented here refer to the main job only. • First, the confirmed status in employment, following ICSE-18 needs to be derived in order to identify the five major groups of: <i>employers, independent workers without employees, contributing family workers, employees</i> and <i>dependent contractors</i>. • Confirmed <i>employers</i> and <i>independent workers without employees</i> are classified as having an informal job if the economic unit in which they work is an informal sector enterprise. • Confirmed <i>contributing family workers</i> are all classified as having an informal job • For confirmed <i>employees</i>: the questions on social security contributions by employer, paid annual leave and paid sick leave are used to identify those with informal jobs • For <i>dependent contractors</i>: the question on self-declared status in employment is used to determine the approach to be used to identify those in informal employment, as described above.
<i>Relevant modules</i>	• Module MJJ (Characteristics of Main Job)
<i>Relevant questions</i>	• MJJ_7 (Self-reported status in employment) • MJJ_8 (Decision-making in the family business) • MJJ.9 (Receipt of wage or salary) • MJJ_10m, MJJ_10n, MJJ_10o (Informal employment among employees) • MJJ_11b, MJJ_11c, MJJ_11d (informal employment among self-employed) • MJJ_11a (establishment size) • MJJ_11 (type of place of work)

C. Flow chart and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS CONTRIBUTING FAMILY WORKER OR (CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7≠2) (CLASSIFIED AS EMPLOYEE AND (MJJ_10M=2 OR (MJJ_10M=97 AND MJJ_10N=2,97) OR (MJJ_10M=97 AND MJJ_10N=1 AND MJJ_100=2,97))) OR (((CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7=2) OR CLASSIFIED AS INDEPENDENT WORKER WITHOUT EMPLOYEES OR CLASSIFIED AS EMPLOYER) AND EMPLOYED IN THE INFORMAL SECTOR))	INFORMAL EMPLOYMENT
IF ((CLASSIFIED AS EMPLOYEE AND (MJJ_10M=1 OR (MJJ_10M=97 AND MJJ_10N=1 AND MJJ_100=1))) OR (((CLASSIFIED AS DEPENDENT CONTRACTOR AND MJJ_7=2) OR CLASSIFIED AS INDEPENDENT WORKER WITHOUT EMPLOYEES OR CLASSIFIED AS EMPLOYER) AND EMPLOYED IN THE FORMAL SECTOR))	FORMAL EMPLOYMENT

D. Basic syntax for Variable Derivation in Stata

```

*****
/* Nature of main job: Informal, formal */
*****

gen ilo_job1_ife_nature=.
  replace ilo_job1_ife_nature=2 if inlist(ilo_lfs_emp,1,2) & (inlist(ilo_job1_ste_icse18,6,7,8,9) &
(MJJ_10m==1 | (MJJ_10m==97 & MJJ_10n==1 & MJJ_10o==1)))
  replace ilo_job1_ife_nature=2 if inlist(ilo_lfs_emp,1,2) & ((inlist(ilo_job1_ste_icse18,1,2,3,4,10) |
(ilo_job1_ste_icse18=5 & MJJ_7==2)) & ilo_job1_ife_prod==2)
  replace ilo_job1_ife_nature=1 if inlist(ilo_lfs_emp,1,2) & ilo_job1_ife_nature!=2
  replace ilo_job1_ife_nature=. if !inlist(ilo_lfs_emp,1,2)   lab def ife_nature_lab 1 "1 - Persons with
informal main job" 2 "2 - Persons with formal main job"
  lab val ilo_job1_ife_nature ife_nature_lab
  lab var ilo_job1_ife_nature "Informal / Formal Economy (Nature of job) - Main job"

```

Persons in time-related underemployment

A. International definition

Persons in time-related underemployment are employed persons working less than a specified number of hours, who want and are available to work more hours. For measurement purposes,

- the “hours worked” takes into account all jobs held by the persons, and may be based on the hours actually worked in the reference week or the hours usually worked per week;
- the “specified number of hours” (i.e. hours’ threshold) may be based on the boundary between full-time and part-time employment, on the median or modal values of the hours usually worked of all persons in employment, or on working time norms as specified in relevant legislation or national practice, and set for specific worker groups;
- the “desire to work more hours” is assessed in the present, and may refer to working more hours in the any of the current jobs (main, secondary) or in a new job, in addition or in replacement of the current jobs held by the person.
- “available” to work more hours should be established in reference to a set short reference period that reflects the typical length of time required in the national context between leaving one job and starting another.

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraphs 43-44, 19th ICLS (2013).

Additional resources: Measuring working time and time-related underemployment in labour force surveys: Main findings from the ILO LFS pilot studies, Report V. (2018). Available at: https://www.ilo.org/stat/Publications/WCMS_635732/lang--en/index.htm

B. Measurement strategy and Question mapping

Measurement strategy The ILO model LFS questionnaire uses a multi-step strategy to identify persons in time-related underemployment employment:

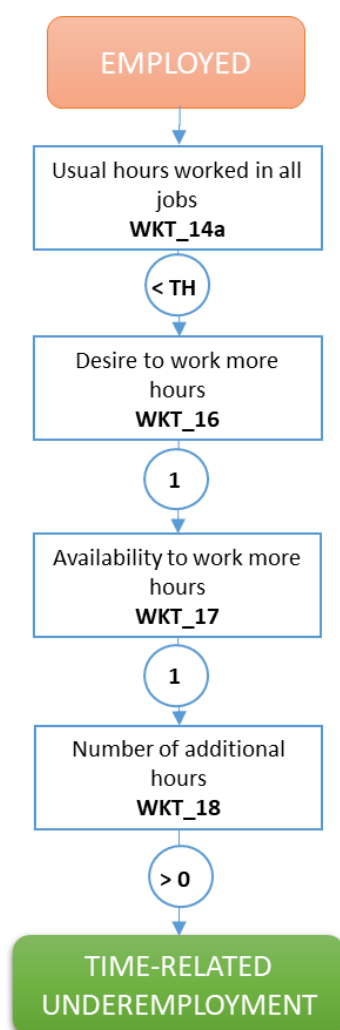
- First, the questionnaire captures both, the hours actually worked and the hours usually worked per week, in the main job and other jobs.
- For those usually working less than a set threshold (e.g. 40 hours per week), considering all jobs, questions on desire and availability to work more hours are asked.
- The model questionnaire uses hours’ usually worked per week in all jobs as reference concept to establish the hours’ threshold and to formulate the question on desire to work more hours.

Relevant modules • Module WKT (Working Time in Employment)

Relevant questions

- WKT_1, WKT_2, WKT_3, WKT_11, WKT_8, [WKT_12](#), WKT_14a (Usual hours worked in all jobs)
- WKT_16 (Desire to work more hours)
- WKT_17 (Availability to work more hours)
- WKT_18 (Number of additional hours – must not equal zero)

C. Flow chart and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS EMPLOYED AND (WKT_14a<TH AND WKT_16=1 AND WKT_17=1 AND WKT_18>0))	TIME-RELATED UNDEREMPLOYMENT

D. Basic syntax for Variable Derivation in Stata

```

*****
/* Persons willing to work additional hours */
*****

gen ilo_joball_will=.
  replace ilo_joball_will=1 if WKT_16==1 & inlist(ilo_lfs_emp,1,2)
  replace ilo_joball_will=2 if WKT_16==2 & inlist(ilo_lfs_emp,1,2)
  replace ilo_joball_will=3 if (ilo_joball_will==. & inlist(ilo_lfs_emp,1,2))
  lab def joball_will_lab 1 "1 - Yes" 2 "2 - No" 3 "3 - Not stated"
  lab val ilo_joball_will joball_will_lab
  lab var ilo_joball_will "Willing to work additional hours"

*****

/*Persons currently available to work additional hours */
*****

gen ilo_joball_avail=.
  replace ilo_joball_avail=1 if WKT_17==1 & inlist(ilo_lfs_emp,1,2)
  replace ilo_joball_avail=2 if WKT_17==2 & inlist(ilo_lfs_emp,1,2)
  replace ilo_joball_avail=3 if (ilo_joball_avail==. & inlist(ilo_lfs_emp,1,2))
  lab def joball_avail_lab 1 "1 - Yes" 2 "2 - No" 3 "3 - Not stated"
  lab val ilo_joball_avail joball_avail_lab
  lab var ilo_joball_avail "Available to work additional hours"

*****

/* Persons in time-related underemployed */
/*NOTE: the threshold TH is to be defined based on national practice*/
*****

gen ilo_joball_tru=.
  replace ilo_joball_tru=1 if ilo_joball_how_usual<=TH & ilo_joball_will==1 & ilo_joball_avail==1 &
inlist(ilo_lfs_emp,1,2)
  lab def tru_lab 1 "Time-related underemployed"
  lab val ilo_joball_tru tru_lab
  lab var ilo_joball_tru "Time-related underemployed"

```

UNEMPLOYED PERSONS AND OTHERS OUTSIDE THE LABOUR FORCE

Unemployed Persons

A. International definition

Unemployed persons are defined as all those of working age who were not employed in the reference week, who carried out activities to seek employment during a specified recent period, and who were currently available to take up employment given a job opportunity.

“Activities to seek employment” refer to any activity carried out for the purpose of finding a job or setting up a business or agricultural undertaking in a recent period comprising (the last/specified) four weeks, 30 days or one month, including the reference week used to identify the employed.

“Current availability” to start working is assessed with respect to a short period comprising the reference week used to identify the employed and a short subsequent period of two weeks or 14 days.

Also included among unemployed persons are *future starters*:

Future starters are defined as persons not employed who did not “seek employment” because they had already made arrangements to start a job within a short subsequent period, but who were currently available to start working.

The duration of the period to start a job for future starters should be set taking into consideration the general length of waiting time to start a new job in the national context (but generally not greater than three months).

Source: Resolution I concerning statistics of work, employment and labour underutilization, paras. 47-48, 19th ICLS (2013).

Additional resources: Measuring unemployment and the potential labour force surveys: Main findings from ILO LFS pilot studies: https://www.ilo.org/stat/Publications/WCMS_627878/lang--en/index.htm

B. Measurement strategy and Question mapping

Measurement strategy The ILO model questionnaire starts the sequence to identify the unemployed with the question on job search:

- For those who answer YES, follow-up questions ask for the main job search activity carried out and availability to start working.
- Future starters are identified through answers to questions on:
 - Main reason for not working in the reference week, or
 - Main reason for not seeking employment in the last four weeks
 - Duration to start the new job or business
 - Availability to start working.

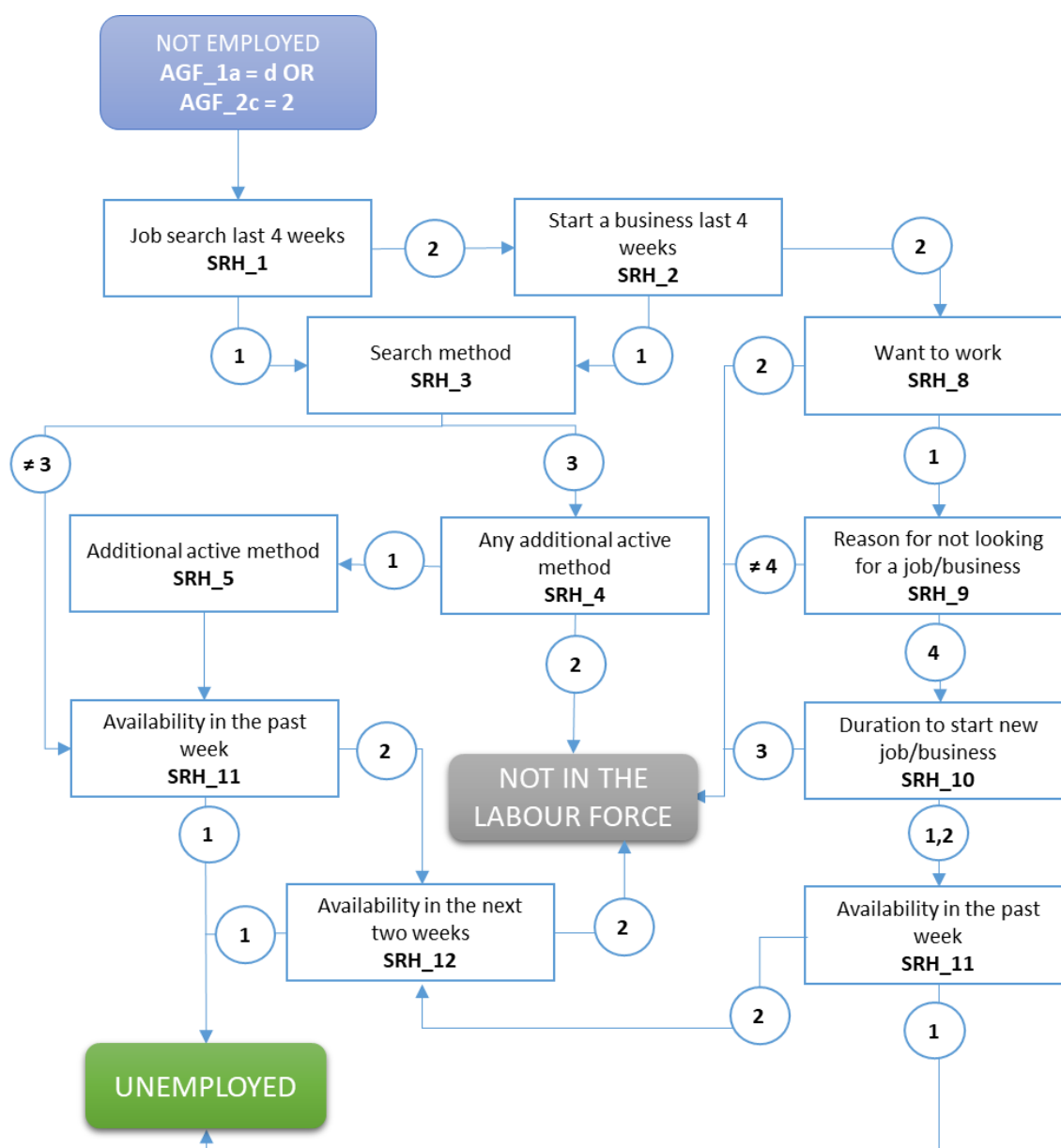
Relevant modules

- Employment (module ATW, module ABS, module AGD)
- Job search and availability of those not in employment (Module SRH)

Relevant questions Not in employment plus:

- SRH_1, SRH_2, SRH_3, SRH_4, SRH_5 (Active job search)
- SRH_9, SRH_10 (Future starters)
- SRH_11, SRH_12 (Availability)

C. Flow chart and reference syntax



Reference Syntax	Status
IF ((AGF_1a=d OR AGF_2c=2) AND ((SRH_1=1 OR SRH_2=1) AND (SRH_3=1,2,4,5,6,7,8,9,10,11,12,13,14 OR (SRH_3=3 AND SRH_4=1 AND SRH_5 =1,2,4,5,6,7,8,9,10,11,12,13,14)) AND (SRH_11=1 OR (SRH_11=2 AND SRH_12=1))) OR (SRH_1=2 AND SRH_2=2 AND SRH_8=1 AND SRH_9=4 AND SRH_10=1,2 AND (SRH_11=1 OR (SRH_11=2 AND SRH_12=1))))	UNEMPLOYED

IF ((AGF_1a=d OR AGF_2c=2) AND ((SRH_1=1 OR SRH_2=1) AND ((SRH_3=1,2,4,5,6,7,8,9,10,11,12,13,14 OR (SRH_3=3 AND SRH_4=1 AND SRH_5=1,2,4,5,6,7,8,9,10,11,12,13,14)) AND (SRH_11=2 AND SRH_12=2)) OR (SRH_3=3 AND SRH_4=2)) OR (SRH_1=2 AND SRH_2=2 AND SRH_8=2 OR (SRH_8=1 AND SRH_9=1,2,3,5,6,7,8,9,10,11,12,13) OR (SRH_8=1 AND SRH_9=4 AND SRH_10=3) OR (SRH_8=1 AND SRH_9=4 AND SRH_10=1,2 AND SRH_FAN=2 AND SRH_12=2)))	NOT IN THE LABOUR FORCE
--	----------------------------

D. Basic syntax for Variable Derivation in Stata

/ Persons actively looking to work */*

gen ilo_lfs_notemp_activ=.

replace ilo_lfs_notemp_activ=1 if (SRH_1==1 | SRH_2==1) & (inlist(SRH_3,1,2,4,5,6,7,8,9,10,11,12,12,14) |
inlist(SRH_5,1,2,4,5,6,7,8,9,10,11,12,12,14)) & ilo_lfs_emp==3

replace ilo_lfs_notemp_activ=2 if (SRH_2==2 | SRH_4==2) & ilo_lfs_emp==3

replace ilo_lfs_notemp_activ=3 if ilo_lfs_notemp_activ=. & ilo_lfs_emp==3

lab def lfs_notemp_activ_lab 1 "Actively looking to work" 2 "Not actively looking to work" 3 "Not
stated"

lab values ilo_lfs_notemp_activ lfs_notemp_activ_lab

lab var ilo_lfs_notemp_activ "Looking to work"

/ Persons Available to work*/*

gen ilo_lfs_notemp_avail=.

replace ilo_lfs_notemp_avail=1 if (SRH_11==1 | SRH_12==1) & ilo_lfs_emp==3

replace ilo_lfs_notemp_avail=2 if SRH_12==2 & ilo_lfs_emp==3

replace ilo_lfs_notemp_avail=3 if ilo_lfs_notemp_avail=. & ilo_lfs_emp==3

lab def lfs_notemp_avail_lab 1 "Available to work" 2 "Not available to work" 3 "Not stated"

lab values ilo_lfs_notemp_avail lfs_notemp_avail_lab

lab var ilo_lfs_notemp_avail "Available to work"

/ Persons who start a job within a short subsequent period*/*

gen ilo_lfs_notemp_futur=.

replace ilo_lfs_notemp_futur=1 if SRH_9==4 & inlist(SRH_10,1,2) & ilo_lfs_emp==3

lab def lfs_notemp_futur_lab 1 "Future starters"

lab values ilo_lfs_notemp_futur lfs_notemp_futur_lab

lab var ilo_lfs_notemp_futur "Future starters"

```

*****

/* Unemployment*/
/* The generated derived variable uses two categories (1,2) to identify the unemployed*/
*****gen

ilo_lfs_unemp=.
  replace ilo_lfs_unemp=1 if ilo_lfs_notemp_activ==1 & ilo_lfs_notemp_avail==1 & !inlist(ilo_lfs_emp,1,2)
  replace ilo_lfs_unemp=2 if ilo_lfs_notemp_futur==1 & ilo_lfs_notemp_avail==1 & !inlist(ilo_lfs_emp,1,2)
  label define ilo_lfs_unemp 1 "1 - Unemployed" 2 "2 - Future starters"
  label value ilo_lfs_unemp lfs_unemp_lab
  label var ilo_lfs_unemp " Unemployment"

```

Long-term Unemployed

A. International definition

Persons in long-term unemployment are defined as all unemployed persons with a *duration of job search* lasting 12 months or more, including the reference period.

The *duration of job search* is measured from the moment when unemployed persons began carrying out activities to seek employment, or from the end of their last job, whichever is shorter.

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraphs 49-50, 19th ICLS (2013).

B. Measurement strategy and Question mapping

Measurement strategy A question on duration of job search is asked to persons not employed who report seeking employment in the specified 4 weeks/30 days.

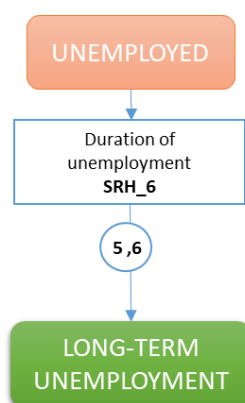
Relevant modules

- Module ATW, module ABS, module AGF (Employment)
- Job search and availability of those not in employment (Module SRH)

Relevant questions Not in employment plus:

- SRH_1, SRH_2, SRH_3, SRH_4, SRH_5 (Active job search)
- SRH_6 (Duration of job search)
- SRH_11, SRH_12 (Availability)

C. Flow chart and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS UNEMPLOYED AND SRH_6=5,6)	LONG-TERM UNEMPLOYMENT

D. Basic syntax for Variable Derivation in Stata

```

*****
/*Long-term unemployment*/
*****

```

```

gen long_unempl=.
replace long_unempl=1 if inlist(SRH_6,5,6) & inlist(ilo_lfs_unemp,1,2)
lab def long_unempl_lab 1 "Long-term unemployment"
lab values long_unempl long_unempl_lab
lab var long_unempl "Long-term unemployment"

```

Potential Labour Force

A. International definition

Potential labour force are all persons of working age who, during the short reference period were:

- **Unavailable jobseekers** –i.e. persons outside the labour force who carried out activities to “seek employment”, were not “currently available” but would become available within a short subsequent period established as per national circumstances; or
- **Available potential jobseekers** –i.e. persons outside the labour force who did not carry out activities to “seek employment”, but wanted employment and were “currently available” (i.e.).

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraph 51, 19th ICLS (2013).

Additional resources: Measuring unemployment and the potential labour force surveys: Main findings from ILO LFS pilot studies:

https://www.ilo.org/stat/Publications/WCMS_627878/lang--en/index.htm

B. Measurement strategy and Question mapping

Measurement strategy The potential labour force is identified through the same sequence of questions used to identify the unemployed. Persons not employed are first asked about activities to seek employment:

- Those who say YES are then asked for the main job search method used and their availability to start working in a short reference period. This sequence serves to identify the “unavailable job seekers”
- Those who say NO are asked a question on desire to work. Those who want to work, are then asked about reasons for not seeking and their availability. This sequence served to identify the “available potential job seekers”

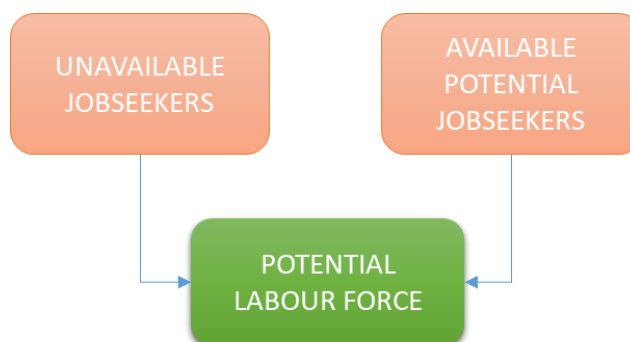
Relevant modules

- Employment (module ATW, module ABS, module AGF)
- Job search, desire and availability of those not in employment (module SRH)

Relevant questions

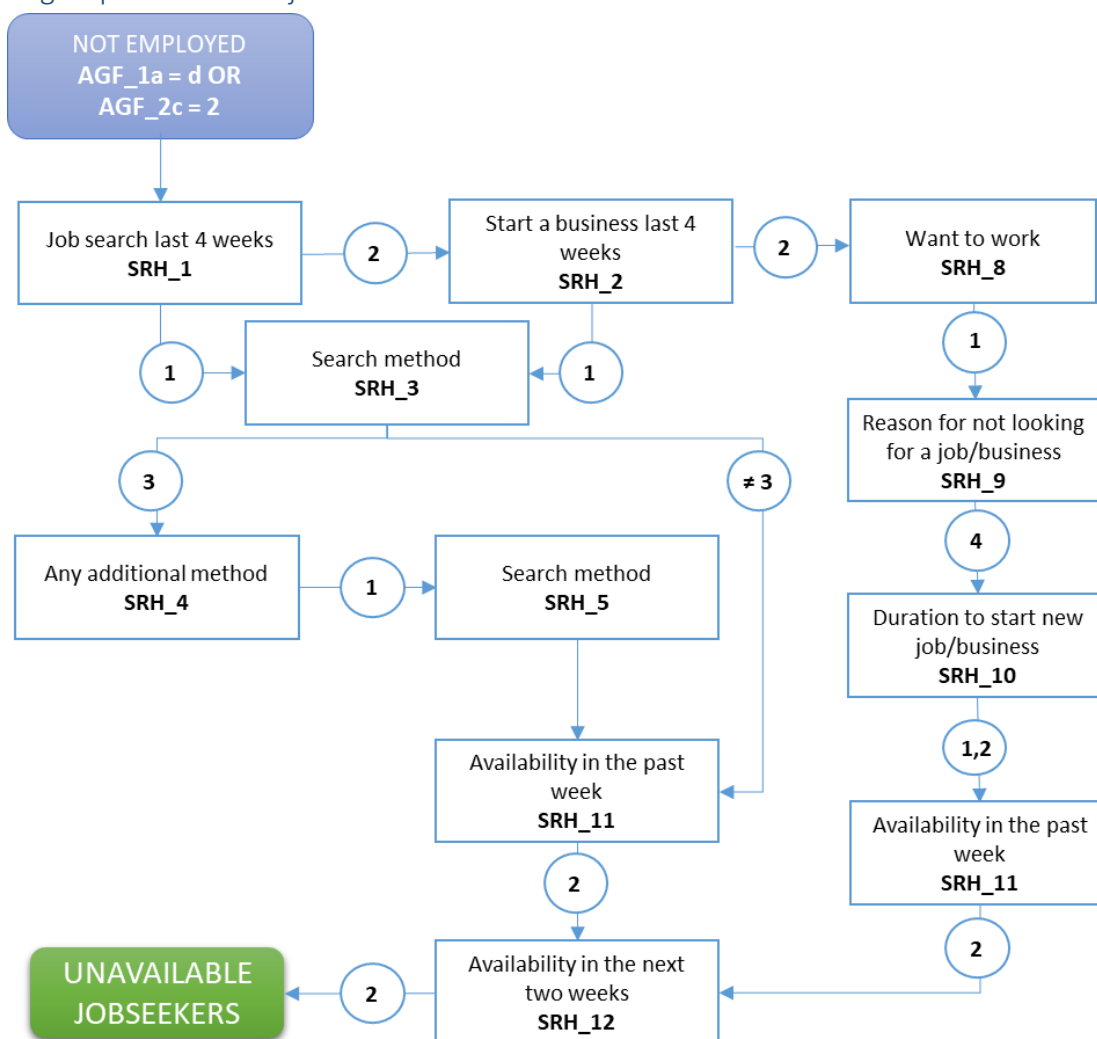
- SRH_1, SRH_2, SRH_3, SRH_4, SRH_5 (Active job search)
- SRH_9, SRH_10 (Future starters)
- SRH_8 (Desire)
- SRH_11, SRH_12 (Availability)

C. Flow charts and reference syntax



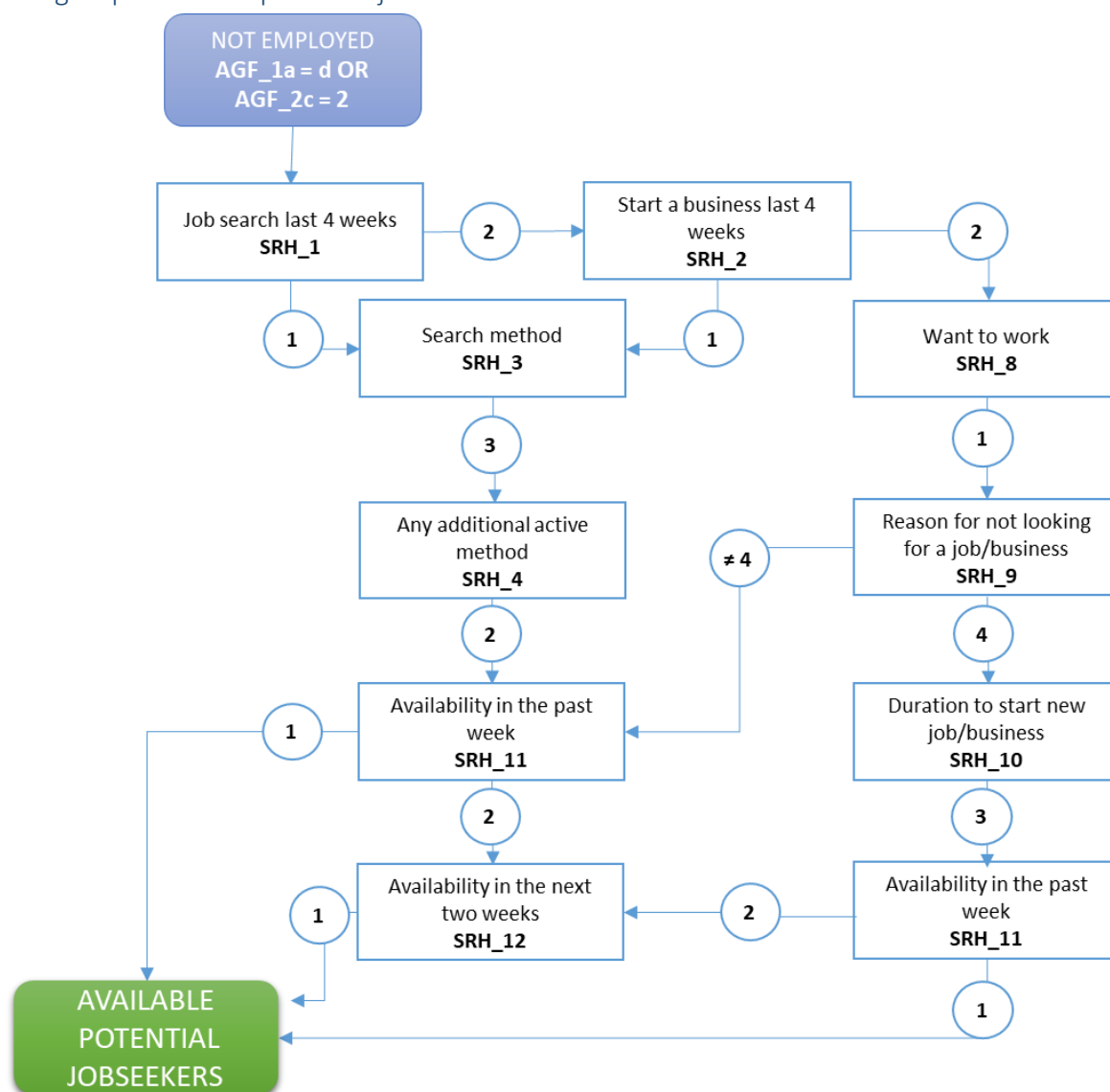
C. Flow charts and reference syntax (continued)

Sub-group: Unavailable jobseekers



Reference Syntax	Status
IF ((AGF_1a=d OR AGF_2c=2) AND ((SRH_1=1 OR SRH_2=1) AND (SRH_3=1,2,4,5,6,7,8,9,10,11,12,13,14 OR (SRH_3=3 AND SRH_4=1 AND SRH_5 =1,2,4,5,6,7,8,9,10,11,12,13,14)) AND (SRH_11=2 AND SRH_12=2)) OR (SRH_1=2 AND SRH_2=2 AND SRH_8=1 AND SRH_9=4 AND SRH_10=1,2 AND SRH_11=2 AND SRH_12=2))	POTENTIAL LABOUR FORCE – UNAVAILABLE JOBSEEKERS

Sub-group: Available potential jobseekers



Reference Syntax	Status
IF ((AGF_1a=d OR AGF_2c=2) AND ((SRH_1=1 OR SRH_2=1) AND (SRH_3=3 AND SRH_4=2) AND (SRH_11=1 OR (SRH_11=2 AND SRH_12=1))) OR (SRH_1=2 AND SRH_2=2 AND SRH_8=1 AND (SRH_9=1,2,3,5,6,7,8,9,10,11,12,13 AND SRH_11=1 OR (SRH_11=2 AND SRH_12=1)) OR (SRH_9=4 AND SRH_10=3 AND (SRH_11=1 OR (SRH_11=2 AND SRH_12=1))))))	POTENTIAL LABOUR FORCE – AVAILABLE POTENTIAL JOBSEEKERS

D. Basic syntax for Variable Derivation in Stata

```
*****
```

```
/*Potential labour force*/
```

```
*****
```

```
gen potential_lf=.
```

```
replace potential_lf=1 if ilo_lfs_notemp_activ==1 & ilo_lfs_notemp_avail==2 & !inlist(ilo_lfs_unemp,1,2)
```

```
replace potential_lf=2 if ilo_lfs_notemp_activ==2 & ilo_lfs_notemp_avail==1 & !inlist(ilo_lfs_unemp,1,2)
```

```
lab def potential_lf_lab 1 "Unavailable jobseekers" 2 "Available potential jobseekers"
```

```
lab val ilo_olf_dlma dlma_lab
```

```
lab var ilo_olf_dlma "Potential labour force"
```

Discouraged job-seekers

A. International definition

Discouraged jobseekers are all persons of working age who were not employed and did not seek employment for *labour market-related reasons*, but wanted and were currently available to work.

Labour market-related reasons include: past failure to find a suitable job; lack of experience; lack of qualifications or jobs matching the person's skills; lack of jobs in the area; considered too young or too old by prospective employers.

Discouraged jobseekers are a sub-group of the *potential labour force*.

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraph 51-52; 80b, 19th ICLS (2013).

B. Measurement strategy and Question mapping

Measurement strategy *Discouraged job seekers* are identified through the same sequence of questions used to identify the unemployed and potential labour force. Persons not employed are first asked about activities to seek employment:

- Those who say NO are asked a question on desire to work. Those who want to work, are then asked about reasons for not seeking work, including labour market-related reasons, and their availability. This sequence serves to identify "discouraged job seekers"

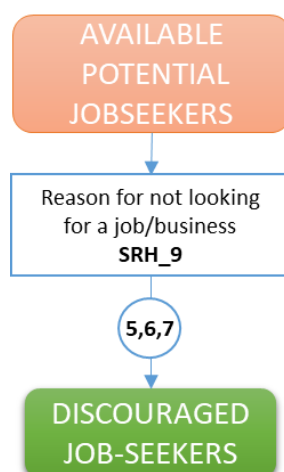
Relevant modules

- Employment (module ATW, module ABS, module AGF)
- Job search, desire and availability of those not in employment (module SRH)

Relevant questions

- SRH_1, SRH_2, SRH_3, SRH_4, SRH_5 (Active job search)
- SRH_8, SRH_9 (Desire and reason for not seeking)

C. Flow chart and reference syntax



Reference Syntax	Status
IF (CLASSIFIED AS AVAILABLE POTENTIAL JOB-SEEKERS AND SRH_9=5,6,7)	DISCOURAGED JOB-SEEKERS

D. Basic syntax for Variable Derivation in Stata

/ Reasons for not seeking a job */*

gen ilo_olf_reason=.

replace ilo_olf_reason=1 if inlist(SRH_9,5,6,7) & !inlist(ilo_lfs_unemp,1,2)

replace ilo_olf_reason=2 if inlist(SRH_9,1,2,3) & !inlist(ilo_lfs_unemp,1,2)

replace ilo_olf_reason=3 if inlist(SRH_9,8,9,10,11) & !inlist(ilo_lfs_unemp,1,2)

replace ilo_olf_reason=4 if SRH_9 ==12 & !inlist(ilo_lfs_unemp,1,2)

replace ilo_olf_reason=5 if ilo_olf_reason==. & !inlist(ilo_lfs_unemp,1,2)

lab def lab_olf_reason 1 "1 - Labour market" 2 "2 - Other labour market reasons" 3 "3 - Personal/Family-related" 4 "4 - Does not need/want to work" 5 "5 - Not elsewhere classified"

lab val ilo_olf_reason lab_olf_reason

lab var ilo_olf_reason "Labour market attachment (Reasons for not seeking a job)"

/ Discouraged job-seekers*/*

gen ilo_dis=.

replace ilo_dis=1 if !inlist(ilo_lfs_unemp,1,2) & (SRH_11==1 | SRH_12==1) & ilo_olf_reason==1

lab def ilo_dis_lab 1 "Discouraged job-seekers"

lab val ilo_dis ilo_dis_lab

lab var ilo_dis "Discouraged job-seekers"

Willing non-jobseekers

A. International definition

Willing non-jobseekers are all persons of working age who were not employed, did not seek employment and were not currently available to work, but who want to work at present.

Willing non-jobseekers are a sub-group of *persons outside labour force*.

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraph 53, 19th ICLS (2013).

B. Measurement strategy and Question mapping

Measurement strategy *Willing non-jobseekers* are identified through the same sequence of questions used to identify the unemployed and potential labour force. Persons not employed are first asked about activities to seek employment:

- Those who say NO are asked a question on desire to work. Those who want to work, are then asked about reasons for not seeking work and their availability. This sequence serves to identify “willing non-jobseekers”

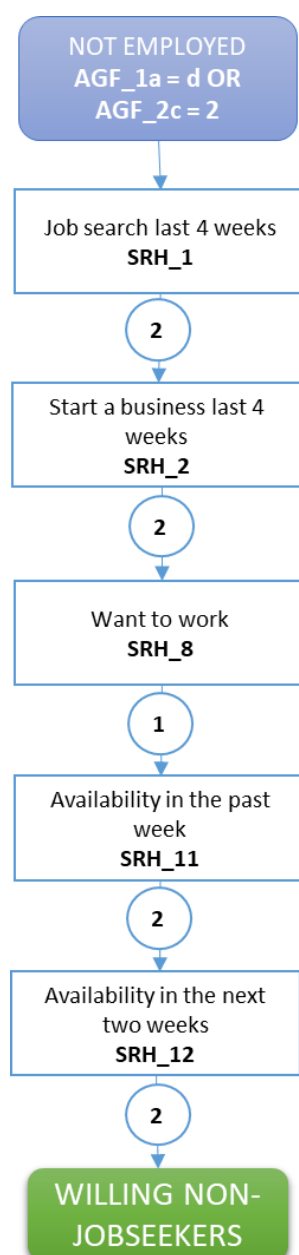
Relevant modules

- Employment (module ATW, module ABS, module AGF)
- Job search, desire and availability of those not in employment (module SRH)

Relevant questions

- SRH_1, SRH_2, SRH_3, SRH_4, SRH_5 (Active job search)
- SRH_8 (Desire)
- SRH_11, SRH_12 (Availability)

C. Flow chart and reference syntax



Reference Syntax	Status
IF ((AGF_1a=d OR AGF_2c=2) AND SRH_1=2 AND SRH_2=2 AND SRH_8=1 AND SRH_11=2 AND SRH_12=2)	WILLING NON-JOBSEEKERS

D. Basic syntax for Variable Derivation in Stata

```

*****
/*Willing non-jobseekers*/
*****
gen willing_non_seekers=.
  replace willing_non_seekers=1 if inlist(ilo_lfs_notemp_activ,2,3) & inlist(ilo_lfs_notemp_avail,2,3) &
SRH_8==1 & !inlist(ilo_lfs_unemp,1,2)
  lab def label_willing_non_seekers 1 "1 - Willing non-jobseekers"
  lab value willing_non_seekers label_willing_non_seekers
  lab var willing_non_seekers "Willing non-jobseekers"

```

OWN-USE PRODUCERS OF GOODS

Subsistence foodstuff producers

A. International definition

Subsistence foodstuff producers are defined as all persons of working age who, in a short reference period, performed any activity to produce, and/or process for storage, goods from agriculture, fishing, hunting and gathering, as foodstuff that contribute to the livelihood of the household or family.

It excludes persons engaged in such production as recreational or leisure activities.

Subsistence foodstuff producers are a subgroup of persons in *own-use production work*.

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraph 24, 19th ICLS (2013).

B. Measurement strategy and question mapping

Measurement strategy The ILO model questionnaire uses a three-step strategy to identify subsistence foodstuff producers. This strategy takes account of the respondents' perspective when answering questions with the aim to reduce respondent burden and minimize reporting errors.

Step I: A module on Agriculture and Market Orientation (module **AGF**) is used to achieve two objectives: First, among persons who report working on their own account in farming, animal husbandry or fishing, it serves to separate those who are employed from those whose products are intended mainly for final consumption by the household. For this second group the module captures their essential characteristics. Second, among persons who report not being employed, it identifies those producing goods from farming, animal husbandry or fishing intended mainly for own final consumption.

Step II: An additional module "Own-use production in agriculture among Employed persons" (module **OPA**) is included after the sections on characteristics of the employed, to capture their participation in own-use production of foodstuff from agriculture (as a secondary activity).

Step III: A final optional module "Own-use production of other goods" (module **OPG**), asked to all working age respondents, is included at the end of the questionnaire to capture an additional set of activities to produce foodstuff for own-final use, as relevant in the national context. This includes gathering of wild products, hunting or trapping, and preparation of preserved food items for storage.

Together these modules enable comprehensive coverage of subsistence foodstuff production, by capturing these activities among both, the employed and the not employed, and whether performed as a primary or secondary activity.

Subsistence foodstuff producers are those identified as engaged in any activity to produce foodstuff mainly for final consumption by the household or family *either* in Step I, II or III..

In the current version of the ILO model questionnaire no direct question is included to assess if the activity is for recreation or leisure. Testing of different question formulations to identify the subsistence nature of the work is being undertaken. Based on those experiences questionnaires and related guidance may be updated.

Relevant modules

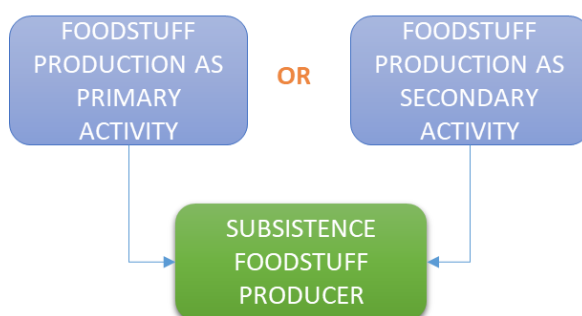
- Module ATW (Employed at work)
- Module ABS (Temporary absence)

- Module AGF (Agricultural work and market orientation)
- Module OPA (Own-use production in agriculture)
- [Module OPG \(Own-use production of other goods\)](#)

Relevant
questions

- AGF_1b, AGF_1a, AGF_2, AGF_2b, AGF_2c
- OPA_1
- [OPG_1, OPG_3, OPG_5](#)

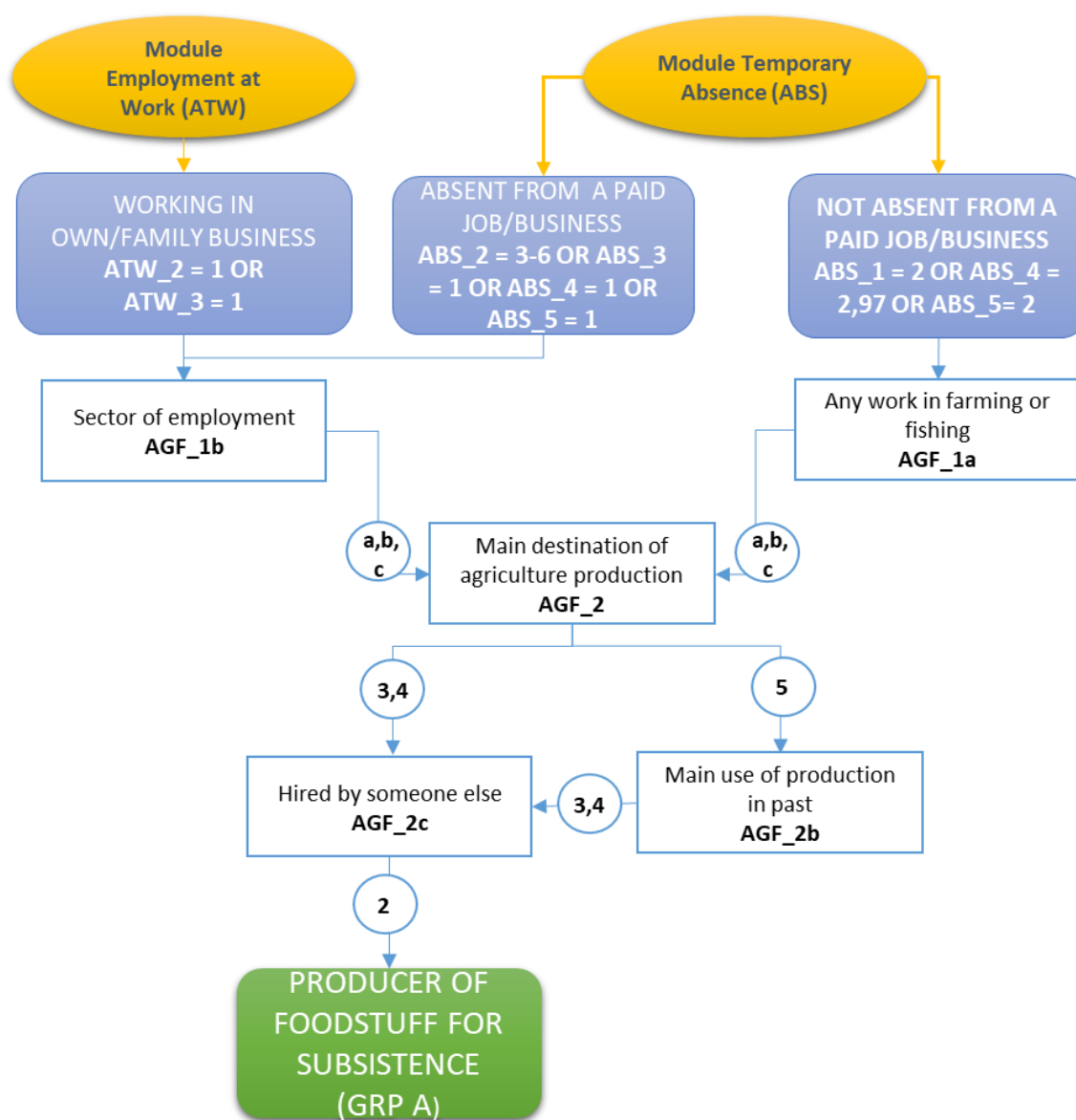
C. Flow chart and reference syntax



Reference Syntax	Status
IF (DEM_6 >= N AND (CLASSIFIED AS ENGAGED IN FOODSTUFF PRODUCTION AS PRIMARY ACTIVITY) OR (CLASSIFIED AS ENGAGED IN FOODSTUFF PRODUCTION AS SECONDARY ACTIVITY))	SUBSISTENCE FOODSTUFF PRODUCER

C. Flow charts and reference syntax (continued)

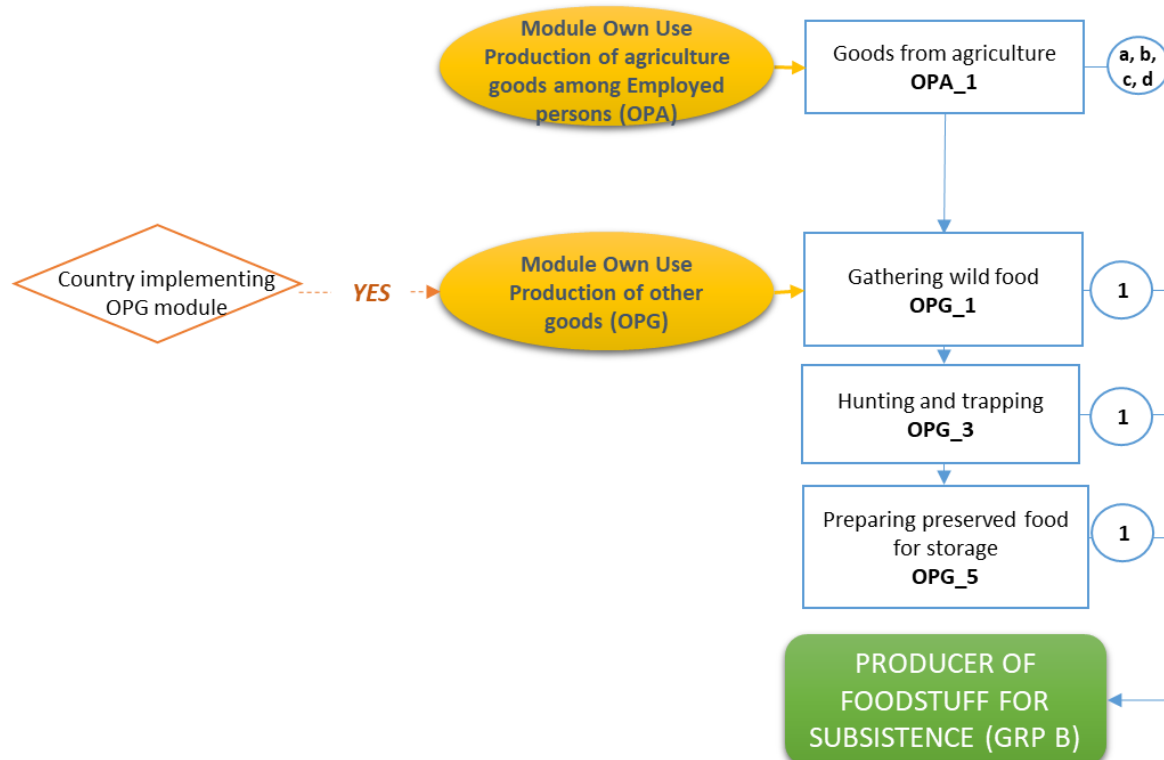
Engaged in foodstuff production as primary activity (GRP A)



Reference Syntax	Status
IF (DEM_6 >= N AND (AGF_1b=a,b,c OR AGF_1a= a,b,c) AND ((AGF_2=3,4) OR (AGF_2=5 AND AGF_2b=3,4)) AND AGF_2c=2)	ENGAGED IN FOODSTUFF PRODUCTION AS PRIMARY ACTIVITY

C. Flow charts and reference syntax (continued)

Engaged in foodstuff production as secondary activity (GRP B)



Reference Syntax	Status
IF (DEM_6 >= N AND OPA_1=a,b,c,d OR (MODULE OPG IMPLEMENTED AND (OPG_1=1 OR OPG_3=1 OR OPG_5=1)))	ENGAGED IN FOODSTUFF PRODUCTION AS SECONDARY ACTIVITY

D. Basic syntax for Variable Derivation in Stata

/* Producer of foodstuff for subsistence */

gen prod_food_sub=.

replace prod_food_sub=1 if AGF_2c==2 | inlist(OPA_1,a,b,c,d) | OPG_1==1 | OPG_3==1 | OPG_5==1

lab def prod_food_sub_lab 1 "Agriculture for own-use"

lab val prod_food_sub prod_food_sub_lab

lab var prod_food_sub "Agriculture for own-use"

Own-use producers of goods

A. International definition

Persons in own-use production of goods are all those of working age who, during a short reference period, performed any activity to produce goods for own final use, where:

- “any activity to produce goods” refers to work performed in the following activities for a cumulative total of at least one hour:
 - producing and/or processing for storage agricultural, fishing, hunting and gathering products;
 - collecting and/or processing for storage mining and forestry products, including firewood and other fuels;
 - fetching water from natural and other sources;
 - manufacturing household goods (such as furniture, textiles, clothing, footwear, pottery or other durables, including boats and canoes);
 - building, or effecting major repairs to, one’s own dwelling, farm buildings, etc.;
- “for own final use” is interpreted as production where the intended destination of the output is mainly for final use by the producer in the form of capital formation, or final consumption by household members, or by family members living in other households.

Source: Resolution I concerning statistics of work, employment and labour underutilization, paragraph 22, 19th ICLS (2013).

B. Measurement strategy and Question mapping

Measurement strategy The ILO model questionnaire uses a multi-step, modular strategy to identify own-use producers of goods. This strategy takes account of the respondents’ perspective when answering questions with the aim to reduce respondent burden and minimize reporting errors.

- First, the ILO model questionnaire identifies persons who are producers of foodstuff for subsistence (see the relevant entry for a detailed description).
- Second, add-on questions are included in module **OPG** to capture persons engaged in own-use production of other non-food items, in particular, own-construction, manufacture of household goods, fetching water, and collecting firewood.

While module **OPG** is indicated as optional, it will not be possible to produce a comprehensive estimate of own-use producers of goods if it this is not included, as per their relevance in the national context.

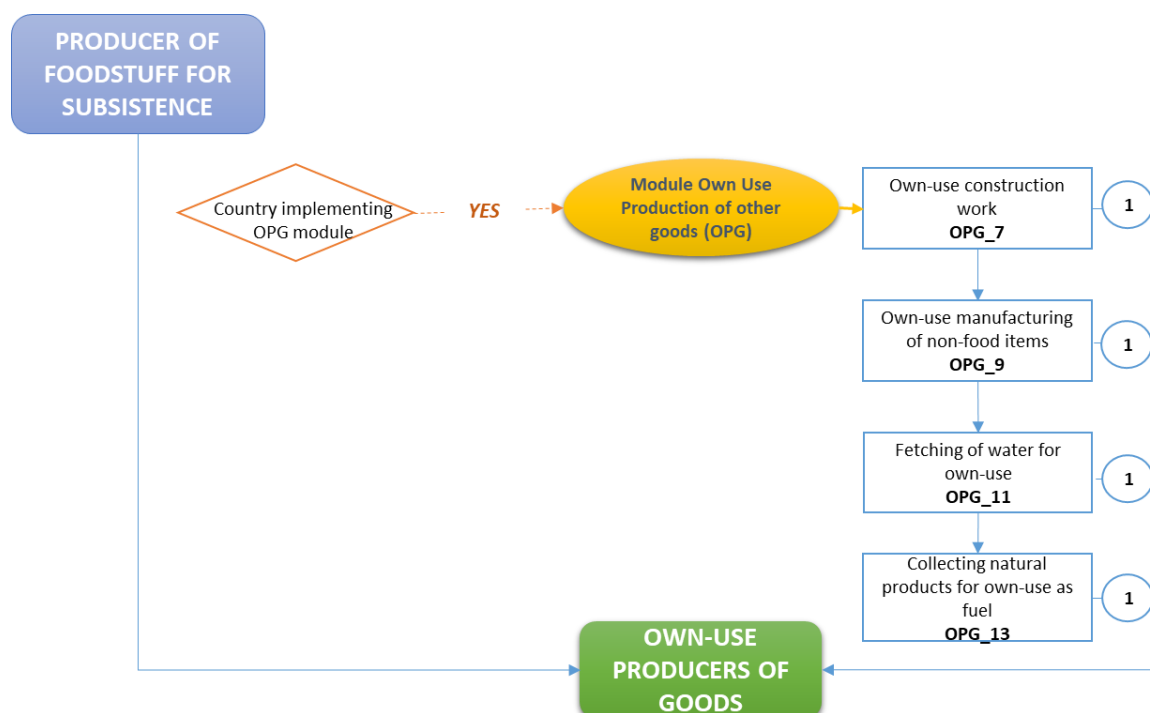
Relevant modules

- Module ATW (Employed at work); Module ABS (Temporary Absence)
- Module AGF (Agricultural work and market orientation)
- Module OPA (Own-use production in agriculture)
- [Module OPG \(Own-use production of other goods\)](#)

Relevant questions

- AGF_1b, AGF_1a, AGF_2, AGF_2b, AGF_2c
- OPA_1
- [OPG_1, OPG_3, OPG_5, OPG_7, OPG_9, OPG_11, OPG_13](#)

C. Flow chart and reference syntax



Reference Syntax	Status
IF (DEM_6 >= N AND CLASSIFIED AS PRODUCER OF FOODSTUFF FOR SUBSISTENCE OR (MODULE OPG IMPLEMENTED AND (OPG_7=1 OR OPG_9=1 OR OPG_11=1 OR OPG_13=1)))	OWN-USE PRODUCER OF GOODS

D. Basic syntax for Variable Derivation in Stata

/ Own-use producers of goods*/*

gen opg=.

replace opg=1 if prod_food_sub=1 | OPG_7==1 | OPG_9==1 | OPG_11==1 | OPG_13==1

lab def opg_lab 1 "Goods for own-use"

lab val opg opg_lab

lab var opg "Goods for own-use"