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Evolution Social Protection

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MIMOSIS: MIcrosimulation MOdel for Belgian Social Insurance Systems
Modelling rules for the Unemployment Benefits Module

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Abstract

This note discusses the rules, used to simulate the unemployment benefits of the unemployed in MIMOSIS.[1] The subset of MIMOSIS that covers the unemployment computation rules, is called the UNEM module.

The rules, discussed in this note, and implemented in the UNEM module, are an interpretation of the unemployment legislation of the year 2001. In appendix 1 we discuss the changes, necessary to simulate changes in the legislation of benefit years until 2005.

Table contents

Introduction

In order to compute the unemployment benefits we use a number of exogenous variables, obtained from an administrative data source. Next to this we also need to construct a number of endogenous variables. Some elements of the legislation are integrated in the module in a parametric form.

In the remainder of the text we point out which are the exogenous and endogenous variables and the parameters of the UNEM module. Names of variables and parameters will appear with capital letters. The names of endogenous variables and parameters start with the string UNEM_. Unless indicated otherwise, the default value of an endogenous variable is 0.

Throughout we assume that the model runs on quarterly data. If a variable or parameter name ends with the string _QT this refers to registrations for the quarter that is being processed. A quarterly registration can either be an amount received during the given quarter, or a status that is assumed to apply throughout the quarter. Variables or parameters that contain registrations for preceding quarters are referred to with ending strings _QTMIN1, _QTMIN2, _QTMIN3 … referring respectively to the preceding quarter, two quarters ago and three quarters ago. Variables or parameters that contain registrations for a day, month or year, end with the string _DAY, _MONTH or _ANN respectively. In appendix 3 we provide a list of all variables and parameters used in this note.

In section 1 of this note we illustrate how the unemployed are identified in the model. In some occasions it is necessary to take into account the income position of other household members to determine the unemployment benefits of the unemployed. In section 2 we therefore illustrate how this household income information is summarised for each of the unemployed. From the third section on we discuss the rules, used to determine the benefits, received by the unemployed, depending on the unemployment status.

1 IDENTIFICATION OF THE UNEMPLOYED

In the unemployment legislation of 2001 one can distinguish three main groups, entitled to unemployment benefits:

1. the unemployed in search of work and who are entitled to benefits (de vergoede werkzoekenden/des demandeurs d'emploi indemnisé). Within this group one can further distinguish:
   a. people who receive benefits after studies
   b. people who receive benefits after employment
2. the unemployed not in search of work and who are entitled to benefits paid by the RVA-ONEM (de niet-werkzoekenden met uitkeringen ten laste van het

RVA-budget/des inactifs avec intervention de l'ONEM). Within this group one can further distinguish:

    a. people who are on conventional early retirement

    b. people who are on career break

    c. the older unemployed who receive a seniority supplement

    d. people who receive an exemption

3. the employees entitled to benefits paid by the RVA-ONEM (de tewerkgestelden met uitkeringen ten laste van het RVA-budget/des employés avec intervention de l'ONEM). Within this group one can further distinguish:

    a. people who are on part-time early retirement

    b. people who are on part-time career break

    c. people who receive guaranteed income benefits

    d. people who are temporarily unemployed

    e. people who are working for a Plaatselijk Werkgelegenheidsagentschap/Agence locale pour l'emploi

    f. people who are working in some kind of activation program

In order to distinguish these different statuses, we use the variable FICHE7_QT, provided by the RVA. This variable covers the status of the unemployed person as registered by the RVA. We use this variable to construct the variable UNEM_STATUS_QT, which will cover the unemployment status of the individual.

Construction rule for UNEM_STATUS_QT:

In Table 1 we illustrate how the values of FICHE7_QT are used to construct the variable values of UNEM_STATUS_QT, other than the default value 0.

Table 1: Values of FICHE7_QT used to create the variable UNEM_STATUS_QT

	Unemployment status	Value of UNEM_STATUS_QT	Value of FICHE7_QT
1.a.	people who receive benefits after studies	1	3, 6, 46
1.b.	people who receive benefits after employment	2	1, 2, 4, 5, 16, 17, 45, 47
2.a.	people who are on conventional early retirement	3	36, 37, 38, 39, 97, 98
2.b.	people who are on career break	4	200, 201, 202, 204, 205, 206
2.c.	the older unemployed who receive a seniority supplement	5	7
2.d.	people who receive unemployment benefits because of an exemption	6	8, 9, 10, 11, 14, 15, 26, 27, 28, 29, 40, 41, 43, 44
3.a.	people who are on part-time early retirement	7	99
3.b.	people who are on part-time career break	8	208, 209, 210, 212, 213, 214, 216, 217, 218
3.c.	people who receive guaranteed income benefits	9	18, 19
3.d.	people who are temporarily unemployed	10	20, 21, 22, 23
3.e.	people who are working for a Plaatselijk Werkgelegenheidsagentschap/Agence locale pour l'emploi	11	31, 32
3.f.	people who are working in some kind of activation program other than the PWA system	12	33, 34, 35, 80, 81, 82, 83, 84, 85, 86, 87, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 126, 127, 128, 130, 131, 132, 133, 134, 135, 136, 137, 138

Remark that, since we take the unemployment status of the individual from an external data source, this implies that the unemployment status of the individual is fixed within the model. This has the advantage that we can rely on other administrative variables to recalculate the unemployment benefits of the unemployed, but it has the disadvantage that the current unemployment module can not be used to simulate the effects when people are moving in or out unemployment. If the module is to be used for that, observations currently lacking, have to be imputed. Which variable values will have to be imputed should become clear from reading through the remainder of the text.

2 IDENTIFICATION OF THE HOUSEHOLD POSITION OF THE UNEMPLOYED

In some occasions, the level of the unemployment benefits depends on the family charge of the unemployed. In the unemployment legislation of 2001 one can distinguish three different household positions of the unemployed[2]:

4. An unemployed with dependent family. This is an unemployed who:
    1.1.   either cohabits with a partner, married or not, who does not receive any professional or replacement income,
        To check this:
        – the professional income of the partner is not taken into account if it is declared together with the request for unemployment benefits and if it is an income received as a wage earner that does not exceed the level of € 275,34 net per month,
        – pension benefits or benefits in case of industrial accidents and occupational diseases, are not taken into account if they do not exceed the level of € 427,54 per month,
        – other benefits, that replace professional income, such as unemployment benefits or sickness and disability benefits other than benefits in case of industrial accidents and occupational diseases are always taken into account.
    1.2.   or does not cohabit with a partner but,
        – cohabits with one or more children,
            – if the unemployed is entitled to family allowances for at least one of these children or none of these children has a professional or replacement income,
                To check this:
                – the professional income of a child is not taken into account if it does not amount to more than € 317,08 gross per month,
                – pension benefits or benefits in case of industrial accidents and occupational diseases, are not taken into account if they do not exceed the level of € 427,54 per month,
                – benefits for sickness and disability, other than those paid in case of industrial accidents and occupational diseases, and unemployment benefits of a child are not be taken into account if they do not amount to more than € 317,08 per month.
        – cohabits with one or more children and one or more relatives up to the third degree,

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2   See Van Eeckhoutte, W. (2001), p. 495-496.

- if the unemployed is entitled to family allowances for at least one of these children or none of these children has a professional or replacement income.
- and the other relatives do not benefit from any professional or replacement income.
  To check this:
  - The above conditions on all children should apply
  - The pensions of ascendants will not be taken into account if they do not amount to more than € 1.541,05 gross per month.
- cohabits with one or more relatives up to the third degree,
  - that do not benefit from a professional or replacement income.
    To check this:
    - The pensions of ascendants will not be taken into account if they do not amount to more than € 913,34 gross per month or to more than € 1.541,05 gross per month if the relative up to the third degree has lost all ability to do things independently or who's ability to function independently is diminished by at least 9 points.

1.3.　　Or lives alone but has a duty of care.

5. An unemployed who is single. This is an unemployed who lives alone and has no duty of care.
6. A cohabitating unemployed. This is an unemployed who is not classified as an unemployed with dependent family and not as an unemployed who is single.

To reconstruct the household position of the unemployed, we need a number of variables that allow us to identify the precise position.

One of the variables we require should reflect the relation between the unemployed and his other household members. We need to distinguish 5 possible relationships: 1) partner, 2) child, 3) relative up to the third degree, 4) ascendant and 5) other. We will store this relationship-indicators in the variable UNEM_REL_QT. Another variable should reflect whether the unemployed cohabits with children yes or no. We will store an indication of this in the variable UNEM_CHILINHH_QT.

Construction rule for UNEM_REL_QT and UNEM_CHILINHH_QT:

In order to determine the values of the variable UNEM_REL_QT, we make use of the relationship variables: FAMREL_RELATION, FAMREL_FAMTYPE and FAMREL_COUPLE. In Decoster, De Swerdt, Orsini and Van Camp (2007) we explain how these variables are constructed and how they can be used to

determine the values of UNEM_REL_QT.[3] This variable can take the values 1, 2, 3, 4, 5 or 6 if the household member of the unemployed is 1) partner, 2) child, 3) ascendant of the first degree, 4) ascendant of the second degree, 5) relative up to the third degree and 6) other, respectively.

From these household relationship variables we can also infer whether the unemployed cohabits with at least one child. If this is the case we set the variable UNEM_CHILINHH_QT equal to 1.

We also need a variable that indicates whether the household member satisfies certain income conditions. We will store an indication of this in the variable UNEM_DEPINC_QT. This variable will be set equal to 1 if a household member does NOT satisfy the conditions to be a dependent of the unemployed.

Construction rule for UNEM_DEPINC_QT:

Before explaining how the income conditions have been checked, we first list the income variables that will be used as input to check these income conditions. We list these variables, and the module that produces these variables, in Table 2.

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[3] Note that if multiple unemployed are present in the same household, the values of the variable UNEM_REL_QT are overwritten each time we determine the family relationships of a particular unemployed.

Table 2: Income variables produced by different modules of the model used as input to check the dependency conditions[4]

Variable	Module	Description
CONTRIB_REVPRIV_QT	CONTRIB	Sum of gross labour income, holiday earnings and other supplements, earned as wage earner on the private labour market
CONTRIB_REVPUB_QT	CONTRIB	Sum of gross labour income, holiday earnings and other supplements, earned as wage earner on the public labour market
CONTRIB_INCSELF_QT	CONTRIB	Gross income earned as self employed
CONTRIB_SSPRIV_EMEE_QT	CONTRIB	Social security contributions paid on CONTRIB_REVPRIV_QT
CONTRIB_SSPUB_EMEE_QT	CONTRIB	Social security contributions paid on CONTRIB_REVPUB_QT
CONTRIB_SSSELF_EMER_QT	CONTRIB	Social security contributions paid on CONTRIB_INCSELF_QT
PENSWELF_AMOUNTP_QT	PENSWELF	Gross amount of pensions received
FAMAL_AMOUNTF_QT	FAMAL	Gross amount of family allowances received by the recipient
SICK_BENINOC_QT	SICK	Gross amount of benefits for industrial accidents and occupational diseases
SICK_NONEINOC_QT	SICK	Gross amount of sickness and disability benefits other than benefits for industrial accidents or occupational diseases
UNEM_BENUNPR_QT	UNEM	Gross amount of real unemployment benefits in a given quarter (no benefits paid by RVA as supplement to wage)

To check the income conditions we need the net earned income as either a wage earner or a self employed. We refer to the latter two variables as UNEM_NETWEARN_QT and UNEM_NETSELF_QT. These variables can be computed with the gross income variables and the contributions paid on it. How we do this, is explained in appendix 2.

We also need to distinguish benefits obtained because of industrial accidents or occupational diseases from other sickness and disability benefits. We obtain both concepts as a result of the SICK module in the form of the variables SICK_BENINOC_QT and SICK_NONEINOC_QT respectively.

The income conditions to be checked depend on the relationship the household member has with the unemployed and whether there are children in the

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[4] Note that the UNEM module also requires observations on the unemployment benefits of all household members. We solve this problem by running the UNEM module twice. In the first run we use exogenous observations on unemployment benefits as input of the module.

household or not. We check these income conditions, individual by individual, and store the result for each individual checked in the variable UNEM_DEPINC_QT.[5]

If the unemployed has a partner, i.e. UNEM_REL_QT is equal to 1 for one of the household members, we check the following conditions on the income levels, observed for the partner of the unemployed:

- If UNEM_NETWEARN_QT > 826,02 then UNEM_DEPINC_QT = 1,
- If UNEM_NETSELF_QT > 0 then UNEM_DEPINC_QT = 1,
- If UNEM_BENUNPR_QT > 0 then UNEM_DEPINC_QT = 1,
- If SICK_NONENINOC_QT > 0 then UNEM_DEPINC_QT = 1,
- If PENSWELF_AMOUNTP_QT > 1282,62 then UNEM_DEPINC_QT = 1,
- If SICK_BENINOC_QT > 1282,62 then UNEM_DEPINC_QT = 1.

If the household member is a child of the unemployed, i.e. UNEM_REL_QT is equal to 2, we check the following conditions on the income levels observed for this child:

- If CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT + CONTRIB_INCSELF_QT > 951,24 then UNEM_DEPINC_QT = 1,
- If UNEM_BENUNPR_QT > 951,24 then UNEM_DEPINC_QT = 1,
- If SICK_NONEINOC_QT > 951,24 then UNEM_DEPINC_QT = 1,
- If PENSWELF_AMOUNTP_QT > 1282,62 then UNEM_DEPINC_QT = 1,
- If SICK_BENINOC_QT > 1282,62 then UNEM_DEPINC_QT = 1.

If the household member is a relative up to the third degree, other than an ascendant, i.e. UNEM_REL_QT is equal to 5, we check the following conditions on the income levels observed for this individual:

- If CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT + CONTRIB_INCSELF_QT > 0 then UNEM_DEPINC_QT = 1,
- If UNEM_BENUNPR_QT > 0 then UNEM_DEPINC_QT = 1,
- If SICK_NONEINOC_QT > 0 then UNEM_DEPINC_QT = 1,
- If PENSWELF_AMOUNTP_QT > 1282,62 then UNEM_DEPINC_QT = 1,
- If SICK_BENINOC_QT > 1282,62 then UNEM_DEPINC_QT = 1.

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[5] The conditions that follow are based on Van Eeckhoutte, W. (2001), p. 495-496.

If the household member is an ascendant, i.e. UNEM_REL_QT is equal to 3 or 4, we check the following conditions on the income levels observed for this individual:

- If CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT + CONTRIB_INCSELF_QT > 0 then UNEM_DEPINC_QT = 1,
- If UNEM_BENUNPR_QT > 0 then UNEM_DEPINC_QT = 1,
- If SICK_NONEINOC_QT > 0 then UNEM_DEPINC_QT = 1,
- If the unemployed cohabits with children and PENSWELF_AMOUNTP_QT > 4.623,24 then UNEM_DEPINC_QT = 1,
- If the unemployed does not cohabit with children and PENSWELF_AMOUNTP_QT > 2.740,02 then UNEM_DEPINC_QT = 1,
- If SICK_BENINOC_QT > 1282,62 then UNEM_DEPINC_QT = 1.

If the household member is related in another sense than the previous ones, i.e. UNEM_REL_QT is equal to 6, we check the following conditions on the income levels observed for this individual:

- If CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT + CONTRIB_INCSELF_QT > 0 then UNEM_DEPINC_QT = 1,
- If UNEM_BENUNPR_QT > 0 then UNEM_DEPINC_QT = 1,
- If SICK_NONEINOC_QT > 0 then UNEM_DEPINC_QT = 1,
- If PENSWELF_AMOUNTP_QT > 2.740,02 then UNEM_DEPINC_QT = 1,
- If SICK_BENINOC_QT > 1282,62 then UNEM_DEPINC_QT = 1.

Remark that the conditions, applied in case of other household members, i.e. UNEM_REL_QT is equal to 6, are not specified explicitly in the legislation. Implementing the specified legislation would imply then that all unemployed, living together with other household members would be classified as cohabitating unemployed by default. Since there is uncertainty on the classification of the degree of relationship between the observed household members, we apply this additional condition.

Remark that with this implementation of the dependency conditions, we assume that all relatives up to the third degree still have their full ability to do things independently. With the variable MEDISCHE CATEGORIE, included at priority level 4 of the data demand, we could check whether there are household members with diminished impendence ability.

The thresholds, used in the preceding checks on income, are integrated in the module in a parametric form. We list the parameter names used, and the value they take in the 2001 legislation, in Table 3.

Table 3: Parameters used to check income conditions of household members of the unemployed and their value in the 2001 tax benefit legislation[6]

Parameter	Value in 2001	Description
UNEM_WAGEDFQ1_QT	826,02	Ceiling used to exempt net wages of spouse
UNEM_WAGEDFQ2_QT	951,24	Ceiling used to exempt gross professional income of children
UNEM_WAGEDFQ3_QT	951,24	Ceiling used to exempt unemployment benefits and sickness and disability benefits, other than benefits obtained because of industrial accidents or occupational diseases of children
UNEM_WAGEDFQ4_QT	4.623,24	Ceiling used to exempt pensions of antecedents in case the unemployed has cohabitating children
UNEM_WAGEDFQ5_QT	2.740,02	Ceiling used to exempt pensions of antecedents in case the unemployed has no cohabitating children
UNEM_WAGEDFQ6_QT	1.282,62	Ceiling used to exempt other pensions and benefits obtained because of industrial accidents or occupational diseases
UNEM_WAGEDFQ7_QT	0	Ceiling used to exempt not else classified replacement or professional income

We also need to know whether the unemloyed is single yes or no. We will count the number of household members and store this result in the variable UNEM_HH_SIZE.

Construction rule for UNEM_HH_SIZE:

We observe the variable NAREGNIS_HH_ID, that comes from the national register. This variable contains a unique identifier of the household to which the individual belongs. We set UNEM_HH_SIZE equal to the number of times this unique value, that we observe for a given individual, is observed in the data set as a whole.

With the variables UNEM_REL_QT, UNEM_DEPINC_QT, UNEM_HH_SIZE and FAMAL_AMOUNTF_QT, we can now reconstruct the required household position of the unemployed. We store the result in the variable UNEM_FAMSIT_QT. This variable can take four values:

− If the individual is not unemployed UNEM_FAMSIT_QT = 0,

− If the unemployed has dependent family UNEM_FAMSIT_QT = 1,

− If the unemployed is categorised as single UNEM_FAMSIT_QT = 2,

− If the unemployed is categorised as cohabitating UNEM_FAMSIT_QT = 3.

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[6] See Van Eeckhoutte, W. (2001), p. 495-496.

Construction rule for UNEM_FAMSIT_QT:

If the unemployed is single, i.e. UNEM_HH_SIZE is equal to 1, UNEM_FAMSIT_QT is set equal to 2. Remark that we assume that all single unemployed do not have a duty of care.

If the individual is not considered as single, we should determine whether the value for UNEM_FAMSIT_QT should either be 1 or 3. By default the value of UNEM_FAMSIT_QT for non single unemployed is set equal to 1, i.e. the default is that these unemployed have dependent family.

In case the unemployed has a partner, i.e. UNEM_REL_QT of a household member is equal to 1, we switch the value of UNEM_FAMSIT_QT to 3 if the value of UNEM_DEPINC_QT of this partner is equal to 1.

In case the unemployed has no partner, i.e. we do not observe a household member with a value for UNEM_REL_QT equal to 1, we switch the value of UNEM_FAMSIT_QT to 3 if one of the following conditions applies:

- If the value of UNEM_DEPINC_QT of a single household member that is not considered as a child, is equal to 1,
- If the value of UNEM_DEPINC_QT of a child is equal to 1 and FAMAL_AMOUNTF_QT = 0,
- If the unemployed only cohabits with people classified as other, i.e. UNEM_REL_QT is equal to 6 for all household members.

Remark that with this implementation we assume that the dependent children in the unemployment legislation are exactly the same as those that should be taken into consideration to determine the family allowances.

In some occasions, we also need to know whether the unemployed has a partner for which the sole source of income is an unemployment benefit that does not exceed the amount of € 917,80 per month.[7] If this is the case, we say that the unemployed has a privileged cohabitant.

In order to indicate whether the unemployed has a privileged partner or not, we will construct the variable UNEM_PRIVICOH_QT, which will take the value 1 if the unemployed cohabits with a partner for which the sole source of income is an unemployment benefit that does not exceed the amount of € 917,80 per month and 0 otherwise.

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[7] See Van Eeckhoutte, W. (2001), p. 500. Van Eeckhoutte, W. (2001), p. 500 also mentiones the condition of having at maximum € 35,3 unemployment benefits per day. The amount of € 917,8 a month corresponds with being unemployed 26 days in a month. Remark that by applying a check on this monthly amount, we apply a limit that is to generous for unemployed who have been unemployed less than 26 days in a month.

Construction rule for UNEM_PRIVICOH_QT:

If the unemployed has a partner, i.e. UNEM_REL_QT is equal to 1 for one of the household members, we check the following conditions on the income levels, observed for the partner of the unemployed:

− If UNEM_STATUS_QT > 0 and UNEM_BENUNPR_QT < 2.753,40 and
(CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT +
CONTRIB_INCSELF_QT + PENSWELF_AMOUNTP_QT +
SICK_BENINOC_QT + SICK_NONEINOC_QT) = 0 then
UNEM_PRIVICOH_QT = 1.

This threshold of € 2.753,40 is set in the module by the parameter UNEM_WAGEDFQ8_QT.

3 DETERMINATION OF UNEMPLOYMENT BENEFITS OF UNEMPLOYED IN SEARCH OF WORK

To receive unemployment benefits, an unemployed in search of work has to meet a whole range of conditions. These conditions can be categorised in two groups:

− the unemployed has to be permitted to the system of unemployment benefits,

− the unemployed has to be eligible for unemployment benefits.

3.1 CONDITIONS TO BE PERMITTED TO THE SYSTEM OF UNEMPLOYMENT BENEFITS

An unemployed in search of work can be permitted to the system of unemployment benefits,

− either if he finishes studies,

− or because he has been employed previously.

The conditions to be permitted to the system of unemployment benefits differ between both states.

We will create a variable UNEM_PERMIS_QT to indicate whether an unemployed is permitted to the system of unemployment benefits for either of the two reasons. If the unemployed is permitted to the system of unemployment benefits UNEM_PERMIS_QT will get a positive value.

3.1.1 PERMISSION ON THE BASIS OF STUDIES[8]

To be permitted to the system of unemployment benefits on the basis of studies, the unemployed in search of work:

− either has to prove that he did not work during a certain time span that follows right after graduation,

− or has to prove he did not find work during a certain time span while he is in a program of part time employment combined with part time studies.

The time span without work that the graduated student or student in a study/employment program should prove, is called the waiting period.

In case of graduated students, the waiting period depends on the age of the unemployed. In Table 4 we list the age and the corresponding days to be proven.

Table 4: Waiting period to be proven by the unemployed in search of work to be permitted to the system of unemployment benefits on the basis of studies[9]

Age of the employee	Waiting period
younger than 18	155 days
between 18 and 26	233 days
Between 26 and 30	310 days
a young person, whatever his age, unemployed due to circumstances dependent on his own will[10]	310 days

To compute the number of days waited, in case of graduated students, one starts to count from a day after graduation, usually August 1st of the year prior to the year one requests an unemployment benefit, and one stops the day before the request for unemployment benefits is filed.

Students in a part time study, part time employment program are only permitted to employment benefits if they are younger than 18 and if they can prove a waiting period of 155 days.[11]

To compute the number of days waited in this case, one starts to count from either the day one enters the program or from the day one becomes unemployed after having entered the program and one stops the day before the request for unemployment benefits is filed.

Construction rule for UNEM_PERMIS_QT:

We have insufficient information to check these conditions, since we do not know when the unemployed graduated or entered the study/employment

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[8] See Van Eeckhoutte, W. (2001), p. 473-475.
[9] See Van Eeckhoutte, W. (2001), p. 474.
[10] In principle, one is considered as a young person in the unemployment legislation, if one is not older than 30. But exceptions to this rule are possible. We will not specify these exceptions here, see Van Eeckhoutte, W. (2001), p. 474-475.
[11] See Van Eeckhoutte, W. (2001), p. 473.

program and we do not know when the unemployed has entered the request for the unemployment benefit. Hence, we can not compute the number of days waited.

Therefore we assume that all unemployed with a value of UNEM_STATUS_QT = 1 are young unemployed who did not work during the time span required to be permitted to unemployment benefits.

In order to distinguish between graduated students and students in a study/employment program, we will use the variable FICHE7_QT. When the unemployed is a graduated student, i.e. FICH7_QT equals 3 or 46, we set UNEM_PERMIS_QT equal to 1. In case the unemployed is in a study/employment program, i.e. FICH7_QT equals 6, we set UNEM_PERMIS_QT equal to 2.

3.1.2 PERMISSION ON THE BASIS OF PREVIOUS EMPLOYMENT[12]

To be permitted to the system of unemployment benefits on the basis of previous employment, the unemployed in search of work has to prove that he has worked a number of days in paid employment (the waiting period) during a certain period immediately prior to the request for unemployment benefits (the period of reference). The number of days the unemployed has to prove and the length of the period of reference, again depends on the age of the unemployed. We list the age and the corresponding days of the waiting and reference period in Table 5.

Table 5: Waiting and reference period to be proven by the unemployed in search of work to be permitted to the system of unemployment benefits on the basis of previous employment[13]

Age of the employee	Waiting period	Reference period
Younger than 36 years	312 days	18 months
From 36 to 49 years	468 days	27 months
50 years and older	624 days	36 months

Construction rule for UNEM_PERMIS_QT (continued):

We again have insufficient information to check these conditions. We do not observe the date of the request for unemployment benefits and we do not have sufficient information on the labour market experience of the unemployed.

Therefore we assume that all unemployed with a value of UNEM_STATUS_QT = 2 are unemployed that have been employed previously

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[12] See Van Eeckhoutte, W. (2001), p. 471-473.
[13] See Van Eeckhoutte, W. (2001), p. 471.

and have a sufficient amount of waiting days. Hence, we set UNEM_PERMIS_QT equal to 3 if UNEM_STATUS_QT = 2.

3.2 CONDITIONS TO BE ELIGIBLE FOR UNEMPLOYMENT BENEFITS[14]

To be eligible to the system of unemployment benefits, the unemployed in search of work, has to meet a number of conditions:

− the unemployed person has to be involuntary out of work and without wages,

− the unemployed person has to be available for the labour market,

− the unemployed person has to be registered and stay registered as a person in search of work,

− the unemployed person has to be fit for work,

− the unemployed person has to meet the age conditions,

− the unemployed person has to reside in Belgium,

− the unemployed person has to submit himself to the control of his dole card.

We will create a variable UNEM_ELIGUIS_QT to indicate whether an unemployed is eligible for unemployment benefits. If the unemployed is eligible, this variable will be set to 1. It will be 0 otherwise.

Construction rule for UNEM_ELIGUIS_QT:

Since we do not have sufficient information to check all these conditions, we will simply assume that all unemployed with UNEM_STATUS_QT = 1 or UNEM_STATUS_QT = 2 are eligible for unemployment benefits. Hence if UNEM_STATUS_QT = 1 or 2, we will set UNEM_ELIGUIS_QT = 1.

3.3 UNEMPLOYMENT BENEFITS AFTER STUDIES

In case the young unemployed graduated, his benefit is called a waiting benefit (wachtuitkering). The benefit of young unemployed in a study/employment program, is called a transitional benefit (overbruggingsuitkering). Although these benefits differ in name, they are determined in the same way.

To determine the benefits received, one first determines the benefits per day. The benefit paid is then determined as the product of this daily benefit and the number of days the unemployed is entitled to this benefit. The level of the daily benefits depends on:

− the age of the unemployed,

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[14] See Van Eeckhoutte, W. (2001), p. 477-485.

– whether or not the unemployed is single and if not, whether he has dependents or not,

– whether or not the unemployed has a partner for which the sole source of income is an unemployment benefit that does not exceed the amount of € 917,80 per month or not.

We list the age, the conditions to be satisfied and the corresponding daily benefit of young unemployed in Table 6.

Table 6: Daily unemployment benefits received by young unemployed[15]

		Benefits per day
1	**Unemployed with dependent family**	€ 30,99
	Single unemployed	
2	Unemployed younger than 18	€ 8,63
3	Unemployed 18 or older but younger than 21	€ 13,56
4	Unemployed 21 or older	€ 21,19
	Cohabitating unemployed	
	Not cohabitating with a partner with low unemployment benefits	
5	Unemployed younger than 18	€ 7,54
6	Unemployed 18 or older but younger than 21	€ 12,02
7	Unemployed 21 or older	€ 12,02
	Cohabitating with a partner with low unemployment benefits	
8	Unemployed younger than 18	€ 7,99
9	Unemployed 18 or older but younger than 21	€ 12,84
10	Unemployed 21 or older	€ 12,84

We will determine these daily benefits and store the result in the variable UNEM_BENSTUD_DAY. Next to this, we will also construct the amount paid to the unemployed on a quarterly basis. The latter result will be stored in the variable UNEM_BENSTUD_QT.

Construction rule for UNEM_BENSTUD_DAY and UNEM_BENSTUD_QT:

If the variable UNEM_PERMIS_QT takes the value 1 or 2 and the variable UNEM_ELIGUIS_QT takes the value 1, we use the variables UNEM_YEAR_AGE, UNEM_FAMSIT_QT and UNEM_PRIVICOH_QT to determine the appropriate value for UNEM_BENSTUD_DAY.

In order to determine the value of UNEM_BENSTUD_QT, we use the determined value of UNEM_BENSTUD_DAY and combine it with the observation in the exogenous variable DAGEN_QT, i.e.:

UNEM_BENSTUD_QT = UNEM_BENSTUD_DAY* DAGEN_QT.

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[15] See Van Eeckhoutte, W. (2001), p. 500.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

The values in Table 6 are integrated in the module with the parameter UNEM_LUSUWB_DAY, which is a vector of 1 by 10. The line numbers of this vector correspond with those used in column 1 of Table 6.

3.4 UNEMPLOYMENT BENEFITS AFTER EMPLOYMENT

To determine the unemployment benefits paid after a period of employment, one first computes a daily benefit conditional on some household and past labour market characteristics. In general, this daily benefit is computed as a percentage of lost either limited or unlimited wages. On June 1st 2001 the average lost daily wage was limited to a maximum amount of € 58,82 per day.[16] In general, the average lost wage is computed as the average wage over the last 4 weeks in employment.[17]

The daily benefit, obtained by applying a percentage on the lost wage is then sometimes limited to a minimum or maximum level. In some cases the daily benefit is set as a lump sum amount.

The daily benefit, determined after a period of employment depends on the following characteristics:

– whether or not the unemployed is single and if not, whether he has dependents or not,

– whether or not the unemployed has a partner for which the sole source of income is an unemployment benefit that does not exceed the amount of € 917,80 per month or not,

– the number of months the unemployed is in unemployment already,

– the number of years worked as a wage earner,

– an average of lost wages earned as a wage earner,

– whether or not the unemployed has lost earning capacity as a wage earner because of an accident yes or no and

– whether or not the unemployed is disabled.

In Table 7 we list the different cases one can distinguish, the general rule used to determine the daily benefit in each case and if they apply, the minimum and maximum level used to restrict the daily benefit. The average of the lost but

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[16] See Van Eeckhoutte, W. (2001), p. 497.

[17] On June 1st 2001 the average lost daily wage was limited to a maximum amount of € 58,82 per day (see Van Eeckhoutte, W. (2001), p. 497).

limited daily wages is abbreviated as ALDW in what follows. The average of the lost unlimited daily wages are abreviated as AUDW.

Table 7: Conditions used to determine the daily benefit after employment on June 1st 2001[18]

	Category	Rule	Minimum daily amount	Maximum daily amount
	Unemployed with dependent family			
1	Unemployed is disabled	60% of AUDW		
2	Unemployed is not disabled	60% of ALDW	€ 31,78	€ 35,30
	Single unemployed			
3	Unemployed is disabled	50% of AUDW		
	Unemployed is not disabled			
4	The first 12 months of unemployment	60% of ALDW	€ 24,07	€ 35,30
5	After the first 12 months of unemployment	45% of ALDW	€ 24,07	€ 26,48
	Cohabitating unemployed			
6	Unemployed is disabled	50% of AUDW		
	Unemployed is not disabled			
7	The first 12 months of unemployment	55% of ALDW	€ 17,70	€ 32,35
8	from the 13th until the 15th month[19]	35% of ALDW	€ 17,70	€ 20,58
	after 15th months			
9	the employee has worked for more than 20 years as a wage earner	35% of ALDW		
10	the employee is permanently disabled for at least 33% of his earning capacity	35% of ALDW		
	All other cases			
11	Not cohabiting with a partner with low unemployment benefits	€ 13,21 per day		
12	Cohabitating with a partner with low unemployment benefits only	€ 13,21+€ 4,41 per day		

In order to check the conditions in Table 7, we need information on the unemployed, in addition to the one already discussed above. In addition to the above variables, we need to know:

1. whether the unemployed is disabled or not,
2. the number of months he is in unemployment,
3. the number of years worked as a wage earner,
4. the decrease in his earning capacity before he entered unemployment,
5. the average of the lost wage earned before entering unemployment.

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[18] See Van Eeckhoutte, W. (2001), p. 496-499.
[19] This period is increased by 3 months for every additional year that the employee has worked as a wage-earner.

An indication whether the unemployed is disabled or not, will be stored in the variable UNEM_DISABLED_QT. If the unemployed is disabled, this variable will be set to 1.

Construction rule for UNEM_DISABLED_QT:

In order to identify disabled unemployed, we will again use the exogenous variable FICHE7_QT. If this variable is equal to 16, we will set UNEM_DISABLED_QT equal to 1.

The number of months the unemployed is in unemployment, will be stored in the variable UNEM_NUMMINU_QT. If positive, this number expresses the number of months the unemployed is in unemployment.

Construction rule for UNEM_NUMMINU_QT:

The time in unemployment is set by aid of the exogenous variable DUUR_QT, provided by the RVA. We will set UNEM_NUMMINU_QT equal to DUUR_QT.

The number of years, worked as a wage earner will be stored in the variable UNEM_NUMYWAGE_QT. Positive numbers express the number of years worked as a wage earner.

Construction rule for UNEM_NUMYWAGE_QT:

We assume that all unemployed have worked less than 1 year as a wage earner before they get unemployed. This implies that the second period of unemployment of all cohabitating unemployed who are not disabled, will only last three months (see line 8 in Table 7) and that in their third period of unemployment none of the cohabitating unemployed who are not disabled will be considered as an unemployed that worked more than 20 years as a wage earner (see line 9 in Table 7).

Remark that we dispose of information with which this assumption could be refined in the form of the CIMIRE data. The CIMIRE data have not been processed for the purpose of the construction of UNEM_NUMYWAGE_QT. Next to this we also requested the variable SUFFIX3 of the RVA, which should capture the fact that an unemployed has worked for more than 20 years as a wage earner. The latter variable is not available.

The decrease in earning capacity will be stored in the variable UNEM_DECREARN_QT. Positive numbers express the percentage decrease in the earning capacity if the unemployed would be working on the labour market.

Construction rule for UNEM_DECREARN_QT:

We assume that all unemployed retain their earning capacity from before unemployment if they would re-enter the labour market. This implies that in their third period of unemployment none of the cohabitating unemployed who are not disabled will be considered as an unemployed with at least a 33% reduction in earning capacity (see line 10 in Table 7).

Remark that the data demand of the MIMOSIS project contains a number of variables, some of the already at our disposal, that could help to refine the content of the variable UNEM_DECREARN_QT. We did process the variables of the FAO and FBZ for the purpose of the construction of UNEM_DECREARN_QT.

The average of the lost wages, earned as a wage earner, is, in general, determined as 1/26 of the last earned monthly wage. In case of part time employment this average of the lost wages is determined as the product of the hourly wage times the average weekly working hours, to be performed by a full time worker in a similar job, divided by 6.[20]

We will construct this average lost daily wage and store the result in the variable UNEM_AVGLWAGE_DAY.

Construction rule for UNEM_AVGLWAGE_DAY:

We dispose of an exogenous variable that covers the last observed hourly wage, i.e. MIMOSIS_GRINC_HOUR.[21] We set the variable UNEM_AVGLWAGE_DAY equal to the value observed in MIMOSIS_GRINC_HOUR times 7,6.

With all the variables, reconstructed above, we are now able to determine the daily unemployment benefits. The result of this computation will be stored in the variable UNEM_BENEMPL_DAY. Next to this, we will also reconstruct the benefits paid on a quarterly basis. This result will be stored in the variable UNEM_BENEMPL_QT.

Construction rule for UNEM_BENEMPL_DAY and UNEM_BENEMPL_QT:

If the variable UNEM_PERMIS_QT takes the value 3 and the variable UNEM_ELIGUIS_QT takes the value 1, we construct UNEM_BENEMPL_DAY first.

We use the values of the variables UNEM_FAMSIT_QT, UNEM_DISABLED_QT, UNEM_NUMMINU_QT, UNEM_NUMYWAGE_QT, UNEM_DECREARN_QT and UNEM_PRIVICOH_QT to select the appropriate percentage or lump sum amount, listed in the rule column of Table 7.

If the daily benefit is a percentage of the average lost wages, we apply the percentage, thus selected, on the variable UNEM_AVGLWAGE_DAY, limited to a maximal amount of € 58,82 if necessary. The result of this operation is stored in the variable UNEM_BENEMPL_DAY.

We then apply the minima and maxima, listed in the last two columns of Table 7, on the values stored in UNEM_BENEMPL_DAY.

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[20] See Van Eeckhoutte, W. (2001), p. 497.
[21] See Perelman and Van Camp (2006) for a discussion of the construction of this variable.

In order to determine the value of UNEM_BENEMPL_QT, we use the determined value of UNEM_BENEMPL_DAY and combine it with the observation in the exogenous variable DAGEN_QT, i.e.:

UNEM_BENEMPL_QT = UNEM_BENEMPL_DAY*DAGEN_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

We set this threshold of 58,82 in the module by aid of the parameter UNEM_LIMLOSW_DAY. The values listed in Table 7 are integrated in the module in a parametric form. Three parameters are used for this.

The values in the last three columns of line 1 to 10 Table 7 are set by the parameter UNEM_PERLIMUB_DAY, which is a matrix of 10 lines and 3 columns. The lump sum amounts € 13,21 and € 4,41 are set by the parameters UNEM_LSCUB1_DAY and UNEM_LSCUB2_DAY, respectively.

In order to allow for the possibility to limit the benefit payments in time we introduce the parameter UNEM_DUURP. If an unempolyed is more months in unemployment than the value set by UNEM_DUURP, then the value of UNEM_BENEMPL_QT is switched to 0, otherwise no adaptation is done. The number of months in unemployement is captured by the variable UNEM_NUMMINU_QT.

4 DETERMINATION OF UNEMPLOYMENT BENEFITS OF UNEMPLOYED NOT IN SEARCH OF WORK WHO ARE ENTITLED TO RVA-ONEM BENEFITS

We distinguish 4 different types of benefits, that are all classified as benefits paid to unemployed not in search of work. The benefits we distinguish are:

1. conventional early retirement benefits,
2. career break benefits,
3. benefits for older unemployed with seniority supplement,
4. benefits because the unemployed is exempted from certain obligations.

Different conditions determine a) whether one is entitled to one of these benefits and b) what the level of the received benefit is. Therefore, we treat these conditions for each of these different benefits, in what follows.

An indicator, indicating whether an unemployed is eligible for one of the preceding four types of benefits and the corresponding benefits will be stored in the variables UNEM_ELIGUNSx_QT and UNEM_BENUNSx_QT, where x will be a number running from 1 to 4, covering the above four benefit types respectively.

4.1 CONVENTIONAL EARLY RETIREMENT BENEFITS

4.1.1 CONDITIONS TO BE ELIGIBLE FOR EARLY RETIREMENT BENEFIT

In order to be eligible for early retirement benefits, the employee has to meet a number of conditions:

- the employee has to be fired by his employer,[22]

- the employee must be entitled to an additional supplement on the basis of a collective (labour) agreement,[23]

- the employee must be entitled to unemployment benefits,

- in principle the unemployed must be at least 58 years old,[24]

- at the age of 58 the employee must have worked for at least 25 years as a wage earner. [25]

Throughout the tax benefit legislation one sometimes distinguishes between early retirement benefits of the old and new type. This is, for instance, the case in the personal income tax legislation.

Early retirement benefits of the old type are early retirement benefits that became operational before January 1st 1987 or are mandatory because of collective wage agreements contracted before January 1st 1986.[26]

An indication of the fact that the unemployed is eligible for conventional early retirement benefits will be stored in the variable UNEM_ELIGUNS1_QT. If this variable is equal to 1 this indicates that the unemployed is entitled to early retirement benefits of the old type. If the unemployed is entitled to early retirement benefits of the new type, the variable UNEM_ELIGUNS1_QT takes the value 2.

> **Construction rule for UNEM_ELIGUNS1_QT:**
>
> The variable UNEM_ELIGUNS1_QT is set equal to 2, each time the variable UNEM_STATUS_QT takes the value 3. Hence we assume that all unemployed that are observed as unemployed with an early retirement benefit in the unemployment data of the RVA are assumed to be eligible for these benefits and no other unemployed are.
>
> Remark that we assume that all early retirement benefits are of the new type. We make this assumption because we can not discriminate between the old and the new type of benefits. The variable Suffix 3, included in the data

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[22] See Van Eeckhoutte, W. (2001), p. 518, point c.
[23] See Van Eeckhoutte, W. (2001), p. 518-519, point e.
[24] See Van Eeckhoutte, W. (2001), p. 515, point a.
[25] See Van Eeckhoutte, W. (2001), p. 517, point b.
[26] See Ministerie van Financiën (2002), p. 36.

demand of the MIMOSIS project, contains information that would allow us to make this distinction.

4.1.2 LEVEL OF THE EARLY RETIREMENT BENEFIT

The early retirement benefits are determined as a percentage of the lost but limited wages, but the amount, obtained as a percentage of the lost but limited wages, may not exceed a certain level or fall below a certain threshold.

In 2001, the lost gross quarterly wages were limited to an amount of € 4.497,90 for the computation of the early retirement benefits.[27] The other conditions, used to determine these early retirement benefits, are listed in Table 8.

Table 8: Conditions used to determine early retirement benefits.[28]

Category	Rule	Minimum	Maximum
Early retirement benefits	60% of lost but limited quarterly wages	€ 2.478, 84	€2.753,4 0

Hence, to compute the early retirement benefit, we need the limited wages, lost in a preceding quarter. We therefore construct the variable UNEM_LOSWAGE_QT.

Construction rule for UNEM_LOSWAGE_QT:

We dispose of an exogenous variable that covers the last observed quarterly income, i.e. MIMOSIS_GRINC_QT.[29] We set the variable UNEM_LOSWAGE_QT equal to the value observed in MIMOSIS_GRINC_QT.

With these lost wages, we can then compute the early retirement benefits. We store these values in the variable UNEM_BENUNS1_QT.

Construction rule for UNEM_BENUNS1_QT:

If UNEM_ELIGUNS1_QT is larger than 0, we first set UNEM_BENUNS1_QT equal to 60% of the minimum of 4.497,90 and UNEM_LOSWAGE_QT.

If UNEM_LOSWAGE_QT is equal to 0, we then set UNEM_BENUNS1_QT equal to BEDRAGEN_QT. The variable BEDRAGEN_QT is an exogenous variable, which contains the benefits paid by the RVA.

We then check whether the value of UNEM_BENUNS1_QT exceeds the minimal or maximal quarterly level.

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[27] See FOD Sociale Zekerheid (2001), p 345.
[28] See Van Eeckhoutte, W. (2001), p. 521, point b. Remark that we interpret the period of entitlement here as the quarter, since we dispose of quarterly data for the computations.
[29] See Perelman and Van Camp (2006) for a discussion of the construction of this variable.

The amount, used to limit the quarterly wages for the computation of early retirement benefits, is integrated in the module in the form of the parameter UNEM_LIMWAGE_QT.

The other conditions, listed in Table 8, are integrated in the module in the form of the parameter UNEM_EARPAR_QT, which is a vector with one line and three columns containing the percentage, minimum and maximum respectively.

Next to the conventional early retirement benefits, paid by the RVA, the early retired also receives early retirement benefits, paid by the employer. This additional supplement is equal to half of the difference between a) the net wages and b) the unemployment benefit. Net wages are equal to the lost but limited gross wages minus the social security contributions and prepayments paid on the total amount of taxable wages.[30] For this computation, the gross wages are limited to an amount of € 8.329,23 per quarter.[31]

We compute these additional early retirement benefits, and store the result in the variable UNEM_ADDUNS_QT.

Construction rule for UNEM_ADDUNS_QT:

If UNEM_ELIGUNS1_QT is larger than 0, we first compute UNEM_ADDUNS_QT as the net wage that corresponds with either the gross wage observed in UNEM_LOSWAGE_QT or with € 8.329,23, depending on which one of the two is the smallest. This result is divided by 2. In appendix 2 we explain how we compute the net wage required for this computation.

The upper limit for the gross wages is integrated in the module in the form of the parameter UNEM_LIMEARR_QT.

4.2 CAREER BREAK BENEFITS

4.2.1 CONDITIONS TO BE ELIGIBLE FOR CAREER BREAK BENEFITS

One can distinguish four different types of career break benefits:

− common career break benefits,

− career break benefits in case of palliative care,

− career break benefits in case of medical assistance,

− career break benefits in case of parental leave.

<u>Common career breaks</u> have a minimum length of three months and a maximum of one year. An employee is entitled to 60 common career break months over his

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[30] See Van Eeckhoutte, W. (2001), p. 519.
[31] See Van Eeckhoutte, W. (2001), p. 519.

entire career. In order to be entitled to these common career break benefits, the employee:[32]

−   may not have used his total credit of 60 months yet,

−   the employee has to have a written agreement with his employer for the interruption of the execution of his employment contract,

−   the employee has to submit a request for career break benefits and in that request the employer has to make a commitment to replace the employee by an unemployed.

Career breaks in case of palliative care last, in principle, one month, but can be extended with another month.[33] All employees are entitled to these benefits. In order to receive them, the employee has to prove that he is giving medical, social, administrative and psychological assistance and care to a person who is suffering from an incurable disease and who is terminally ill. The employee can prove this by submitting a doctor's certificate that states that the employee is giving assistance and palliative care without revealing the identity of the patient.

Career breaks in case of medical assistance have a minimum length of 1 month and a maximum of 3 months.[34] Different (succeeding) periods of career break in case of medical assistance are possible but they cannot exceed 12 months per patient assisted. In order to receive such benefits, the employee has to prove that he is giving assistance or care to a household member or family member who is seriously ill. The employee can prove this by submitting a doctor's certificate that states that the employee is giving assistance or care.

Career breaks in case of parental leave last, in principle, three moths.[35] To be entitled to benefits because of parental leave, the employee has to have an employment contract with his employer for at least 12 moths during the 15 months that precede the request for parental leave. The right for parental leave can be granted in case of birth, if the child is not older than 4 years, and in case of adoption, if the child is not older than 8 years.

We will reconstruct these eligibility conditions, and store the result in the variable UNEM_ELIGUNS2_QT. This variable can further take the value 1 to 4 in case the conditions for one of the four preceding benefits are satisfied.

Construction rule for UNEM_ELIGUNS2_QT:

We assume that all people with a value of UNEM_STATUS_QT equal to 4, i.e. people who are on career break, may be entitled to one of the four preceding benefits. In order to distinguish further between one of the 4 possible types, we use the variable REDENLO_QT in addition. The variable REDENLO_QT is an

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[32] See Van Eeckhoutte, W. (2001), p. 109 ff.
[33] See Van Eeckhoutte, W. (2001), p. 126-127.
[34] See Van Eeckhoutte, W. (2001), p. 127 ff.
[35] See Van Eeckhoutte, W. (2001), p. 130 ff.

exogenous variable, provided by the RVA, which covers the reason why someone takes a career break.

The value UNEM_STATUS_QT, the values of REDENLO_QT and the corresponding value of UNEM_ELIGUNS2_QT, are listed in Table 9.

Table 9: Variable values used to determine the values of UNEM_ELIGUNS2_QT

Value of UNEM_ELIGUNS2_QT	Label of UNEM_ELIGUNS2_QT	Value of UNEM_STATUS_QT	Value of REDENLO_QT
1	Common career break	4	. or 9
2	Career break in case of palliative care	4	P
3	career break benefits in case of medical assistance	4	G
4	career break benefits in case of parental leave	4	O

4.2.2 LEVEL OF CAREER BREAK BENEFITS

Career break benefits are determined differently for those leaving a full time job and those leaving a part time job. In case the employee leaves a full time job, the basic benefit is fixed as a lump sum amount per month. In case the employee leaves a part time job, the benefit is first determined in the same way as that of a full time employee, but then this benefit is reduced proportional to the ratio of a) working hours performed by the part time worker and b) the number of hours to be performed by a full time worker.[36]

The common career break benefits depend on a) the number of months the career break already lasted and b) the number of children for which the career breaker receives child benefits.[37]

The different conditions, and the corresponding benefits per month, paid in case the employee leaves a full time job, are listed in Table 10.

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[36] Remark that we assume that the same rule applies for all types of career break although Van Eeckhoutte, W. (2001) only lists this rule explicitely for common career breaks, see p. 110.

[37] See Van Eeckhoutte, W. (2001), p. 110.

Table 10: Level of common career break benefits per month on June 1st 2001 for employees who leave a full time job[38]

	Number of months the career break lasts	
Situation	First 12 months	After 12 months
Standard amount	€ 317,40	€ 301,54
Exception:		
The career break starts in a time span of three years after the birth or adoption of a child that is not the first child for which the employee or his partner receive child benefits		
In case of the second child	€ 347,62	€ 330,24
In case of the third child or higher	€ 377,84	€ 358,95

In order to compute all career break benefits, we need to know whether the employee leaves a full time job or part time job. We will store an indication of this in the variable UNEM_FPUNS_QT. It will take the value 1 in case the employee leaves a full time job and a 2 when the employee leaves a part time job.

Construction rule for UNEM_FPUNS_QT:

In order to construct this variable UNEM_FPUNS_QT, we will use the variable FICHE7_QT. If the variable FICHE7_QT takes the values 200, 201 or 202, the unemployed is someone who left a full time job. We will set UNEM_FPUNS_QT equal to 1 in these cases. If the variable FICHE7_QT takes the value 204, 205 or 206 the employee has interrupted a part time job. These values for FICHE7_QT therefore imply a value 2 for UNEM_FPUNS_QT.

Next to this, we also need to know how many months the career break is already ongoing and whether the career breaker satisfies the conditions to receive a supplement in addition to the standard amount. We will construct the variable UNEM_CARBCON_QT, that contains values that differentiate these different conditions.

Construction rule for UNEM_CARBCON_QT:

In order to construct the values of UNEM_CARBCON_QT, other than the default value 0, we will use two exogenous variables, provided by the RVA, i.e. VERMIN_QT and VERHOG_QT. The variable VERMIN_QT indicates whether the career breaker is in his first 12 months or not. The variable VERHOG_QT allows us to differentiate between the standard amount and the supplements because of children. How we combine the values of VERMIN_QT and VERHOG_QT to obtain a value of UNEM_CARBCON_QT is listed in Table 11.

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[38] See Van Eeckhoutte, W. (2001), p. 110.

Table 11: Variable values used to determine the values of UNEM_CARBCON_QT

Value of UNEM_CARBCON_QT	Label of UNEM_CARBCON_QT	Value of VERMIN_QT	Value of VERHOG_QT
1	Standard amount, first 12 months	1, 9 or .	A, 9 or .
2	Supplement for second child, first 12 months	1, 9 or .	B or D
3	Supplement for third child or above, first 12 months	1, 9 or .	C or E
4	Standard amount, after 12 months	2	A, 9 or .
5	Supplement for second child, after 12 months	2	B or D
6	Supplement for third child or above, after 12 months	2	C or E

Combining now the values of the variables UNEM_ELIGUNS2_QT, UNEM_FPUNS_QT and UNEM_CARBCON_QT allows us to determine the benefits of common career breakers. We will store all constructed career break benefits in the variable UNEM_BENUNS2_QT.

Construction rule for UNEM_BENUNS2_QT in case of common career break:

For people who take a common career break, i.e. UNEM_ELIGUNS2_QT is equal to 1, and who leave a full time job, i.e. UNEM_FPUNS_QT is equal to 1, we determine the career break benefit as the daily benefit multiplied with the number of days they received a benefit in the given quarter. We observe the number of days they received a benefit in the form of the exogenous variable DAGEN_QT, provided by the RVA. The daily benefit is reconstructed as the monthly benefit divided by 26. The monthly benefit is selected from Table 10, conditional on the value of UNEM_CARBCON_QT. Hence, for common career breakers who leave a full time job, we apply the following rule:

UNEM_BENUNS2_QT = (monthly amount/26)*DAGEN_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

For people with a common career break but who leave a part time job, we do not have sufficient information to determine the proportional amount of hours worked, as compared to a full time worker. Therefore we do not recompute their career break benefits, but simply set them equal to the observed value of the exogenous variable BEDRAGEN_QT provided by the RVA.

Hence, for common career breakers who leave a part time job, we apply the following rule:

UNEM_BENUNS2_QT = BEDRAGEN_QT

The lump sum amounts, listed in Table 10, are integrated in the module in the form of the parameter UNEM_BENCCB_MONTH.

The <u>benefits in case of a career break for palliative care</u> are also set as a lump sum amount per month. This monthly amount differs, conditional on the number of months the career break already lasted. The different monthly amounts, that applied in 2001, are listed in Table 12.

Table 12: Level of career break benefits per month in case of palliative care on June 1st 2001 for employees who leave a full time job[39]

	Number of months the career break lasts	
Situation	First 12 months	After 12 months
Standard amount	€ 526,13	€ 499,83

Combining the values of the variables UNEM_ELIGUNS2_QT, UNEM_FPUNS_QT and UNEM_CARBCON_QT allows us to determine the benefits in case of palliative care.

Construction rule for UNEM_BENUNS2_QT in case of palliative care:

For people eligible for career break benefits in case of palliative care, i.e. UNEM_ELIGUNS2_QT is equal to 2, who leave a full time job, i.e. UNEM_FPUNS_QT is equal to 1, we determine the quarterly benefit again as the monthly benefit divided by 26 multiplied by the number of days one received a benefit.

The monthly amount is selected from Table 12 conditional on the value of UNEM_CARBCON_QT. If this variable takes the value 1, 2 or 3 we select the monthly amount that applies for the first 12 and if it takes the value 4, 5 or 6 we select the value that applies for more than 12 months. Hence, for common career breakers who leave a full time job, we apply the following rule:

UNEM_BENUNS2_QT = (monthly amount/26)*DAGEN_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

For people who leave a part time job, we do not recompute their career break benefits, but set them again equal to the observed value of the exogenous variable BEDRAGEN_QT. Hence, for career breakers that are eligible for palliative care benefits who leave a part time job, we apply the following rule:

UNEM_BENUNS2_QT = BEDRAGEN_QT

The lump sum amounts, listed in Table 12, are integrated in the module in the form of the parameter UNEM_BENPCARE_MONTH.

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[39] See Van Eeckhoutte, W. (2001), p. 127.

The <u>benefits in case of medical assistance</u> are again set as a lump sum amount per month, with a different amount conditional on the number of months the career break is already ongoing. The different monthly amounts, that applied in 2001, are listed in Table 13.

Table 13: Level of career break benefits per month in case of medical assistance on June 1st 2001 for employees who leave a full time job[40]

	Number of months the career break lasts	
Situation	First 12 months	After 12 months
Standard amount	€ 526,13	€ 499,83

Combining the values of the variables UNEM_ELIGUNS2_QT, UNEM_FPUNS_QT and UNEM_CARBCON_QT allows us to determine the benefits in case of medical assistance.

Construction rule for UNEM_BENUNS2_QT in case of medical assistance:

The value of UNEM_BENUNS2_QT in case of people eligible for career break benefits for medical assistance, i.e. UNEM_ELIGUNS2_QT is equal to 3, are determined in a similar way as those for palliative care.

The lump sum amounts, listed in Table 13, are integrated in the module in the form of the parameter UNEM_BENMCARE_MONTH.

The <u>benefits in case of parental leave</u> are also set as a lump sum amount per month, with a different amount conditional on the number of months the career break is already ongoing. The different monthly amounts, that applied in 2001, are listed in Table 14.

Table 14: Level of career break benefits per month in case of parental leave on June 1st 2001 for employees who leave a full time job[41]

	Number of months the career break lasts	
Situation	First 12 months	After 12 months
Standard amount	€ 526,13	€ 499,83

Combining the values of the variables UNEM_ELIGUNS2_QT, UNEM_FPUNS_QT and UNEM_CARBCON_QT allows us to determine the benefits in case of parental leave.

Construction rule for UNEM_BENUNS2_QT in case of parental leave:

The value of UNEM_BENUNS2_QT in case of people eligible for career break benefits for parental leave, i.e. UNEM_ELIGUNS2_QT is equal to 4, are determined in a similar way as those for palliative care and medical assistance.

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[40] See Van Eeckhoutte, W. (2001), p. 129.
[41] See Van Eeckhoutte, W. (2001), p. 134.

The lump sum amounts, listed in Table 14, are integrated in the module in the form of the parameter UNEM_BENPLEAV_MONTH.

4.3 BENEFITS FOR OLDER UNEMPLOYED WITH SENIORITY SUPPLEMENT

4.3.1 CONDITIONS TO BE ELIGIBLE FOR SENIORITY SUPPLEMENTS

The seniority supplement is supplement on top of the normal unemployment benefit, paid to older unemployed. To be entitled to seniority supplements the older unemployed has to meet the following conditions:[42]

– the older unemployed has to be at least 50 years old (age condition),

– the older unemployed must have worked for at least 20 years (duration of the career),

– the older unemployed has to be unemployed for more than one year (duration of unemployment).

We will reconstruct these eligibility conditions, and store the result in the variable UNEM_ELIGUNS3_QT. This variable will take the value 1 in case the older unemployed is eligible for seniority supplements.

Construction rule for UNEM_ELIGUNS3_QT:

We assume that all people with a value of UNEM_STATUS_QT equal to 5, i.e. older unemployed who receive a seniority supplement, do satisfy the eligibility conditions. Hence, UNEM_ELIGUNS3_QT will take the value 1 when UNEM_STATUS_QT is equal to 5.

4.3.2 LEVEL OF BENEFITS WITH SENIORITY SUPPLEMENT

The seniority supplement of the older unemployed depends on a) the household situation of the unemployed, b) the age of the unemployed and c) the time the unemployed is already in unemployment.

In general, the daily supplement is determined as a percentage of the lost daily wage, but in some cases it is set as a lump sum amount. This seniority supplement is added to the normal unemployment benefit. If the amount of unemployment benefit, including the supplement, falls below a certain threshold, the total daily unemployment benefit is set equal to a predefined minimal level.

In Table 15 we list the rule used to determine the daily supplement of older unemployed and the levels applied to set the minimal total daily benefit, conditional on the characteristics of the unemployed.

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[42] See Van Eeckhoutte, W. (2001), p. 500.

Table 15: Conditions used to determine the seniority supplement of older unemployed on June 1st 2001[43]

	Category	Rule	Minimum daily amount of basic benefit + supplement	Maximum daily amount of basic benefit + supplement
1	**Unemployed with dependent family**	€ 3,69	€ 34,04	
	Single unemployed			
2	Unemployed is 55 years or older	15% of ALDW	€ 28,46	
3	All other cases	9,5% of ALDW	€ 31,33	
	Cohabitating unemployed			
	The first 15 months of unemployment			
4	Unemployed is 55 years or older but younger than 58	20% of ALDW	€ 28,46	
5	Unemployed is 58 years or older	15% of ALDW	€ 25,86	
6	All other cases	10% of ALDW	€ 23,81	
7	After 15 months of unemployment	€ 3,79	€ 17,08	

In order to construct the unemployment benefits, including the seniority supplement, we need to know all the information, necessary to compute the normal unemployment benefit (as explained in section 3). These variables also contain the necessary information to compute the seniority supplement that is to be added to this normal benefit.

We will reconstruct the daily benefit of older unemployed, that entitled to a seniority supplement, and store in the variable UNEM_BENUNS3_DAY. We will then use this daily amount to construct the quarterly amount, which is stored in the variable UNEM_BENUNS3_QT.

Construction rule for UNEM_BENUNS3_DAY and UNEM_BENUNS3_QT:

For all unemployed that are eligible for the seniority supplement, i.e. UNEM_ELIGUNS3_QT is equal to 1, we first compute the normal daily benefit, as explained in section 3.[44] We store this result in the variable UNEM_BENREF_DAY. Two extra parameters, necessary to compute the value of UNEM_BENREF_DAY are integrated in the module. These parameters are UNEM_LIMLOSW_REF_DAY and UNEM_PERLIMUB_REF_DAY. In the baseline

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[43] See Van Eeckhoutte, W. (2001), p. 501.
[44] Since we do not have additional information to discriminate between those that leave school or would be entitled to benefits after employment, we compute the benefits as if all would be entitled to unemployment benefits after employment.

the values of these parameters are set equal to those of the parameters UNEM_LIMLOSW_DAY and UNEM_PERLIMUB_DAY, but integration of these parameters allows for later differentiantion in the computation of both benefits.

We then use the variables UNEM_FAMSIT_QT, UNEM_NUMMINU_QT and UNEM_YEAR_AGE to select the appropriate percentage or lump sum amount from the column rule in Table 15. If a percentage is to be applied on the lost daily wages, we apply this percentage on the variable UNEM_AVGLWAGE_DAY, in order to obtain the daily supplement. The daily supplement, thus obtained, is added to the normal benefit, i.e. UNEM_BENREF_DAY, and the result is stored in the variable UNEM_BENUNS3_DAY.

The level of the daily benefit, including the seniority supplement, is then compared with the minimal level, listed in the column minimum of Table 15. Daily benefits that fall below this threshold, are set equal to this minimum level.

In order to obtain the quarterly amount of benefits paid to the unemployed, we multiply the daily benefit with the number of days for which the unemployed received benefits, i.e. DAGEN_QT, and store the result of this multiplication in the variable UNEM_BENUNS3_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

The values, listed in Table 15, are integrated in the module in the form of the parameter UNEM_BENSSUP_DAY. This parameter is a matrix with 7 rows and 3 columns, containing the rule value, the minimum and maximum respectively.

4.4 UNEMPLOYMENT BENEFITS IN CASE OF EXEMPTION

Unemployed can be exempted to accept certain conditions that other unemployed are obliged to accept if they do not want to loose their unemployment benefit. Conditions unemployed might be exempted from are:[45]

– the acceptance of suitable employment or a professional training,

– the enrolment to the authorized employment office and/or office for professional training,

– the participation to a guidance scheme,

– the availability for the labour market,

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[45] See Van Eeckhoutte, W. (2001), p. 491.

– the registration as a person in search of work.

The unemployment benefits that exempted unemployed receive differ, in some cases, from the benefits paid to non exempted unemployed.

4.4.1 CONDITIONS TO BE ELIGIBLE FOR UNEMPLOYMENT BENEFITS IN CASE OF EXEMPTION

In the unemployment legislation one distinguishes exemptions because of social and familial reasons from those because of studies or professional training.

An exemption because of social and familial reasons can be given to unemployed if their social or familial situation is such that they have difficulties to comply to all the obligations an unemployed should obey. In order to be eligible for this kind of exemption, the unemployed has to prove that the exemption is necessary to solve the problems he faces.[46] Unemployed who are studying or who follow a professional training program can be exempted as a result of this if they have some certificate of study.

We will store an indication of the fact that the unemployed is eligible for exemption benefits in the variable UNEM_ELIGUNS4_QT. This variable will take the value 1 if the unemployed is exempted because of social and familial reasons and 2 if he is exempted because of studies or professional training.

Construction rule for UNEM_ELIGUNS4_QT:

We assume that only unemployed that are exempted according to our exogenous information, i.e. UNEM_STATUS_QT is equal to 6, are eligible for these exemption benefits.

To distinguish further between exemptions because of social and familial reasons and those because of studies or professional training, we use the variable FICHE7_QT. If the variable FICHE7_QT takes the value 8, we will set UNEM_ELIGUNS4_QT equal to 1. For all other values of FICHE7_QT, we will set UNEM_ELIGUNS4_QT equal to 2.

4.4.2 LEVEL OF UNEMPLOYMENT BENEFITS IN CASE OF EXEMPTION

Unemployed that are exempted because of social or familial reasons receive a lump sum benefit. The benefit depends on the number of months one is exempted. In Table 16 we list the lump sum benefits, conditional on the number of months one is exempted.

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[46] See Van Eeckhoutte, W. (2001), p. 490-491.

Number of months being exempted	Amount per day
First 24 months	€ 10,01
From month 25 till month 72	€ 8,13
From month 73 on	€ 0

In order to compute these daily benefits, we need to know how many months the unemployed is already exempted. We will construct an indication of this and store the result in the variable UNEM_EXEMP_QT. This variable will take the value 1 if the unemployed is in his first 24 months of exemption, 2 if his in the period from the 25th month until month 72 and 3 if he is exempted for more than 72 months.

Construction rule for UNEM_EXEMP_QT:

We derive the number of months that the unemployed is exempted from the level of the daily benefit, observed in the exogenous variable DGNDMND_QT, conditional on the fact that the unemployed is observed as an unemployed who is exempted because of social or familial reasons, i.e. the variable FICHE7_QT is equal to 8. The values of FICHE7_QT and DGNDMND_QT, that determine the value of UNEM_EXEMP_QT, are summarised in Table 17.

Table 17: Variable values used to determine the values of UNEM_EXEMP_QT

Value of UNEM_EXEMP_QT	Label of UNEM_EXEMP_QT	Value of FICHE7_QT	Value of DGNDMND_QT
1	Exempted 24 months or less	8	€ 10,01
2	Exempted more than 24 months but less than 72	8	€ 8,13
3	Exempted more than 72 months	8	Other value than € 10,01 and € 8,13

With the variable UNEM_EXEMP_QT and UNEM_ELIGUNS4_QT, we can determine the daily benefit in case of exemption because of social or familial reasons. The daily benefit, combined with the number of days the benefit is paid in a given quarter, results in the quarterly amount paid. We store this quarterly benefit in the variable UNEM_BENUNS4_QT.

Construction rule for UNEM_BENUNS4_QT in case of exemption because of social or familial reasons:

If the unemployed is exempted because of social or familial reasons, i.e. UNEM_ELIGUNS4_QT is equal to 1, we use the value of the variable UNEM_EXEMP_QT, to select the appropriate daily benefit from Table 16. This

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[47] See Van Eeckhoutte, W. (2001), p. 491.

daily benefit, multiplied with the number of days observed in the exogenous variable DAGEN_QT, results in the quarterly amount.

Hence, for those exempted because of social and familial reasons, we apply the following rule:

UNEM_BENUNS4_QT = (daily benefit)*DAGEN_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

The values, listed in Table 16, are integrated in the module in the form of the parameter UNEM_EXEMPSF_DAY.

An unemployed that is exempted because of studies or a professional training, receives the same benefit as an unemployed with similar characteristics but who is not exempted.

Construction rule for UNEM_BENUNS4_QT in case of exemption because of studies or professional training:

If an unemployed is exempted because of studies or professional training, i.e. UNEM_ELIGUNS4_QT is equal to 2, we will apply the same rules as discussed in section 3 to determine the quarterly unemployment benefits. [48]

5 DETERMINATION OF UNEMPLOYMENT BENEFITS OF EMPLOYEES ENTITLED TO BENEFITS PAID BY THE RVA-ONEM

We distinguish 6 different types of benefits, that are all classified as benefits paid by the RVA to employees. The benefits we distinguish are:

1. part time early retirement benefits,
2. part time career break benefits,
3. guaranteed income benefits,
4. benefits paid in case of temporary unemployment,
5. benefits paid to people employed in the framework of a Plaatselijk Werkgelegenheidsagentschap (PWA)/Agence Locale Pour L'emploi (ALE),
6. benefits paid to people employed in other activation programs.

Different conditions determine a) whether one is entitled to one of these benefits and b) what the level of the received benefit is. Therefore, we treat these conditions for each of these different benefits, in what follows.

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[48] Since we do not have additional information to discriminate between those that leave school or would be entitled to benefits after employment, we compute the benefits as if the unemployed would be entitled to unemployment benefits after employment.

An indicator, indicating whether the employee is eligible for one of the preceding six types of benefits and the corresponding benefits will be stored in the variables UNEM_ELIGEMPx_QT and UNEM_BENEMPx_QT, where x will be a number running from 1 to 6, covering the above six benefit types respectively.

5.1 PART TIME EARLY RETIREMENT BENEFITS

5.1.1 CONDITIONS TO BE ELIGIBLE FOR PART TIME EARLY RETIREMENT BENEFITS

In order to be eligible for part time early retirement benefits, the employee has to meet a number of conditions:[49]

– the employee must be at least 55 years old;

– the employee must have worked for at least 25 years as a wage earner;

– the employee must have an agreement with his employer to cut back on his working hours;

– the employee must have worked full-time in the same company during the 12 months prior to the agreement to cut back on his working hours;

– the employee must still work for half of the working hours of a normal full-time job;

– the employee must be entitled to unemployment benefits.

Throughout the tax benefit legislation one sometimes distinguishes between early retirement benefits of the old and new type. This is, for instance, the case in the personal income tax legislation.

Early retirement benefits of the old type are early retirement benefits that became operational before January 1st 1987 or are mandatory because of collective wage agreements contracted before January 1st 1986.[50]

An indication of the fact that the unemployed is eligible for conventional early retirement benefits will be stored in the variable UNEM_ELIGEMP1_QT. If this variable is equal to 1 this indicates that the unemployed is entitled to early retirement benefits of the old type. If the unemployed is entitled to early retirement benefits of the new type, the variable UNEM_ELIGEMP1_QT takes the value 2.

Construction rule for UNEM_ELIGEMP1_QT:

The variable UNEM_ELIGEMP1_QT is set equal to 2, each time the variable UNEM_STATUS_QT takes the value 7. Hence we assume that only all

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[49] See Van Eeckhoutte, W. (2001), p. 508 ff..
[50] See Ministerie van Financiën (2002), p. 36.

unemployed that are observed as part time early retired in the unemployment data of the RVA are eligible for these benefits and have a early retirement benefit of the new type.

5.1.2 LEVEL OF PART TIME EARLY RETIREMENT BENEFITS

The part time early retirement benefits are set as a lump sum amount per day. In 2001 this daily lump sum amount was set equal to € 12,22.[51]

We can use this lump sum value to determine the quarterly part time early retirement benefit. We will store this quarterly benefit in the variable UNEM_BENEMP1_QT.

Construction rule for UNEM_BENEMP1_QT:

If UNEM_ELIGEMP1_QT is not equal to 0, we will determine the part time early retirement benefits by multiplying the lump sum amount with the number of days the employee received unemployment benefits according to what we observe in the exogenous variable DAGEN_QT. Hence, we set the value of UNEM_BENEMP1_QT as follows:

UNEM_BENEMP1_QT = (daily lump sum amount)*DAGEN_QT

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

The lump sum value of the daily benefit is integrated in the module in the form of the parameter UNEM_LSPEAR_DAY.

Next to this part time early retirement benefit, paid by the RVA, the part time early retired also receives early retirement benefits paid by the employer. In case of part time early retirement this additional supplement is equal to:

1/4 of the net wages – 5/4 of the unemployment benefit.[52]

Net wages in this rule are equal to gross wages, earned in case of full time employment, minus the social security contributions and prepayments paid on the total amount of taxable wages.[53] For this computation, the gross wages are limited to an amount of € 8.329,23 per quarter.[54]

We compute this additional part time early retirement benefit, and store the result in the variable UNEM_ADDEMP_QT.

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[51] See FOD Sociale Zekerheid (2001), p 513.
[52] See Van Eeckhoutte, W. (2001), p. 511.
[53] See Van Eeckhoutte, W. (2001), p. 511.
[54] See Van Eeckhoutte, W. (2001), p. 511.

Construction rule for UNEM_ADDEMP_QT:

If UNEM_ELIGEMP1_QT is equal to 1 we compute UNEM_ADDEMP_QT first as the net wage that corresponds with either the gross wage observed in UNEM_LOSWAGE_QT or with € 8.329,23, depending on which one of the two is the smallest. This result is divided by 4. In appendix 2 we explain how we compute the net wage that corresponds with the selected value.

From this value we subtract 5/4* UNEM_BENEMP1_QT. Remark that we assume here that the lump sum unemployment benefit is the relevant unemployment benefit to be used, although Van Eeckhoutte (2001) does not mention this explicitly.

If UNEM_ADDEMP_QT would become negative after this subtraction, this variable is set equal to 0.

The upper limit for the gross wages is integrated in the module in the form of the parameter UNEM_LIMEARR_QT.

5.2 PART TIME CAREER BREAK BENEFITS

5.2.1 CONDITIONS TO BE ELIGIBLE FOR PART TIME CAREER BREAK BENEFITS

One can again distinguish four different types of part time career break benefits:

– common part time career break benefits,

– part time career break benefits in case of palliative care,

– part time career break benefits in case of medical assistance,

– part time career break benefits in case of parental leave.

The conditions to be eligible for one of these part time career break benefits are the same as those used for a full time career break of the same type (see section 4.2 above).

We will reconstruct these eligibility conditions, and store the result in the variable UNEM_ELIGEMP2_QT. This variable can further take the value 1 to 4 in case the conditions for one of the four preceding benefits are satisfied.

Construction rule for UNEM_ELIGEMP2_QT:

We assume that all people with a value of UNEM_STATUS_QT equal to 8, i.e. people who have a part time career break according to the exogenous variable FICHE7_QT, are entitled to one of the four preceding benefits. In order to distinguish further between one of the 4 possible types, we use the variable REDENLO_QT in addition. The variable REDENLO_QT is an exogenous variable, provided by the RVA, which covers the reason why someone takes a career break.

The value UNEM_STATUS_QT, the values of REDENLO_QT and the corresponding value of UNEM_ELIGEMP2_QT, are listed in Table 18.

Table 18: Variable values used to determine the values of UNEM_ELIGEMP2_QT

Value of UNEM_ELIGEMP2_QT	Label of UNEM_ELIGEMP2_QT	Value of UNEM_STATUS_QT	Value of REDENLO_QT
1	common part time career break	8	.
2	part time career break in case of palliative care	8	P
3	part time career break benefits in case of medical assistance	8	G
4	part time career break benefits in case of parental leave	8	O

5.2.2 LEVEL OF PART TIME CAREER BREAK BENEFITS

Part time career break benefits are determined differently for those leaving a full time job and those leaving a part time job. In case the employee leaves a full time job, the basic benefit is fixed as a lump sum amount per month. In case the employee leaves a part time job, the benefit is first determined in the same way as that of a full time employee, but then this benefit is reduced proportional to the ratio of a) working hours performed by the part time worker and b) the number of hours to be performed by a full time worker.[55]

The common part time career break benefits depend on a) the number of months the career break already lasts, b) the number of children for which the career breaker receives child benefits, c) the age of the career breaker and d) the size of the reduction in employment activity.[56]

The different conditions, and the corresponding common part time career break benefits per month, paid in case the employee leaves a full time job, are listed in Table 19 for employees younger than 50 on June 1st 2001 and in Table 20 for employees that are 50 or older on June 1st 2001.

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[55] Remark that we again assume that the same rule applies for all types of career break although Van Eeckhoutte, W. (2001) only lists this rule explicitly for common career breaks, see p. 111 ff.

[56] See Van Eeckhoutte, W. (2001), p. 114-115.

Table 19: Level of common part time career break benefits per month on June 1st 2001 for employees that are younger than 50 on June 1st 2001 and who leave a full time job[57]

	Situation	Number of months the career break lasts	
		First 12 months	After 12 months
	Standard amount		
1	Full-time employee who reduces working hours by 1/5	€ 63,49	€ 60,31
2	Full-time employee who reduces working hours by 1/4	€ 79,35	€ 75,38
3	Full-time employee who reduces working hours by 1/3	€ 105,80	€ 100,50
4	Full-time employee who reduces working hours by 1/2	€ 158,70	€ 150,77
	Exception:		
	The career break starts in a time span of three years after the birth or adoption of a child that is not the first child for which the employee or his partner receive child benefits		
	In case of the second child		
5	Full-time employee who reduces working hours by 1/5	€ 69,53	€ 66,06
6	Full-time employee who reduces working hours by 1/4	€ 86,91	€ 82,57
7	Full-time employee who reduces working hours by 1/3	€ 115,89	€ 110,09
8	Full-time employee who reduces working hours by 1/2	€ 173,82	€ 165,12
	In case of the third child or higher		
9	Full-time employee who reduces working hours by 1/5	€ 75,58	€ 71,79
10	Full-time employee who reduces working hours by 1/4	€ 94,47	€ 89,74
11	Full-time employee who reduces working hours by 1/3	€ 125,95	€ 119,66
12	Full-time employee who reduces working hours by 1/2	€ 188,92	€ 179,47

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[57] See Van Eeckhoutte, W. (2001), p. 114.

Table 20: Level of common part time career break benefits per month on June 1st 2001 for employees that are 50 or older on June 1st 2001 and who leave a full time job[58]

	Situation	Number of months the career break lasts	
		First 12 months	After 12 months
	Standard amount		
1	Full-time employee who reduces working hours by 1/5	€ 126,97	€ 120,62
2	Full-time employee who reduces working hours by 1/4	€ 158,70	€ 150,77
3	Full-time employee who reduces working hours by 1/3	€ 211,58	€ 201,02
4	Full-time employee who reduces working hours by 1/2	€ 317,40	€ 301,54
	Exception:		
	The career break starts in a time span of three years after the birth or adoption of a child that is not the first child for which the employee or his partner receive child benefits		
	In case of the second child		
5	Full-time employee who reduces working hours by 1/5	€ 133,02	€ 126,38
6	Full-time employee who reduces working hours by 1/4	€ 166,26	€ 157,96
7	Full-time employee who reduces working hours by 1/3	€ 221,69	€ 210,59
8	Full-time employee who reduces working hours by 1/2	€ 332,52	€ 315,89
	In case of the third child or higher		
9	Full-time employee who reduces working hours by 1/5	€ 139,07	€ 132,10
10	Full-time employee who reduces working hours by 1/4	€ 173,82	€ 165,12
11	Full-time employee who reduces working hours by 1/3	€ 231,76	€ 220,15
12	Full-time employee who reduces working hours by 1/2	€ 347,62	€ 330,24

In order to compute all part time career break benefits, we need to know whether the employee, who is eligible for a common part time career break benefit, leaves a full time job or part time job. We will store an indication of this in the variable UNEM_FPEMP_QT. It will take the value 1 in case the employee leaves a full time job and a 2 when the employee leaves a part time job.

Construction rule for UNEM_FPEMP_QT:

In order to construct this variable UNEM_FPEMP_QT, we will use the variable FICHE7_QT. If the variable FICHE7_QT takes the values 208, 209 or 210, the unemployed is someone who left a full time job. We will set UNEM_FPEMP_QT equal to 1 in these cases. If the variable FICHE7_QT takes the value 212, 213 or 214 the employee has interrupted a part time job. These values for FICHE7_QT therefore imply a value 2 for UNEM_FPEMP_QT.

We also need to know how many months the career break already lasts and whether the career breaker satisfies the conditions to receive a supplement in addition to the standard amount. Since the conditions are the same as those

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[58] See Van Eeckhoutte, W. (2001), p. 115.

applied in case of a full time career break, we can use the variable UNEM_CARBCON_QT for this (see Table 11).

In order to determine the common part time career break benefit, we also need to know the size of the reduction in the amount of hours worked because of the part time career break. We store an indication of this in the variable UNEM_TIMEUNS_QT. This variable will take the value 1, 2, 3 and 4 if the employee reduced his activity with 1/5, 1/4, 1/3 or 1/2 respectively.

Construction rule for UNEM_TIMEUNS_QT:

In order to construct this variable we will use the exogenous variable BEDRAGEN_QT, which contains the amount of benefits paid in a given quarter. Since we observe this variable for the last quarter of 2001, we can infer the time reduction of the part time career breaker by comparing the observed value in BEDRAGEN_ of the last quarter of 2001 with the monthly lump sum benefits, listed in Table 19 and Table 20, multiplied by 3.

Hence, in order to construct the variable UNEM_TIMEUNS_QT for those eligible for a common part time career break, i.e. UNEM_ELIGEMP2_QT is equal to 1, we will first select the appropriate set of 4 values from Table 19 or Table 20, conditional on the age of the career breaker, observed in the variable UNEM_YEAR_AGE, and the value of UNEM_CARBCON_QT that we observe. We then check whether the value of BEDRAGEN_QT is equal to one of these four values multiplied by 3. If the observed value in BEDRAGEN_QT is not equal to one of these four values, we will set the value of UNEM_TIMEUNS_QT equal to 1.

Remark that we assume that the default situation is the smallest possible reduction in labour time, i.e. 1/5.

Combining now the values of the variables UNEM_ELIGEMP2_QT, UNEM_FPEMP_QT, UNEM_CARBCON_QT, UNEM_YEAR_AGE and UNEM_TIMEUNS_QT allows us to determine the benefits of common part time career breakers. We will store all constructed career break benefits in the variable UNEM_BENEMP2_QT.

Construction rule for UNEM_BENEMP2_QT in case of common part time career break:

For people who take a common part time career break, i.e. UNEM_ELIGEMP2_QT is equal to 1, and who leave a full time job, i.e. UNEM_FPEMP_QT is equal to 1, we determine the career break benefit as the daily benefit multiplied with the number of days they received a benefit in the given quarter. We observe the number of days they received a benefit in the form of the exogenous variable DAGEN_QT, provided by the RVA. The daily benefit is reconstructed as the monthly benefit divided by 26. The monthly benefit is selected from Table 19 or Table 20, conditional on the age of the

career breaker and the value of UNEM_CARBCON_QT. Hence, for common part time career breakers who leave a full time job, we apply the following rule:

UNEM_BENEMP2_QT = (monthly amount/26)*DAGEN_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

For people with a common career break but who leave a part time job, we do not have sufficient information to determine the proportional amount of hours worked, as compared to a full time worker. Therefore we do not recompute their career break benefits, but simply set them equal to the observed value of the exogenous variable BEDRAGEN_QT provided by the RVA.

Hence, for common career breakers who leave a part time job, we apply the following rule:

UNEM_BENEMP2_QT = BEDRAGEN_QT

The lump sum amounts, listed in Table 19 and Table 20 are integrated in the module in the form of the parameters UNEM_BENCCM50_MONTH and UNEM_BENCCP50_MONTH respectively. These parameters are both matrixes with 12 lines and 2 columns.

The <u>benefits in case of a part time career break for palliative care</u> are also set as a lump sum amount per month. This monthly amount differs with a) the number of months the career break already lasted, b) the age of the career breaker and c) the percentage reduction in his labour time.

The different monthly amounts, that applied in 2001, are listed in Table 21 and Table 22 for employees who are younger than 50 and 50 or older, respectively.

Table 21: Level of part time career break benefits per month on June 1st 2001 in case of a career break for palliative care for employees that are younger than 50 on June 1st 2001 and who leave a full time job[59]

		Number of months the career break lasts	
	Situation	First 12 months	After 12 months
1	Full-time employee who reduces working hours by 1/5	€ 105,23	€ 99,95
2	Full-time employee who reduces working hours by 1/4	€ 0	€ 0
3	Full-time employee who reduces working hours by 1/3	€ 0	€ 0
4	Full-time employee who reduces working hours by 1/2	€ 263,04	€ 249,90

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[59] See Van Eeckhoutte, W. (2001), p. 127.

Table 22: Level of part time career break benefits per month on June 1st 2001 in case of a career break for palliative care for employees that are 50 or older on June 1st 2001 and who leave a full time job[60]

	Situation	Number of months the career break lasts	
		First 12 months	After 12 months
1	Full-time employee who reduces working hours by 1/5	€ 210,44	€ 199,93
2	Full-time employee who reduces working hours by 1/4	€ 0	€ 0
3	Full-time employee who reduces working hours by 1/3	€ 0	€ 0
4	Full-time employee who reduces working hours by 1/2	€ 526,13	€ 499,83

Combining the values of the variables UNEM_ELIGEMP2_QT, UNEM_FPEMP_QT, UNEM_YEAR_AGE, UNEM_TIMEUNS_QT and UNEM_CARBCON_QT allows us to determine the benefits in case of a part time career break for palliative care.

Construction rule for UNEM_BENEMP2_QT in case of a part time career break for palliative care:

For people eligible for career break benefits in case of a part time career break for palliative care, i.e. UNEM_ELIGEMP2_QT is equal to 2, who leave a full time job, i.e. UNEM_FPEMP_QT is equal to 1, we determine the quarterly benefit again as the monthly benefit divided by 26 multiplied by the number of days one received a benefit.

The monthly amount is selected from Table 21 or Table 22 conditional on the values of UNEM_YEAR_AGE, UNEM_TIMEUNS_QT and UNEM_CARBCON_QT. If UNEM_CARBCON_QT takes the value 1, 2 or 3 we select the monthly amount that applies for the first 12 and if it takes the value 4, 5 or 6 we select the value that applies for more than 12 months. If UNEM_TIMEUNS_QT takes a value other than 4, we assume that the employee reduced his employment effort with 1/5. Hence, for common career breakers who leave a full time job, we apply the following rule:

UNEM_BENEMP2_QT = (monthly amount/26)*DAGEN_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

For people who leave a part time job, we do not recompute their career break benefits, but set them again equal to the observed value of the exogenous variable BEDRAGEN_QT. Hence, for career breakers that are eligible for palliative care benefits who leave a part time job, we apply the following rule:

UNEM_BENEMP2_QT = BEDRAGEN_QT

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[60] See Van Eeckhoutte, W. (2001), p. 127.

Remark that observed reductions of employment time of 1/4 or 1/3 are assumed to be reductions of 1/5.

The lump sum amounts, listed in Table 21 and Table 22, are integrated in the module in the form of the parameters UNEM_BENPCM50_MONTH and UNEM_BENPCP50_MONTH respectively. These parameters are both matrixes with 4 lines and 2 columns.

The benefits in case of medical assistance are again set as a lump sum amount per month, with a different amount conditional on a) the number of months the career break is already ongoing, b) the age of the career breaker and c) the percentage reduction in his labour time.

The different monthly amounts, that applied in 2001, are listed in Table 23 and Table 24 for employees who are younger than 50 and 50 or older, respectively.

Table 23: Level of part time career break benefits per month on June 1st 2001 in case of a career break for medical assistance for employees that are younger than 50 on June 1st 2001 and who leave a full time job[61]

	Situation	Number of months the career break lasts	
		First 12 months	After 12 months
1	Full-time employee who reduces working hours by 1/5	€ 105,23	€ 99,95
2	Full-time employee who reduces working hours by 1/4	€ 131,53	€ 124,96
3	Full-time employee who reduces working hours by 1/3	€ 175,38	€ 166,61
4	Full-time employee who reduces working hours by 1/2	€ 263,04	€ 249,90

Table 24: Level of part time career break benefits per month on June 1st 2001 in case of a career break for medical assistance for employees that are 50 or older on June 1st 2001 and who leave a full time job[62]

	Situation	Number of months the career break lasts	
		First 12 months	After 12 months
1	Full-time employee who reduces working hours by 1/5	€ 210,44	€ 199,93
2	Full-time employee who reduces working hours by 1/4	€ 263,04	€ 249,90
3	Full-time employee who reduces working hours by 1/3	€ 350,77	€ 333,24
4	Full-time employee who reduces working hours by 1/2	€ 526,13	€ 499,83

Combining the values of the variables UNEM_ELIGEMP2_QT, UNEM_FPEMP_QT, UNEM_YEAR_AGE, UNEM_TIMEUNS_QT and UNEM_CARBCON_QT allows us to determine the benefits in case of a part time career break for medical assistance.

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[61] See Van Eeckhoutte, W. (2001), p. 129.
[62] See Van Eeckhoutte, W. (2001), p. 129.

Construction rule for UNEM_BENEMP2_QT in case of a part time career break for medical assistance:

The value of UNEM_BENEMP2_QT in case of people eligible for a part time career break benefits for medical assistance, i.e. UNEM_ELIGEMP2_QT is equal to 3, are determined in a similar way as those for a career break for palliative care.

In the system of medical assistance, one distinguishes the four possible time reductions that are quantified in UNEM_TIMEUNS_QT.

The lump sum amounts, listed in Table 23 and Table 24, are integrated in the module in the form of the parameters UNEM_BENMCM50_MONTH and UNEM_BENMCP50_MONTH respectively. These parameters are both matrixes with 4 lines and 2 columns.

The <u>benefits in case of a part time career break for parental leave</u> are also set as a lump sum amount per month, with a different amount conditional on a) the number of months the career break already lasted, b) the age of the career breaker and c) the percentage reduction in his labour time.

The different monthly amounts, that applied in 2001, are listed in Table 25 and Table 26 for employees who are younger than 50 and 50 or older, respectively.

Table 25: Level of part time career break benefits per month on June 1st 2001 in case of a career break for parental leave for employees that are younger than 50 on June 1st 2001 and who leave a full time job[63]

	Situation	Number of months the career break lasts	
		First 12 months	After 12 months
1	Full-time employee who reduces working hours by 1/5	€ 0	€ 0
2	Full-time employee who reduces working hours by 1/4	€ 0	€ 0
3	Full-time employee who reduces working hours by 1/3	€ 0	€ 0
4	Full-time employee who reduces working hours by 1/2	€ 263,04	€ 249,90

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[63] See Van Eeckhoutte, W. (2001), p. 129.

Table 26: Level of part time career break benefits per month on June 1st 2001 in case of a career break for parental leave for employees that are 50 or older on June 1st 2001 and who leave a full time job[64]

	Situation	Number of months the career break lasts	
		First 12 months	After 12 months
1	Full-time employee who reduces working hours by 1/5	€ 0	€ 0
2	Full-time employee who reduces working hours by 1/4	€ 0	€ 0
3	Full-time employee who reduces working hours by 1/3	€ 0	€ 0
4	Full-time employee who reduces working hours by 1/2	€ 526,13	€ 499,83

Combining the values of the variables UNEM_ELIGEMP2_QT, UNEM_FPEMP_QT, UNEM_YEAR_AGE and UNEM_CARBCON_QT allows us to determine the benefits in case of a part time career break for parental leave.

Construction rule for UNEM_BENEMP2_QT in case of a part time career break for parental leave:

The value of UNEM_BENEMP2_QT in case of people eligible for part time career break benefits for parental leave, i.e. UNEM_ELIGEMP2_QT is equal to 4, are determined in a similar way as those for palliative care and medical assistance.

All people, eligible for these benefits, reduce their working hours with ½.

The lump sum amounts, listed in Table 25 and Table 26, are integrated in the module in the form of the parameters UNEM_BENPLM50_MONTH and UNEM_BENPLP50_MONTH respectively. These parameters are both matrixes with 4 lines and 2 columns.

5.3 GUARANTEED INCOME BENEFITS

5.3.1 CONDITIONS TO BE ELIGIBLE FOR GUARANTEED INCOME BENEFITS

Guaranteed income benefits are installed to guarantee that people who combine an unemployment benefit with part time employment, are guaranteed to receive a minimal level of income. To be eligible for these benefits, the employee with unemployment benefits, has to satisfy the following conditions:[65]

−   the part-time job of the employee has to be at least 1/3 of a full-time job and at most 4/5 of a full-time job,

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[64] See Van Eeckhoutte, W. (2001), p. 129.
[65] See Van Eeckhoutte, W. (2001), p. 503-504.

- the employee has to meet all the necessary conditions to receive unemployment benefits as a full-time employee at the moment he starts working as a part-time employee,

- the employee has to file a request to get the capacity of part-time employee with guaranteed income benefits,

- the employee has to be registered and stay registered as a person in search for a full-time job,

- the employee has to be available for the full-time labour market,

- the gross wages of the employee have to amount to less than € 935 per month,

- the employee has to file a request for a full-time job in the company he is working part-time.

An indication of the fact whether the employee is eligible for guaranteed income benefits yes or no will be stored in the variable UNEM_ELIGEMP3_QT.

Construction rule for UNEM_ELIGEMP3_QT:

The variable UNEM_ELIGEMP3_QT is set equal to 1, each time the variable UNEM_STATUS_QT takes the value 9. Hence we assume that only all unemployed that are observed as those that currently are eligible for guaranteed income benefits are eligible for these benefits.

5.3.2 LEVEL OF GUARANTEED INCOME BENEFITS

Guaranteed income benefits are computed as:

a reference monthly benefit - the net monthly wages obtained as part time worker + a lump sum amount per month.[66]

The guaranteed income benefit, thus obtained, is then limited to a percentage of the reference benefit. The reference benefit is assumed to be the unemployment benefit the unemployed would receive if he would enter unemployment after full time employment.[67]

Net wages in this rule are equal to gross wages, earned in case of full time employment, minus the social security contributions and prepayments paid on the total amount of taxable wages.[68]

The additional monthly supplement, added to the difference between the reference benefit and the net wage depends on the household position of the

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[66] See Van Eeckhoutte, W. (2001), p. 503-504.
[67] See RVA (2006), Documentatie: Infobladen, Deeltijdse arbeid, Hebt u recht op de inkomensgarantie-uitkering "overgangsregime"?;
[68] See Van Eeckhoutte, W. (2001), p. 511.

unemployed. We list these monthly lump sum amounts and the percentage, used to limit the guaranteed income benefits, in Table 27.

Table 27: Level of monthly lump sum benefit, added to the difference between reference unemployment benefits and wages, and the percentage applied to compute the maximum benefit on June 1st 2001[69]

	Situation	Monthly lump sum benefit	guaranteed income benefit is maximum x% of reference benefit
1	Unemployed with dependent family	€ 142,34	90
2	Single unemployed	€ 113,86	90
3	Cohabitating unemployed	€ 85,40	90

In order to compute the guaranteed income benefits, we need to know all the information, necessary to compute the normal unemployment benefit (as explained in section 3), since we consider these normal unemployment benefits to be the reference benefit for people receiving a guaranteed income benefit. One of the variables, necessary to compute these normal unemployment benefits, is the variable UNEM_FAMSIT_QT, which contains the household position of the unemployed and which is the variable required to compute the additional monthly supplement to compute guaranteed income benefits.

We will reconstruct the daily reference benefit, used to compute the guaranteed income benefit, and store it in the variable UNEM_BENEMP3_DAY. We will then use this daily amount to construct a quarterly amount of guaranteed income benefits. The latter result is stored in the variable UNEM_BENEMP3_QT.

Construction rule for UNEM_BENEMP3_DAY and UNEM_BENEMP3_QT:

For all unemployed that are eligible for the guaranteed income benefit, i.e. UNEM_ELIGEMP3_QT is equal to 1, we first compute the normal daily benefit, as explained in section 3.[70] We store this result in the variable UNEM_BENREF_DAY. Two extra parameters, necessary to compute the value of UNEM_BENREF_DAY are integrated in the module. These parameters are UNEM_LIMLOSW_REF_DAY and UNEM_PERLIMUB_REF_DAY. In the baseline the values of these parameters are set equal to those of the parameters UNEM_LIMLOSW_DAY and UNEM_PERLIMUB_DAY, but integration of these parameters allows for later differentiantion in the computation of both benefits.

We multiply this daily benefit with the number of days, for which the unemployed receives a benefit in the given quarter, i.e. the variable

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[69] See Van Eeckhoutte, W. (2001), p. 504.
[70] Since we do not have additional information to discriminate between those that leave school or would be entitled to benefits after employment, we compute the benefits as if all would be entitled to unemployment benefits after employment.

DAGEN_QT. The result of this product is stored in the variable UNEM_BENEMP3_QT.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

From the quarterly benefit, thus obtained we subtract the net quarterly wages, i.e. CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT – CONTRIB_SSPRIV_EMEE_QT - CONTRIB_SSPUB_EMEE_QT minus prepayments paid on this income. In appendix 2 we explain how we compute these prepayments.

If the quarterly benefit UNEM_BENEMP3_QT would become negative after this operation, we set it equal to 0.

We then add the monthly supplement, multiplied by 3, to the variable UNEM_BENEMP3_QT and compare the value for UNEM_BENEMP3_QT, obtained after all these operations, with a percentage of UNEM_BENEMP3_DAY*DAGEN_QT. If UNEM_BENEMP3_QT exceeds this restricted reference amount, we set UNEM_BENEMP3_QT equal to this restricted reference amount.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

The appropriate monthly lump sum benefit and the percentage applied to compute the restricted reference amount are both selected, conditional on the household position of the unemployed.

The values, listed in Table 27, are integrated in the module in the form of the parameter UNEM_GUARINC_MONTH, which is a matrix with 3 rows and 2 columns.

5.4 BENEFITS PAID IN CASE OF TEMPORARY UNEMPLOYMENT

5.4.1 CONDITIONS TO BE ELIGIBLE FOR TEMPORARY UNEMPLOYMENT BENEFITS

An employee can be temporarily unemployed due to different circumstances:[71]

− a case of force majeure,

− collective (yearly) holidays,

− technical disturbances,

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[71] See RVA (2006), Werkloosheid en Brugpensioen: Tijdelijke Werkloosheid, Reglementering, Soorten Tijdelijke werkloosheid.

– bad weather conditions,

– on economical grounds,

– strike or lockout.

We will store an indication of the fact that the employee is eligible for temporary unemployment benefits in the variable UNEM_ELIGEMP4_QT.

Construction rule for UNEM_ELIGEMP4_QT:

The variable UNEM_ELIGEMP4_QT is set equal to 1, each time the variable UNEM_STATUS_QT takes the value 10. Hence we assume that only all unemployed that are observed as those that currently are eligible for temporary unemployment benefits are eligible for these benefits.

5.4.2 LEVEL OF TEMPORARY UNEMPLOYMENT BENEFITS

In general temporary unemployment benefits are computed as a fraction of the normal unemployment benefit. The fraction, applied to compute these benefits, depends upon a) the number of hours of temporary unemployment and b) the total number of hours performed in some reference case. The precise way of computing this fraction differs with the unemployment status. One can distinguish the following cases and computation methods:[72]

– full-time employees or part-time employees without guaranteed income benefits. Their fraction is computed as a) the number of hours of temporary unemployment*6 divided by b) the number of working hours of the employee per week,

– part-time employees with guaranteed income benefits. Their fraction is computed as a) the number of hours of temporary unemployment*6 divided by b) the number of working hours per week of a full-time employee working in the same company,

– employees in voluntary part-time employment or for employees on part-time early retirement. Their fraction is computed as a) the number of hours of temporary unemployment*12 divided by b) the number of working hours per week of a full-time employee working in the same company.

Hence, in order to compute these benefits we need to know the normal unemployment benefit as well as the number of hours the employee was temporarily unemployed and the number of hours performed in the reference case (i.e. the denominator of the fraction). We will store these temporary unemployment benefits in the variable UNEM_BENEMP4_QT.

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[72] See RVA (2006), Werkloosheid en Brugpensioen: Tijdelijke Werkloosheid, Reglementering, Uitkeringen, Hoeveel uitkeringen tijdelijke werkloosheid ontvangt u per maand?.

Construction rule for UNEM_BENEMP4_QT:

Since we do not observe the number of hours of temporary unemployment and the number of hours in the reference cases, we do not recompute these benefits. For those identified as temporary unemployed, i.e. those with UNEM_ELIGEMP4_QT = 1, we set UNEM_BENEMP4_QT equal to the value in the exogenous variable BEDRAGEN_QT, i.e. the variable that contains the benefits received in a given quarter.

5.5 BENEFITS PAID TO PEOPLE EMPLOYED IN THE FRAMEWORK OF A PLAATSELIJK WERKGELEGENHEIDSAGENTSCHAP (PWA)/AGENCE LOCALE POUR L'EMPLOI (ALE),

5.5.1 CONDITIONS TO BE ELIGIBLE FOR PWA BENEFITS

The Plaatselijke Werkgelegenheidsagentschappen (PWA's) are local administrative agencies that organise a job market for unemployed. The jobs, intermediated by the PWA are typically service jobs like a) help with typical household activities like cleaning and ironing, b) guarding of sick children, c) gardening but also civil guarding activities in cities (stadswacht).[73]

One can only make use of PWA intermediation if one is unemployed, but not all unemployed can enter the PWA system or enter it in the same way. One can distinguish the following three types of unemployed:[74]

− Unemployed that enter the PWA circuit automatically. They do so because of their unemployment characteristics. This is, for example, the case for full time unemployed who are unemployed already for more than 2 years and who are older than 45. Unemployed, that satisfy these conditions, but who are exempted from certain duties of the unemployed (see section 4.4), are not automatically considered to be available for PWA intermediation.

− Unemployed that enter the PWA circuit on their own request. Full time unemployed who receive the existence minimum or who have been unemployed for at least 24 months of the 36 months preceding the request, can enter the system on their own request.

− Unemployed excluded from the PWA circuit. This is, for example, the case for unemployed that are part time employed at the same time or unemployed who receive a conventional early retirement benefit.

We will store an indication of the fact that the employee is eligible for the PWA circuit in the variable UNEM_ELIGEMP5_QT.

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[73] See Van Eeckhoutte, W. (2001), p. 151-152.
[74] See Van Eeckhoutte, W. (2001), p. 152-153.

Construction rule for UNEM_ELIGEMP5_QT:

The variable UNEM_ELIGEMP5_QT is set equal to 1, each time the variable UNEM_STATUS_QT takes the value 11. Hence we assume that only all unemployed that are observed as those that are currently in the PWA circuit are eligible for PWA benefits.

5.5.2 LEVEL OF PWA BENEFITS

The normal unemployment benefit of unemployed, activated by intermediation of a PWA, is reduced with a fixed amount for each hour worked. In 2001 this fixed amount was € 2,48.[75] At the same time the activated unemployed receives a separate PWA benefit. This benefit is computed as a lump sum amount multiplied by the number of hours worked with a PWA contract. In 2001 the hourly PWA benefit was € 6,20.[76]

Hence, in order to compute these benefits we need to know the normal unemployment benefit as well as the number of hours the unemployed has worked with a PWA contract. We will store the daily and quarterly benefits, received as PWA unemployed in the variables UNEM_BENEMP5_DAY and UNEM_BENEMP5_QT respectively.

Construction rule for UNEM_BENEMP5_DAY and UNEM_BENEMP5_QT:

For all unemployed that are eligible for PWA benefits, i.e. UNEM_ELIGEMP5_QT is equal to 1, we first compute the normal daily benefit, as explained in section 3.[77] We store this result in the variable UNEM_BENREF_DAY. Two extra parameters, necessary to compute the value of UNEM_BENREF_DAY are integrated in the module. These parameters are UNEM_LIMLOSW_REF_DAY and UNEM_PERLIMUB_REF_DAY. In the baseline the values of these parameters are set equal to those of the parameters UNEM_LIMLOSW_DAY and UNEM_PERLIMUB_DAY, but integration of these parameters allows for later differentiantion in the computation of both benefits.

We multiply this daily benefit with the number of days, for which the unemployed receives a benefit in the given quarter, i.e. the variable DAGEN_QT. The result of this product is considered to be the normal quarterly benefit and is stored in the variable UNEM_BENEMP5_QT.

From this quarterly benefit we then subtract the fixed amount of 2,48 multiplied with the number of hours worked with a PWA contract and we add

[75] See Van Eeckhoutte, W. (2001), p. 155.
[76] See Van Eeckhoutte, W. (2001), p. 155.
[77] Since we do not have additional information to discriminate between those that leave school or would be entitled to benefits after employment, we compute the benefits as if all would be entitled to unemployment benefits after employment.

the fixed amount of 6,20 multiplied with the number of hours worked with a PWA contract. We observe the number of hours worked with such a PWA contract in a given quarter in the exogenous variable URENPWA_QT, provided by the RVA.

We include the lump sum amounts of 2,48 and 6,20 in the module in the form of the parameters UNEM_PWAMIN_HOUR and UNEM_PWAPLUS_HOUR respectively.

5.6 BENEFITS PAID TO PEOPLE EMPLOYED IN OTHER THAN PWA ACTIVATION PROGRAMS

5.6.1 CONDITIONS TO BE ELIGIBLE FOR ACTIVATION BENEFITS OTHER THAN PWA BENEFITS

One can distinguish at least two different types of activation programs, other than the PWA system:

– transition programs (doorstromingsprogramma's/programmes de transition professionelle),

– reinsertion programs (herinschakelingsprogramma's/programmes de reinsertion).

In order to be eligible for the benefits of a transition program, the unemployed should satisfy one of the following conditions:[78]

– the unemployed person should be younger than 25 years and have no diploma higher secondary education and for at least 9 months a) be registered as a person in search of work, b) receive unemployment benefits or c) receive social welfare benefits,

– the unemployed person should receive waiting benefits and be full time unemployed for at least 12 months,

– the unemployed person should be full time unemployed and receive unemployment benefits for at least 24 moths,

– the unemployed person should be in search of work and receive social welfare benefits for at least 12 months.

– on the day that he becomes employee he should a) receive waiting benefits and be registered as a person in search of work for at least 9 months or b) receive unemployment benefits or c) receive social welfare benefits for at least 9 months.

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[78] See Van Eeckhoutte, W. (2001), p. 224.

In order to be eligible for the benefits of a <u>reinsertion program</u>, the unemployed should satisfy the following conditions:[79]

– the unemployed should be long-term unemployed,

– the unemployed should have a written employment contract for at least a part-time job.

We will reconstruct these eligibility conditions, and store the result in the variable UNEM_ELIGEMP6_QT. This variable can take the value 1 or 2 in case the conditions to receive one of the two preceding benefits are satisfied.

Construction rule for UNEM_ELIGEMP6_QT:

We assume that all people with a value of UNEM_STATUS_QT equal to 12, i.e. people who are eligible for benefits of an activation program, other than the PWA system, are eligible for the benefits of one or the other activation program.

In order to distinguish further between the two aforementioned programs, we will use the exogenous variable FICHE7_QT. The values of UNEM_STATUS_QT, FICHE7_QT and the corresponding value of UNEM_ELIGEMP6_QT, are listed in Table 28.

Table 28: Variable values used to determine the values of UNEM_ELIGEMP6_QT

Value of UNEM_ELIGEMP6_QT	Label of UNEM_ELIGEMP6_QT	Value of UNEM_STATUS_QT	Value of FICHE7_QT
1	Unemployed is eligible for benefits of a transition program	12	80, 81, 82, 83, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114
2	Unemployed is eligible for benefits of a reinsertion program	12	84, 85, 86, 117, 118, 119, 120

5.6.2 LEVEL OF ACTIVATION BENEFITS OTHER THAN PWA BENEFITS

The <u>benefits in case of a transition program</u> depend on a) the amount of the employment time as compared to a full time employment activity, b) the type of municipality where the unemployed is living in and c) the number of hours performed in a PWA program.

The different monthly amounts, that applied in 2001, for the different possible conditions, are listed in Table 29. Remark that we assume here that these

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[79] See Van Eeckhoutte, W. (2001), p. 239.

amounts applied throughout 2001 although Van Eeckhoutte (2001) notes that these amounts are not indexed.[80]

Table 29: The level of monthly benefits for employees eligible for benefits of a transition program on June 1st 2001[81]

Employment volume as a fraction of the hours to be performed by a full time employee in the same job	municipality with a normal unemployment rate		municipality with a high unemployment rate
	The unemployed performed less than 180 P.W.A.-hours in the last 6 months	The unemployed performed at least 180 P.W.A.-hours in the last 6 months	
The employee is employed 1/2 or more but less than 4/5	€ 247,89	€ 297,47	€ 433,81
The employee is employed 4/5 or more	€ 322,26	€ 371,84	€ 545,37

If the monthly benefit, listed in Table 29, exceeds the net wage that the unemployed receives from his employment activity, the transition benefit is limited to this net wage.[82]

In order to reconstruct these transition benefits, we need to know the time the unemployed performs an employment activity expressed as a fraction of the time to be performed by a full time employee in the same job. We will store this result in the variable UNEM_FRACTRAN_QT.

Construction rule for UNEM_FRACTRAN_QT:

In order to discriminate between the possible employment fractions, we will use observations of the variable FICHE7_QT. We list the values of FICHE7_QT and the corresponding values of the variable UNEM_FRACTRAN_QT in Table 30.

Table 30: Variable values used to determine the values of UNEM_FRACTRAN_QT

Value of UNEM_FRACTRAN_QT	Label of UNEM_FRACTRAN_QT	Value of FICHE7_QT
1	The employee is employed 1/2 or more but less than 4/5	80, 81, 100, 101, 102, 103, 104, 105, 109, 110, 111
2	The employee is employed 4/5 or more	82, 83, 106, 107, 108, 112, 113, 114

Next to the employment fraction we also need to know the unemployment rate of the municipality the unemployed is living in. We will store observations on this in the variable UNEM_TOWNRATE_QT. This variable can take two values apart from the default value 0. It will be equal to 1 for those not living in town with a high unemployment rate and 2 in case the unemployment rate of the town is high.

[80] See Van Eeckhoutte, W. (2001), p. 238.
[81] See Van Eeckhoutte, W. (2001), p. 238.
[82] See Van Eeckhoutte, W. (2001), p. 238.

Construction rule for UNEM_TOWNRATE_QT:

In order to construct this variable we will use the exogenous variable BEDRAGEN_QT, which contains the amount of benefits paid in a given quarter. Since we observe this variable for the last quarter of 2001, we can infer the unemployment rate of the town by comparing the observed value in BEDRAGEN_ of the last quarter of 2001 with the monthly lump sum benefits, listed in Table 29, multiplied by 3.

Hence, in order to construct the variable UNEM_TOWNRATE_QT we will check for those eligible for transition benefits, i.e. for whom UNEM_ELIGEMP6_QT is equal to 1, whether the variable BEDRAGEN_ of the last quarter of 2001 is equal to one of the lump sum values, listed in the last column of Table 29, multiplied by 3. If this is the case, the variable UNEM_TOWNRATE_QT will be set equal to 2. In all other cases of eligible unemployed, it will be set equal to 1.

Remark that we assume here that eligible unemployed receive this benefit during three months in the last quarter of 2001 and that by default we assume that those eligible for the transition benefits live in a town with a low unemployment rate.

Finally, we also need to know whether the unemployed has performed more than 180 hours with a PWA contract in the past 6 moths. We will store observations on this in the variable UNEM_PWAHOURS_QT. This variable can again take two values apart from the default value 0. It will be equal to 1 for those that performed less than 180 hours with a PWA contract and 2 in case the unemployed performed 180 hours or more.

Construction rule for UNEM_PWAHOURS_QT:

In order to construct this variable we will again use the exogenous variable BEDRAGEN_QT, which contains the amount of benefits paid in a given quarter. Since we observe this variable for the last quarter of 2001, we can infer the number of hours performed with a PWA contract by comparing the observed value in BEDRAGEN_ of the last quarter of 2001 with the monthly lump sum benefits, listed in Table 29, multiplied by 3.

In order to construct the variable UNEM_PWAHOURS_QT we will check for those eligible for transition benefits, i.e. for whom UNEM_ELIGEMP6_QT is equal to 1, whether the variable BEDRAGEN_ of the last quarter of 2001 is equal to one of the lump sum values, listed in the last but one column of Table 29, multiplied by 3. If this is the case, the variable UNEM_PWAHOURS_QT will be set equal to 2. In all other cases of eligible unemployed, it will be set equal to 1.

Remark that we assume here that eligible unemployed receive this benefit during three months in the last quarter of 2001 and that by default we assume

that the eligible unemployed performed less than 180 hours with a PWA contract.

With these reconstructed variables we can now reconstruct the quarterly transition benefits. We will store this result in the variable UNEM_BENEMP6_QT.

Construction rule for UNEM_BENEMP6_QT in case of transition benefits:

For those eligible for transition benefits, i.e. for whom UNEM_ELIGEMP6_QT is equal to 1, we will check the values of UNEM_FRACTRAN_QT, UNEM_TOWNRATE_QT and UNEM_PWAHOURS_QT and select with it the appropriate monthly lump sum benefit from Table 29.

In order to obtain quarterly benefits then, we divide this monthly benefit by 26 and multiply it with the number of days for which the unemployed receives a benefit. We observe this number of days in the variable DAGEN_QT, provided by the RVA.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

If the following sum: CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT – CONTRIB_SSPRIV_EMEE_QT - CONTRIB_SSPUB_EMEE_QT   minus prepayments is positive but smaller than the reconstructed value of UNEM_BENEMP6_QT, we limit the value of UNEM_BENEMP6_QT, to this value. In appendix 2 we explain how we compute the prepayments paid on observed wages.

The values, listed in Table 29, are integrated in the module in the form of the parameter UNEM_TRANSBEN_MONTH, which is a matrix with 2 rows and 3 columns.

The <u>benefits in case of a reinsertion program</u> depend on a) the number of months the unemployed is already active in a reinsertion program and b) the amount of the employment time as compared to a full time employment activity.

The different monthly amounts, that applied in 2001, for the different possible conditions, are listed in Table 31. Remark that we again assume here that these amounts applied throughout 2001 although Van Eeckhoutte (2001) notes that these amounts are not indexed.[83]

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[83] See Van Eeckhoutte, W. (2001), p. 240.

Table 31: The level of monthly benefits for employees eligible for benefits of a reinsertion program on June 1st 2001[84]

Condition	
The unemployed is employed in a reinsertion program for 36 months or less	
The employee is employed 1/2 or more but less than 4/5	€ 433,81
The employee is employed 4/5 or more	€ 545,37
The unemployed is employed in a reinsertion program for more than 36 months	€ 148,74

If the monthly benefit, listed in Table 31, exceeds the net wage that the unemployed receives from his employment activity, the transition benefit is limited to this net wage.[85]

In order to reconstruct these reinsertion benefits, we need to know the time the unemployed is already active in a reinsertion program. We will store this result in the variable UNEM_DUURREIN_QT. This variable can again take two values apart from the default value 0. It will be equal to 1 for those that are less than 36 months in a reinsertion program and 2 in case the unemployed is already for more than 36 months in such a program.

Construction rule for UNEM_DUURREIN_QT:

In order to construct this variable we will again use the exogenous variable BEDRAGEN_QT, which contains the amount of benefits paid in a given quarter. Since we observe this variable for the last quarter of 2001, we can infer the length of the time spell that the unemployed is in the reinsertion program, by comparing the observed value in BEDRAGEN_ of the last quarter of 2001 with the monthly lump sum benefits, listed in Table 31, multiplied by 3.

In order to construct the variable UNEM_DUURREIN_QT we will check for those eligible for reinsertion benefits, i.e. for whom UNEM_ELIGEMP6_QT is equal to 2, whether the variable BEDRAGEN_ of the last quarter of 2001 is equal to the value in the last line of Table 31, multiplied by 3. If this is the case, the variable UNEM_DUURREIN_QT will be set equal to 2. In all other cases of unemployed eligible for transition benefits, the variable UNEM_DUURREIN_QT will be set equal to 1.

Remark that we assume here that eligible unemployed receive this benefit during three months in the last quarter of 2001 and that by default, they are less than 36 months in a reinsertion program.

In order to reconstruct the reinsertion benefits, we also need to know the time the unemployed performs an employment activity expressed as a fraction of the

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[84] See Van Eeckhoutte, W. (2001), p. 240.
[85] See Van Eeckhoutte, W. (2001), p. 240.

time to be performed by a full time employee in the same job. We will store this result in the variable UNEM_FRACREIN_QT.

Construction rule for UNEM_FRACREIN_QT:

In order to discriminate between the possible employment fractions, we will use observations of the variable FICHE7_QT. We list the values of FICHE7_QT and the corresponding values of the variable UNEM_FRACREIN_QT in Table 32.

Table 32: Variable values used to determine the values of UNEM_FRACREIN_QT

Value of UNEM_FRACREIN_QT	Label of UNEM_FRACREIN_QT	Value of FICHE7_QT
1	The employee is employed 1/2 or more but less than 4/5	84, 85
2	The employee is employed 4/5 or more	86, 117, 118, 119, 120

With these reconstructed variables we can now reconstruct the quarterly reinsertion benefits. We will store this result in the variable UNEM_BENEMP6_QT as well.

Construction rule for UNEM_BENEMP6_QT in case of reinsertion benefits:

For those eligible for reinsertion benefits, i.e. for whom UNEM_ELIGEMP6_QT is equal to 2, we will check the values of UNEM_FRACREIN_QT and UNEM_DUURREIN_QT and select with it the appropriate monthly lump sum benefit from Table 31.

In order to obtain quarterly benefits then, we divide this monthly benefit by 26 and multiply it with the number of days for which the unemployed receives a benefit. We observe these number of days in the variable DAGEN_QT, provided by the RVA.

If the value of the variable DAGEN_QT is missing, we assume that the unemployed receives this benefit for 3 times 26 days, i.e. 78 days, in a quarter.

If the following sum: CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT – CONTRIB_SSPRIV_EMEE_QT - CONTRIB_SSPUB_EMEE_QT minus prepayments is positive but smaller than the reconstructed value of UNEM_BENEMP6_QT, we limit the value of UNEM_BENEMP6_QT, to this value. In appendix 2 we explain how we compute the prepayments paid on this labour income.

The values, listed in Table 31, are integrated in the module in the form of the parameter UNEM_REINBEN_MONTH, which is a matrix with 3 rows and 1 column.

6 CONSTRUCTION OF UNEMPLOYMENT CONCEPTS TO BE EXCHANGED TO OTHER MODULES

Throughout the preceding sections we reconstructed several benefit variables. Some of the other modules require aggregates of these benefit variables, produced by the UNEM module. In this section we discuss the variables constructed to exchange to other modules. Before discussing these exchange concepts, we make an overview of the different benefit variables that have been reconstructed throughout the preceding sections. In Table 33 we list the name and the label of these reconstructed benefit variables and the section that discusses the construction of this concept.

Table 33: Benefit variables reconstructed with the UNEM module

Type of benefit	Label	Section
Unemployed in search of work		
UNEM_BENSTUD_QT	Unemployment benefits after studies	
UNEM_BENEMPL_QT	Unemployment benefits after employment	
Unemployed not in search of work but entitled to RVA benefit		
UNEM_BENUNS1_QT	Conventional early retirement benefits paid by RVA	
UNEM_ADDUNS_QT	Additional supplement, paid by the employer, for people on conventional early retirement	
UNEM_BENUNS2_QT	Career break benefits	
UNEM_BENUNS3_QT	Benefits of older unemployed who receive a seniority supplement	
UNEM_BENUNS4_QT	Unemployment benefits in case of exemption of certain duties	
Employees entitled to RVA benefit		
UNEM_BENEMP1_QT	Early retirement benefits in case of part-time early retirement paid by the RVA	
UNEM_ADDEMP_QT	Additional supplement, paid by the employer, in case of part-time early retirement	
UNEM_BENEMP2_QT	Part-time career break benefits	
UNEM_BENEMP3_QT	Guaranteed income benefits	
UNEM_BENEMP4_QT	Unemployment benefits in case of temporary unemployment	
UNEM_BENEMP5_QT	PWA benefits	
UNEM_BENEMP6_QT.	Benefits for people working in some kind of activation program other than the PWA system	

With these variables we reconstruct variables for the CONTRIB, SICK and UNEM module. We also use these variables to construct concepts that cover expenses made within the global budget of the social security system.

6.1 VARIABLES CONSTRUCTED FOR THE CONTRIB MODULE

The module that reconstructs the social security contributions requires the early retirement benefits as input since social security contributions are due on these benefits. Since contributions have to be paid, both on the unemployment benefit paid by the RVA as on the additional supplement paid by the employers we exchange the variables UNEM_BENUNS1_QT, UNEM_ADDUNS_QT, UNEM_BENEMP1_QT and UNEM_ADDEMP_QT from the UNEM to the CONTRIB module.

Although no social security contributions are due on other unemployment benefits, we construct two other variables that, together capture the rest of these benefits.

One variable captures the unemployment benefits received by older unemployed with seniority supplement. We distinguish these benefits from the rest since these benefits are treated differently than other unemployment benefits in the personal income tax system. We store the result in the variable UNEM_OLDUNSS_QT and identify this variable by setting it equal to UNEM_BENUNS3_QT.

With another variable we capture all the unemployment benefits, other than those paid for early retirement and to older unemployed with a seniority supplement, such that we can exchange them to the CONTRIB module as well. We store this result in the variable UNEM_OTHERUN_QT. We define this variable as the sum of the following variables:

UNEM_BENSTUD_QT, UNEM_BENEMPL_QT, UNEM_BENUNS2_QT,
UNEM_BENUNS4_QT, UNEM_BENEMP2_QT, UNEM_BENEMP3_QT,
UNEM_BENEMP4_QT, UNEM_BENEMP5_QT, UNEM_BENEMP6_QT.

In order to be able to simulate the possibility that unemployed who are suspended from unemployment enter the labour market with some fixed number of hours, we exchange the variables UNEM_STATUS_QT and UNEM_NUMMINU_QT to the CONTRIB module as well.

6.2 VARIABLES CONSTRUCTED FOR THE SICK MODULE

To check the income position of other household members, the SICK module requires an estimate of the unemployment benefits (i.e. excluding benefits paid by the RVA as supplement to the wage), received by any of the household members.

We store an aggregate of all possible unemployment benefits, received by an individual, in the variable UNEM_BENUN_QT. We construct UNEM_BENUN_QT as the sum of all benefits except those paid as benefits of an activation program. Hence, the variable UNEM_BENUN_QT is defined as:

```
UNEM_BENUN_QT =
UNEM_BENSTUD_QT + UNEM_BENEMPL_QT + UNEM_BENUNS1_QT +
UNEM_BENUNS2_QT + UNEM_BENUNS3_QT + UNEM_BENUNS4_QT +
UNEM_BENEMP1_QT + UNEM_BENEMP2_QT + UNEM_BENEMP3_QT +
UNEM_BENEMP4_QT + UNEM_ADDUNS_QT + UNEM_ADDEMP_QT.
```

Remark that a) we do not distinguish the benefits paid by the employer from those paid by the RVA, for this purpose and b) we include all benefits in this concept, independent of their type.

6.3 VARIABLES CONSTRUCTED FOR THE UNEM MODULE

To check the income position of other household members, the UNEM module requires an estimate of the unemployment benefits, received by any of the household members.

For this prupose we use the variable UNEM_BENUN_QT as well.

6.4 VARIABLES CONSTRUCTED FOR THE FAMAL MODULE

To check the income position of other household members, the FAMAL module requires an estimate of the unemployment benefits, received by any of the household members.

For this prupose we use the variable UNEM_TOTBEN_QT. We construct this variable as the sum of the variables UNEM_BENUNS1_QT, UNEM_ADDUNS_QT, UNEM_BENEMP1_QT, UNEM_ADDEMP_QT, UNEM_OLDUNSS_QT and UNEM_OTHERUN_QT.

To compute the family allowances, we also need to know how many months an individual that was either full time unemployed or in early retirement was unemployed. For this purpose we construct the variable UNEM_FULL6MON_QT. This variable is equal to UNEM_NUMMINU_QT if the unemployed is either in full time unemployment or early retired, i.e. UNEM_STATUS_QT is equal to 1, 2, 3 or 7.

7 REFERENCES

[1] FOD Sociale Zekerheid (2001), *Beknopt overzicht van de sociale zekerheid in België*, Brussel: Federaal Ministerie van Sociale Zaken, Volksgezondheid en Leefmilieu, Bestuur van de Informatie en de Studiën.

[2] Ministerie van Financiën (2001), *Sleutelformule voor het berekenen van de bedrijfsvoorheffing (BV) verschuldigd op bezoldigingen, pensioenen of brugpensioen (nieuw stelsel) betaald vanaf 1.1.2001*, Brussel: Ministerie van Financiën,Administratie van de Ondernemings- en Inkomensfiscaliteit.

[3] Ministerie van Financiën (2002), *Fiscaal Memento 2002*, Brussel: Ministerie van Financiën, Studie en Documentatiedienst.

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[5] Perelman, S and Van Camp, G. (2006), MIMOSIS: MIcrosimulation MOdel for Belgian Social Insurance Systems, Construction of gross hourly and quarterly income, *mimeo*, Brussel: FOD Sociale Zekerheid,.DG Socaal Beleid.

[6] RVA (2006), http://www.onem.fgov.be/Home/MenuNL.htm

[7] Van Eeckhoutte, W. (2001), *Sociaal Zakboekje 2001-2*, Diegem: Kluwer/Ced. Samsom.

APPENDIX 1: CHANGES IN THE UNEMPLOYMENT LEGISLATION SINCE 2001?

TIJDSKREDIET/CRÉDIT-TEMPS

Since January 1st 2002 employees who are working in the private sector have a right to a full or partial interruption of their working hours for at most one year during their entire career. The minimum length of a period of interruption is three months. To be entitled the employee must have worked 12 months for his employer during the 15 months prior to his request for tijdskrediet/crédit-temps. In Table 1A the level of benefits in case of tijdskrediet/ credit-temps is presented.

Table 1A: Level of net benefits in case of tijdskrediet/credit-temps on June 1st 2003[86]

Full interruption		Partial interruption	
< 5 years seniority	> 5 years seniority	< 5 years seniority	> 5 years seniority
€ 354,62	€ 472,83	€ 163,46	€ 217,95

Employees working in a five-day working week or more also have the right to decrease their working days for:

− one day per week;

− or two half days per week;

during a maximum period of five years during their entire career. The minimum length of a period of this kind of interruption is six months. To be entitled the employee must have worked for his employer during the five years prior to his request and he must have worked full-time during the last 12 months of those five years. The net benefits the employees receives amount to € 107,64 per month.

Employees of 50 years or older also have the right to:

− reduce their working days with one day per week or two half days per week on the condition that they are working in a five-day working week or more (the minimum length of a period of this kind of interruption is also six months);

− reduce their job to a part-time job.

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[86] See
http://www.rva.fgov.be/D_opdracht_LBO/default.asp?MainDir=D_opdracht_LBO&Language=NL&IndexDir=Regl/Werknemers&Button=1

There is no maximum length to this right. To be entitled the employee must be 50 years or older; he must have worked for his employer during the five years prior to his request; he must have a seniority of 20 years as an wage earner. The net benefits amount to € 151,24 per month for a decrease of 1/5 and to € 325,59 per month in case of a decrease to a part-time job.

PARTICULAR UNEMPLOYMENT BENEFITS FOR THE DISABLED

The rules concerning the particular unemployment benefits for the disabled were lifted (as a simplification of the unemployment legislation). Given the fact that the guaranteed minimum income also applies to the employment of disabled employees the deviating regulation had no longer raison d'être. Since April 1st 2003 the disabled unemployed are indemnified according to the rules of the general system (as described in section 1.4.1).

APPENDIX 2: THE CALCULATION OF INCOME NET OF PREPAYMENTS[87]

In some cases we need income net of prepayments to compute the unemployment benefits. Different prepayment rules are applied on labour income and on certain non labour market incomes, such as pensions.[88] Since we only need to apply the rules on labour income, we discuss these rules in what follows.

To compute income net of prepayments, we start by constructing a gross taxable income concept. This gross taxable income is equal to gross income minus social security contributions paid on this gross income concept. We store annual gross taxable income in the variable UNEM_GTINC_ANN.

Construction rule for UNEM_GTINC_ANN:

How we compute this gross taxable income concept, depends on the income concept that is under study.

<u>If</u> we have to compute net wages of wage earners, we define gross taxable income as:

UNEM_GTINC_ANN = ((CONTRIB_REVPRIV_QT + CONTRIB_REVPUB_QT)-(CONTRIB_SSPRIV_EMEE_QT + CONTRIB_SSPUB_EMEE_QT))*4.

<u>If</u> we have to compute net income of self employed, we define gross taxable income as:

UNEM_GTINC_ANN = ((CONTRIB_INCSELF_QT -
 CONTRIB_SSSELF_EMER_QT))*4.

<u>If</u> we have to compute net lost income, we define gross taxable income as:

UNEM_GTINC_ANN = MIN(UNEM_LOSWAGE_QT;€ 8.329,23)*4 –
13,07*MIN(UNEM_LOSWAGE_QT;€ 8.329,23)*4.

The percentage of 13,07% is integrated in the model in the form of the parameter UNEM_SSCONT_QT.

Remark that if we apply this percentage, we apply it for all individuals for which we have to compute the social security contributions on lost wages.

It is this gross taxable income concept that we use to compute the prepayments, paid on it.

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[87] Ministerie van Financiën (2001).
[88] Ministerie van Financiën (2001).

PREPAYMENTS PAID ON LABOUR INCOME

Starting with the observation on annual gross taxable income, we compute the prepayments paid per quarter in three steps:

– computation of gross taxable wages per year,

– computation of net taxable wages per year,

– computation of the prepayments paid per year and per quarter.

DETERMINATION OF NET TAXABLE WAGES PER YEAR

To determine net taxable income, one subtracts from the gross taxable income the costs, made to earn this income. The costs subtracted differ in function of the gross taxable income. The scales and the rates applied to determine these costs, are listed in Table 34.

Table 34: Rates applied on gross taxable income of employees to determine a lump sum amount of expenses made to earn this income[89]

Gross taxable income in EURO					Rate applied on gross taxable income
More than 0	but	not	more	than 4.164,61	20%
More than 4.164,61	but	not	more	than 8.354,01	10%
More than 8.354,01	but	not	more	than 13.906,83	5%
More than 13.906,83	but	not	more	than 55.470,32	3%
More than 55.470,32					0%

We compute net taxable income and store the result in the variable UNEM_NTINC_ANN.

> **Construction rule for UNEM_NTINC_ANN:**
>
> The value of UNEM_NTINC_ANN is defined as the value of gross annual labour income, i.e. UNEM_GTINC_ANN, minus the costs made to obtain this income. To compute the latter costs we apply the scale and the rates, listed in Table 34, on the gross annual labour income variable.
>
> We integrate the values, listed in Table 34, in the module with the parameter UNEM_COSTSCAL_ANN, which is a matrix with 5 lines and 3 columns.

DETERMINATION OF PREPAYMENTS

The basic prepayment taxes are determined by applying rates, differing in function of the net taxable income, on this net taxable income concept. The

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[89] See Ministerie van Financiën (2001), p 4;

scales and the rates applied to determine the basic prepayment taxes on income earned in 2001, are listed in Table 35.

Table 35: Rates applied on net taxable income of employees to determine the basic amount of prepayment taxes[90]

Net taxable income in EURO		Rate applied on net taxable income
More than 0	but not more than 6.395,51	27,00%
More than 6.395,51	but not more than 8.477,96	32,40%
More than 8.477,96	but not more than 12.097,20	43,20%
More than 12.097,20	but not more than 27.838,44	48,60%
More than 27.838,44	but not more than 41.745,27	54,00%
More than 41.745,27	but not more than 61.229,70	56,70%
More than 61.229,70		59,40%

Construction rule for UNEM_PREPAY_BASE_ANN:

The result, obtained by applying the brackets and rates, mentioned in Table 35 on the value of UNEM_NTINC_ANN, will be stored in the variable UNEM_PREPAY_BASE_ANN.

From the basic amount of prepayments one then subtracts a number of tax reductions. One tax reduction, applied on this basic amount of prepayments, is the tax reduction for dependent children. The lump sum amounts in function of the number of dependent children, deducted from the basic amount of prepayment taxes in 2001, are listed in Table 36.

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[90] See Ministerie van Financiën (2001), Bijlage 1.

Table 36: Lump sum amounts in function of the number of dependent children, deducted from the basic amount of prepayment taxes in 2001[91]

Rank of the dependent child	Lump sum amount deducted of basic amount of prepayment taxes
1	304,91
2	505,70
3	1.383,24
4	1.847,31
5	1.933,57
6	1.933,57
7	1.933,57
8	2.064,46
9 or more	2.147,75

Construction rule for UNEM_AMOUNT_REDCHILD_ANN and UNEM_PREPAY_REDCHILD_ANN :

In order to compute the tax reduction for dependent children, we first compute the amount of income, exempted from the bottom up. This amount of exempted income corresponds with the sum of the values, listed in Table 36, up till the number of dependent children, i.e. the value of PIT_DEPCHILD_ANN. We store this amount in the variable UNEM_AMOUNT_REDCHILD_ANN.

To compute the tax reduction that corresponds with this amount of exempted income, we apply the brackets and rates, mentioned in Table 35 on the value of UNEM_AMOUNT_REDCHILD_ANN. The result of this operation will be stored in the variable UNEM_PREPAY_REDCHILD_ANN.

With the basic amount of prepayments and those attribtuted for depedent children, we can compute the annual and quarterly amount of prepayments, paid on the corresponding gross income concept. We will store the annual prepayment taxes in the variable UNEM_PREPAY_ANN and the quarterly prepayment in the variable UNEM_PREPAY_QT.

Construction rule for UNEM_PREPAY_ANN and UNEM_PREPAY_QT:

The value of annual prepayments is equal to the value of the basic prepayments minus the tax reduction because of dependent children, i.e.:

UNEM_PREPAY_ANN = UNEM_PREPAY_BASE_ANN - UNEM_PREPAY_REDCHILD_ANN.

If the result of this subtraction would become negative, we set the annual prepayments equal to 0.

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[91] See Ministerie van Financiën (2001), Bijlage 3.

To obtain the amount of prepayments paid per quarter, i.e. UNEM_PREPAY_QT, we divide the annual prepayments by 4.

Remark that we do not apply any tax reduction, other than the tax reduction for dependent children, although they may exist and that we assume that the dependent children, produced by the PIT module, is the appropriate one to compute the prepayment taxes.

Remark that we apply the same rules to determine the prepayments paid on income obtained as a wage earner and as a self employed.

The values listed in Table 35 and Table 36 are integrated in the module in the form of the parameters UNEM_TAXRATES_ANN and UNEM_REDCHILD_ANN respectively.

LABOUR INCOME NET OF PREPAYMENTS

We have to compute labour income net of prepayments in four cases, i.e. to determine UNEM_NETWEARN_QT, UNEM_NETSELF_QT and in the first step of the construction of UNEM_ADDUNS_QT and UNEM_ADDEMP_QT. In all these cases the labour income, net of prepayments, will be defined as UNEM_GTINC_ANN/4 minus UNEM_PREPAY_QT.

APPENDIX 3: CLASSIFICATION OF VARIABLES AND PARAMETERS

Throughout the main text we mentioned the names of variables and parameters that are used for the computation of the unemployment benefits with the UNEM module. Within the set of variables one can further distinguish endogenous from exogenous variables. Endogenous variables are variables that are constructed within the UNEM module itself. Exogenous variables are variables that either come from a source outside the whole model or from another module and that are used as input of the UNEM and therefore remain fixed throughout the UNEM module. Parameters are those elements of the module that will be offered to the user of the microsimulation model as something that can be manipulated.

In what follows we provide three tables with the exogenous and endogenous variables and the parameters of the UNEM module respectively. Each table consists of two columns that contain the following elements:

1. the name of the variable;
2. a label for this variable in English.

EXOGENOUS VARIABLES

Name	Label
From datawarehouse	
NARGENIS	
NAREGNIS_HH_ID	Anonymised identification number of the household to which the individual belongs
NAREGNIS_DATBIRTH	Birth date of the individual in year and month
NAREGNIS_SEX	Sex of the individual on 1 January 2002
RVA	
FICHE7_QT	Characterisation of unemployment (category of RVA)
DAGEN_QT	Number of days for which unemployment benefits are received
DGNDMND_QT	Amount of the unemployment benefit per day which is granted to the unemployed person
BEDRAGEN_QT	Amount of unemployment benefits received during the trimester
REDENLO_QT	Motivation for the career break
VERMIN_QT	Reduction of unemployment benefits because of career break
VERHOG_QT	Increase of unemployment benefits because of career break
DUUR_QT	Duaration of unemployment
URENPWA_QT	Number of hours worked for local employment agencies in the given quarter
CONSTRUCTED	
MIMOSIS_GRINC_HOUR	Constructed income earned per hour
MIMOSIS_GRINC_QT	Constructed income earned per quarter
MIMOSIS_WEIGHT	Sample weight correction for non random selection
From other modules	
FAMREL_FAMILY	Unique identifier identifying the family to which the individual belongs
FAMREL_RELATION	Relation of the individual with respect to the head of the family
FAMREL_FAMTYPE	Type of family to which the individual belongs
FAMREL_COUPLE	Type of couple to which the individual belongs
CONTRIB_REVPRIV_QT	Sum of gross labour income, holiday earnings and other supplements, earned as wage earner on the private labour market
CONTRIB_REVPUB_QT	Sum of gross labour income, holiday earnings and other supplements, earned as wage earner on the public labour market
CONTRIB_INCSELF_QT	Gross income earned as self employed
CONTRIB_SSPRIV_EMEE_QT	Social security contributions paid on CONTRIB_REVPRIV_QT
CONTRIB_SSPUB_EMEE_QT	Social security contributions paid on CONTRIB_REVPUB_QT
CONTRIB_SSSELF_EMER_QT	Social security contributions paid on CONTRIB_INCSELF_QT
PENSWELF_AMOUNTP_QT	Gross amount of pensions received
FAMAL_AMOUNTF_QT	Gross amount of family allowances received by the recipient
SICK_BENINOC_QT	Gross amount of benefits for industrial accidents and occupational diseases

SICK_NONEINOC_QT	Gross amount of sickness and disability benefits other than benefits for industrial accidents or occupational diseases
PIT_DEPCHILD_ANN	Number of dependent children in the tax unit of the individual
UNEM_BENUNPR_QT	Gross amount of unemployment benefits estimated before unemployment benefits are computed

ENDOGENOUS VARIABLES

Name	Label
UNEM_STATUS_QT	Indicator whether an individual is entitled to any sort of benefit paid by the RVA
UNEM_FAMSIT_QT	Family charge position of the unemployed
UNEM_HH_SIZE	Number of household members of the unemployed
UNEM_REL_QT	Relationship of the individual with respect to other family members
UNEM_YEAR_AGE	Age of the individual
UNEM_NETWEARN_QT	Net income earned as wage earner
UNEM_NETSELF_QT	Net income earned as self employed
UNEM_DEPINC_QT	Variable containing an indication whether an individual is income dependent yes or no
UNEM_CHILINHH_QT	Unemployed cohabits with children yes or no
UNEM_PRIVICOH_QT	The unemployed has a privileged partner yes or no
Unemployment benefits of unemployed in search of work	
UNEM_PERMIS_QT	Unemployed is permitted to the system of unemployment benefits on the basis of studies or on the basis of previous employment
UNEM_ELIGUIS_QT	Individual satisfies the eligibility conditions for unemployment benefits on the basis of studies
UNEM_BENSTUD_DAY	Unemployment benefits per day for unemployed entitled to benefits after studies
UNEM_BENSTUD_QT	Unemployment benefits per quarter for unemployed entitled to benefits after studies
UNEM_BENEMPL_DAY	Unemployment benefits per day for unemployed entitled to benefits after employment
UNEM_BENEMPL_QT	Unemployment benefits per quarter for unemployed entitled to benefits after employment
UNEM_DISABLED_QT	Unemployed is disabled yes or no
UNEM_NUMMINU_QT	Number of months the unemployed is already in unemployment
UNEM_NUMYWAGE_QT	The number of years the unemployed has worked as wage earner
UNEM_DECREARN_QT	The decrease in earning capacity if the unemployed would be on the labour market
UNEM_AVGLWAGE_DAY	The last daily wage earned before entering unemployment
Reference unemployment benefits of unemployed not in search of work or employees entitled to RVA benefits	
UNEM_BENREF_DAY	Reference unemployment benefits per day (computed as if the unemployed was unemployed in search of work)
UNEM_BENREF_QT	Reference unemployment benefits per quarter day (computed as if the unemployed was unemployed in search of work)

Unemployment benefits of unemployed not in search of work who are entitled to RVA-ONEM benefits

UNEM_ELIGUNS1_QT	Unemployed is not in search of work and is entitled to early retirement benefits either of the old or the new type
UNEM_LOSWAGE_QT	The last quarterly wage earned before entering unemployment
UNEM_BENUNS1_QT	Quarterly early retirement benefit paid by the RVA to an unemployed not in search of work
UNEM_ADDUNS_QT	Quarterly early retirement benefit paid by the previous employer to an unemployed not in search of work
UNEM_ELIGUNS2_QT	Unemployed is not in search of work and is entitled to career break benefits
UNEM_FPUNS_QT	Type of job left by the unemployed not in search of work (i.e. either full or part time)
UNEM_CARBCON_QT	Qualification of the career break of the unemployed not in search of work (i.e. number of months and supplement)
UNEM_BENUNS2_QT	Quarterly career break benefit paid to unemployed not in search of work
UNEM_ELIGUNS3_QT	Unemployed is not in search of work and is entitled to benefits for older unemployed with seniority supplement
UNEM_BENUNS3_DAY	Benefit per day for unemployed not in search of work who is entitled to benefits for older unemployed with seniority supplement
UNEM_BENUNS3_QT	Benefit per quarter for unemployed not in search of work who is entitled to benefits for older unemployed with seniority supplement
UNEM_ELIGUNS4_QT	Unemployed is not in search of work and is entitled to unemployment benefits in case of exemptions
UNEM_BENUNS4_QT	Benefit per quarter for unemployed not in search of work who is entitled to benefits in case of exemption
UNEM_EXEMP_QT	Number of months the unemployed is already exempted from certain obligations

Unemployment benefits of employees entitled to benefits paid by the RVA-ONEM

UNEM_ELIGEMP1_QT	Employee is entitled to part time early retirement benefits
UNEM_BENEMP1_QT	Quarterly early retirement benefit paid by the RVA to an employee entitled to part time early retirement benefits
UNEM_ADDEMP_QT	Quarterly early retirement benefit paid by the employer to an employee entitled to part time early retirement benefits
UNEM_ELIGEMP2_QT	Employee is entitled to part time career break benefits
UNEM_BENEMP2_QT	Quarterly career break benefits paid to employee entitled to part time career break benefits
UNEM_FPEMP_QT	Type of job left by the employee entitled to part time career break benefits (i.e. either full or part time)
UNEM_TIMEUNS_QT	Reduction in work time of the employee entitled to part time career break benefits
UNEM_ELIGEMP3_QT	Employee is entitled to guaranteed income benefits paid by

	the RVA
UNEM_BENEMP3_DAY	Guaranteed income benefit for a day paid by the RVA to an employee entitled to these benefits
UNEM_BENEMP3_QT	Guaranteed income benefit per quarter paid by the RVA to an employee entitled to these benefits
UNEM_ELIGEMP4_QT	Employee is entitled to temporary unemployment benefits
UNEM_BENEMP4_QT	Quarterly benefits paid to employee entitled to temporary unemployment benefits
UNEM_ELIGEMP5_QT	Employee is entitled to PWA benefits
UNEM_BENEMP5_DAY	PWA benefits paid per day
UNEM_BENEMP5_QT	Quarterly amount of PWA benefits
UNEM_ELIGEMP6_QT	Employee is entitled to activation benefits for other than PWA program
UNEM_FRACTRAN_QT	Time performed by the employee in an activation program, other than PWA, expressed as a fraction of a full time
UNEM_TOWNRATE_QT	Degree of unemployment in the town the employee in an activation program is living in
UNEM_PWAHOURS_QT	Number of hours performed in PWA activity
UNEM_BENEMP6_QT	Quarterly benefits paid to employee entitled to benefits for activation program other than PWA program
UNEM_DUURREIN_QT	Number of months the employee is in a reinsertion program
UNEM_FRACREIN_QT	Time performed by the employee in a reinsertion program, expressed as a fraction of a full time

Prepayment variables

UNEM_GTINC_ANN	Gross taxable income per year
UNEM_NTINC_ANN	Net taxable income per year
UNEM_PREPAY_BASE_ANN	Basic amount of prepayments paid per year
UNEM_AMOUNT_REDCHILD_ANN	Annual amount of income, exempted from the bottom up, for dependent children
UNEM_PREPAY_REDCHILD_ANN	Annual tax reduction because of dependent children
UNEM_PREPAY_ANN	Annual amount of prepayments
UNEM_PREPAY_QT	Quarterly amount of prepayments

Reconstructed exchange concepts

UNEM_OLDUNSS_QT	Unemployment benefits of older unemployed with seniority supplement
UNEM_OTHERUN_QT	Unemployment benefits, other than early retirement benefits and benefits of older unemployed with seniority supplement
UNEM_TOTBEN_QT	Gross amount of unemployment benefits
UNEM_BENUN_QT	Gross amount of real unemployment benefits in a given quarter (no benefits paid by RVA as supplement to wage)
UNEM_FULL6MON_QT	The number of months in unemployment if the unemployed is either full time unemployed or early retired (hence eligible for social supplement in child benefits)

PARAMETERS

Name	Label
UNEM_FAMREL_QT	Matrix used to convert relationships of family members
UNEM_WAGEDFQ1_QT	Ceiling used to exempt net wages of spouse
UNEM_WAGEDFQ2_QT	Ceiling used to exempt gross professional income of children
UNEM_WAGEDFQ3_QT	Ceiling used to exempt unemployment benefits and sickness and disability benefits, other than benefits obtained because of industrial accidents or occupational diseases of children
UNEM_WAGEDFQ4_QT	Ceiling used to exempt pensions of antecedents in case the unemployed has cohabitating children
UNEM_WAGEDFQ5_QT	Ceiling used to exempt pensions of antecedents in case the unemployed has no cohabitating children
UNEM_WAGEDFQ6_QT	Ceiling used to exempt other pensions and benefits obtained because of industrial accidents or occupational diseases
UNEM_WAGEDFQ7_QT	Ceiling used to exempt not else classified replacement or professional income
UNEM_WAGEDFQ8_QT	Ceiling used to determine whether the partner is a privileged partner (i.e. low income)
UNEM_LUSUWB_DAY	Lump sum benefits paid per day as waiting benefit for unemployed entitled to unemployment benefits on the basis of studies
UNEM_LIMLOSW_DAY	Ceiling used to limit lost daily wages
UNEM_PERLIMUB_DAY	Fractions and ceilings used to determine daily benefits for unemployed entitled to unemployment benefits on the basis of employment
UNEM_LIMLOSW_REF_DAY	Ceiling used to limit lost daily wages if reference benefits are computed (i.e. value of UNEM_BENREF_DAY)
UNEM_PERLIMUB_REF_DAY	Fractions and ceilings used to determine daily benefits for unemployed entitled to unemployment benefits on the basis of employment if reference benefits are computed (i.e. value of UNEM_BENREF_DAY)
UNEM_DUURP	Maximum number of months in unemployment for which the unemployed can receive a benefit
UNEM_LSCUB1_DAY	Lump sum benefit of cohabitating unemployed who does not have a privileged partner
UNEM_LSCUB2_DAY	Additional lump sum benefit if the cohabitating unemployed has a privileged partner
UNEM_LIMWAGE_QT	Ceiling used to limit the lost gross wages per quarter in the computation of early retirement benefits for the RVA benefit
UNEM_EARPAR_QT	Percentage and ceilings used to determine early retirement benefits
UNEM_LIMEARR_QT	Ceiling used to limit the lost gross wages per quarter in the computation of early retirement benefits paid by the employer
UNEM_BENCCB_MONTH	Monthly lump sum benefits used to determine common career break benefits for employees who leave a full time job
UNEM_BENPCARE_MONTH	Monthly lump sum benefits used to determine career break benefits in case of palliative care for employees who leave a full

	time job
UNEM_BENMCARE_MONTH	Monthly lump sum benefits used to determine career break benefits in case of medical assistance for employees who leave a full time job
UNEM_BENPLEAV_MONTH	Monthly lump sum benefits used to determine career break benefits in case of parental leave for employees who leave a full time job
UNEM_BENSSUP_DAY	Percentages and ceilings used to determine daily unemployment benefits of unemployed entitled to a seniority supplement
UNEM_EXEMPSF_DAY	Lump sum benefits paid per day in case of exemption from certain obligations because of social and familial reasons
UNEM_LSPEAR_DAY	Lump sum benefit paid per day in case of part time early retirement
UNEM_BENCCM50_MONTH	Monthly lump sum benefits used to determine common part time career break benefits for employees younger than 50
UNEM_BENCCP50_MONTH	Monthly lump sum benefits used to determine common part time career break benefits for employees who are 50 or older
UNEM_BENPCM50_MONTH	Monthly lump sum benefits used to determine part time career break benefits in case of palliative care for employees younger than 50
UNEM_BENPCP50_MONTH	Monthly lump sum benefits used to determine part time career break benefits in case of palliative care for employees who are 50 or older
UNEM_BENMCM50_MONTH	Monthly lump sum benefits used to determine part time career break benefits in case of medical assistance for employees younger than 50
UNEM_BENMCP50_MONTH	Monthly lump sum benefits used to determine part time career break benefits in case of medical assistance for employees who are 50 or older
UNEM_BENPLM50_MONTH	Monthly lump sum benefits used to determine part time career break benefits in case of parental leave for employees younger than 50
UNEM_BENPLP50_MONTH	Monthly lump sum benefits used to determine part time career break benefits in case of parental leave for employees who are 50 or older
UNEM_GUARINC_MONTH	Monthly lump sum amounts and Percentages used to compute the guaranteed income benefits in case of unemployment
UNEM_PWAMIN_HOUR	Hourly lump sum amount used to reduce the common unemployment benefit in case of PWA activation
UNEM_PWAPLUS_HOUR	Hourly lump sum amount used to determine the PWA supplement
UNEM_TRANSBEN_MONTH	Monthly lump sum benefits for employees in a transition program
UNEM_REINBEN_MONTH	Monthly lump sum benefits for employees in a reinsertion program

Prepayment parameters

UNEM_SSCONT_QT	Percentage used to determine social security contributions paid on gross income
UNEM_COSTSCAL_ANN	Percentages and thresholds used to determine professional costs in the prepayment computation
UNEM_TAXRATES_ANN	Tax rates and thresholds used to determine annual taxes in the prepayment computation
UNEM_REDCHILD_ANN	Tax credit for children in prepayment computation