EUROMOD COUNTRY REPORT



MALTA (MT) 2014-2017

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September 2017

EUROMOD version H1.0







EUROMOD is a tax-benefit micro-simulation model for the European Union (EU) that enables researchers and policy analysts to calculate, in a comparable manner, the effects of taxes and benefits on household incomes and work incentives for the population of each country and for the EU as a whole.

EUROMOD has been enlarged to cover 28 Member States and is updated to recent policy systems using data from the European Union Statistics on Income and Living Conditions (EUSILC) as the input database, supported by DG-EMPL of the European Commission.

This report documents the work done in one annual update for Malta. This work was carried out by the EUROMOD core developer team, based mainly in ISER at the University of Essex, in collaboration with a national team.

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The results presented in this report are derived using EUROMOD version H1.0. EUROMOD is continually being improved and the results presented here may not match those that would be obtained with later versions of EUROMOD.

For more information, see: https://www.euromod.ac.uk

This document is supported by the European Union Programme for Employment and Social Innovation "Easi" (2014-2020). For further information please consult http://ec.europa.eu/social/easi. The information contained within this document does not necessarily reflect the position or opinion of the European Commission.

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1. BASIC INFORMATION

1.1 Basic information about the tax-benefit system

Are policies different across regions or municipalities?

Tax-benefit policies are not different in Malta across areas; it is a unified system.

• When is the "fiscal year" (e.g., 1st of January – 31st of December)?

The fiscal year in Malta runs from the 1st January to the 31st December. The 'benefit year' is from the first Monday in January and ending on the last Sunday before the first Monday in January of the following year;

What is the state pension age?

The retirement age at the time of the reform stood at 62 years for both men and women. The reform introduced equal retirement age for men and women at 61 years as from the 1st of January 2007. The retirement age is set to increase to 65 years of age for both men and women in a gradual manner. From the 1st January 2007 the pension age will increase as follows for persons:

- Born on or before 31/12/1951 no change
- Born between 1/1/1952 and 31/12/1955 at 62 years
- Born between 1/1/1956 and 31/12/1958 at 63 years
- Born between 1/1/1959 and 31/12/1961 at 64 years
- Born on or after 1/1/1962 at 65 year.

• Minimum school leaving age and definition of dependent children for tax and/or benefit purposes:

The educational system in Malta and Gozo is divided into three main branches - Primary Education (which extends from age five till eleven), Secondary Education (which stretches from age eleven till sixteen) and Tertiary Education. Education is compulsory from age five till sixteen.

According to the Social Security Act, "child" means a person who is under the age of 16 years and includes a stepchild, an adopted child and a child born out of wedlock. In the case of the children's allowance, the definition of 'child' may be extended in some cases to persons aged above 16 but below 21 (see sections 1.3.2. and 2.3.5 for details).

• Definition of lone parent and/or other socially protected groups (e.g., large families) for tax and benefit purposes:

According to the Social Security Act, "single parent" means a parent who is widowed, separated (whether de facto or de jure), divorced or unmarried who is solely and entirely (i.e. does not receive alimony from the former partner) responsible for the upkeep and upbringing of his or her dependant sons or daughters who have not yet reached 18 years of age.

• Are income taxed individually or jointly (in case of joint, briefly explain how it works: income splitting, family quotient, etc.)?

The taxation system is progressive. Married couples may choose whether they opt for individual or joint taxation. Widows and separated spouses may also be taxed at rates applicable to married couples when they have the custody of children and fulfil a few additional conditions. Single persons are taxed at the individual tax rate.

• Are different income sources taxed differently (e.g., capital income tax)?

Some types of investment income and capital gains are taxed at different (usually lower) rates than labour income.

• Do taxpayers need to fill in a tax return or do withholdings match the exact amount due in the end of the financial year?

Every taxpayer in Malta files an income tax return. The self-assessment concept, which was introduced as from the year of assessment 1999, requires by law that every taxpayer who files an income tax return has the obligation to make his own 'assessment' for tax purposes. This means that it is the taxpayer himself who determines the amount of tax chargeable. If it results that not all the tax chargeable has been paid, penalties may have to be imposed. The additional tax and interest will be charged as from the tax return date.

• Indexation: are there statutory indexing regimes for taxes and benefits to take account of inflation?

In Malta there is the Cost of Living Adjustment (COLA) which is an increase in wages and pensions (the latter granted in full as from Budget for 2008) by a fixed amount that reflects the indexation of the basic wage to the average Retail Price Index inflation of the last 12 months to September of that year. In 2015, a one time additional bonus of €35 is given to all persons in receipt of social security benefits. This was the result of a very low COLA where government contributed towards aiding all low income earners. This bonus is also given on a pro-rata basis to students and part time workers.

 How is income assessed on (most) means-tested benefits (weekly/monthly/annually, in terms of past/current/expected income)?

Income for most means-tested benefits is assessed on an annual basis. The previous year's income is taken into account in most means-tests. Income taken into account for the means-tests is usually net of social insurance contributions but gross of taxes.

1.2 Social Benefits

The Social Security Act in Malta provides for two types of benefits: contributory and non-contributory. In the case of contributory benefits, the basic requirement for entitlement is that specific contribution conditions are satisfied. In the non-contributory scheme, the basic requirement is that the conditions of the means test are satisfied.

1.2.1 Contributory Benefits

1.2.1.1. Short-term Benefits

Unemployment benefit (UB): is payable to unemployed persons registered under Part 1 of the unemployment register that satisfy a minimum contributory period.

Special Unemployment Benefit (SUB): the benefit is a top-up to the UB, when income and capital resources are under a given threshold.

Sickness benefit: in case of sickness, this entitles the beneficiary to 156 days of sickness benefit but may in certain cases also be extended to 312 days. In each case the first three days of each new claim for this benefit are not paid. Persons are paid according to their normal working week and no payments are effected for public holidays. Sickness benefit is applicable to persons who have not reached retirement age and who satisfy the relevant contribution conditions.

Injury benefit: this benefit is payable to persons who suffer personal injury caused by accidents arising out of or in the course of his/her employment or self-occupation or in the case of contraction of an industrial disease. A person becomes entitled to this benefit if he/she is incapable of work for more than 3 days. The maximum entitlement is limited to 12 months.

1.2.1.2 Long-term benefits

Two-thirds pension: earnings-related pension payable to persons who have retired after January 1979. This scheme basically provides for a pension equivalent to two-thirds of the insured person's pensionable income. There are applicable maximum and minimum rates. The two-thirds proportion may vary where the insured's contribution average is less than 50. In the case of an employed person, the pensionable income is calculated by taking the average yearly salary on which the relevant contribution has been paid, of the best three consecutive calendar years during the last 10 years prior to retirement. This calculation is further adjusted to cater for cost of living adjustments. For self-employed persons the pensionable income is the average of his/her net income, derived from investments/rents/pensions, etc., of the last 10 calendar years or part thereof. In the case of a person defined as self-occupied (a person who derives income from an economic activity and hence declares a net profit/loss) the pensionable income is assessed as the average net income declared from the person's gainful activity during the last 10 years or part thereof.

Retirement Pension: is payable on reaching the pensionable age. The rates and types of categories vary according to a range of statutory conditions. In Malta, a person may receive only one pension, that is: Retirement or Two-Thirds pension (i.e. the one which is more beneficial). Retirement pension is payable to persons on reaching pension age 62 in the case of both males and females. A person must have paid at least 156 contributions and an average of 20 contributions per annum (minimum) throughout his/her working life from 18/19 years till age of 62/65 years. In 2016 the guaranteed national minimum pension for single persons was increased to €7,280 per annum (€140 per week). Those married couples who do not benefit from the aforementioned increase are given increased payments beyond the COLA adjustments of €4.15 per week.

Increased retirement pension: applies to cases where the sum total of a person's service pension together with the rate of retirement pension applicable in the case, are lower than a certain percentage of the person's pensionable income.

National minimum pension/Increased national minimum pension: where a beneficiary is not entitled to a Service Pension, he may be eligible to the contributory benefits of NMP or to the INMP. This can be considered to be the minimum entitlement of a person who is not in receipt of a service pension as defined by law. The INMP applies where the Service Pension is low. This benefit is payable up to two-thirds of the pensionable income.

Rates of the NMP: 4/5ths of the National Minimum Wage, in the case of married man maintaining a wife (i.e. the wife is not gainfully occupied and not looking for work), and two-thirds of the National Minimum Wage in case of any other person.

Decreased national minimum pension: where a person is entitled to a service pension and his service pension together with the rate of retirement pension or increased retirement pension applicable in his/her case is less than the rate of national minimum pension in his/her case, then, such a person would be entitled to the National minimum pension reduced by his service pension.

Anticipated old age pension: these are periodic payments intended to maintain the income of beneficiaries who retire before the standard retirement age. In Malta these are pensions given to ex-police and Armed Forces officers according to the Police Act and the Armed Forces Act.

Invalidity/disability benefits:

- **Disability pension:** payable if injury or disease caused or contracted whilst at work is considered to cause a loss of physical or mental faculty calculated between 20% and 89%. Rates awarded according to degree of Disability. Where the degree of disablement is assessed at 90% and over, the person concerned is automatically awarded an Invalidity Pension at the full rate. From 2015 the full disability pension will be given irrespective of whether a person earns more than the minimum wage or not. Furthermore, as from 2016, on reaching pensionable age, persons with disability will be entitled to a pension equivalent to the non-contributory retirement pension.
- **Invalidity Pension:** this is a contributory benefit payable to persons deemed permanently incapable for suitable full-time or regular part-time employment. Various rates apply according to different conditions;
- Decreased national minimum invalidity pension/Increased invalidity pension/National minimum invalidity pension: is payable to persons deemed permanently incapable for full-time or regular part-time employment but who are recipients of a service pension. Where the flat rate Invalidity Pension together with the Service Pension the claimant is receiving, do not exceed two-thirds of his pensionable income, he is entitled to an Increased Invalidity Pension (IIP) or such part thereof, ensuring that the two-thirds of the pensionable income are not exceeded.

1.2.1.3. Other long-term contributory benefits

Widow's pension: a widow/widower, whose spouse satisfies the relevant contribution conditions on his/her death, is entitled to a Widow/Widower's Pension or to a Survivor's Pension, whichever is the most beneficial. Widow's Pension or Survivor's Pension is awarded to those persons whose spouse was already in receipt of a Retirement Pension or Two-Thirds Pension. Early Survivor's Pension is awarded to those persons whose spouse was still under retirement age on the date of his/her demise. In 2014 the widow's pension was extended by removing the children's age capping as well as the wage/ salary capping to receive a full widow's pension irrespective of their earnings or their children's age. Upon re-marriage, the Widow/Survivors' Pension will cease to be granted but will be entitled to a re-marriage pension for a maximum of 260 weeks at the applicable rate of Widow's Pension relevant to the contribution average only.

The widows' pension entitled the surviving spouse to take up 5/6 of the married couples' pension. In 2016 this was further increased so that widows' will be able to take all the amount of this pension.

Survivor's pension: earnings-related pension payable to a widow whose husband was entitled to a Two-Thirds' pension or whose husband would have been entitled to a pension had he reached retiring age at the time of his death.

National minimum widow's pension/Widows' pension: a widow/widower whose spouse satisfies the relevant contribution conditions on his/her date of death is entitled to a Widow/widowers Pension as per XII Schedule of the Social Security Act or to a Survivors' Pension. Furthermore, in case where a widow has the care and custody of children under 16 years of age, an increase of Lm1.95 (€4.54) per week for each child is also paid if she remains in gainful occupation. Where a widow is not gainfully occupied an increase of Lm4.00 (⊕.32) per week for each child is paid.

Parent's pension: is payable to a parent of an employed or self-occupation person, who died as a result of industrial disease or accident at work and whom, prior to death of son or daughter, depended solely on their financial resources for livelihood.

Orphan's allowance: weekly allowance paid to a guardian of a child or children who are under 16 years of age.

Orphan's supplementary allowance: weekly pension paid to a guardian of a child or children whose age lies between 16 and 21 years and who are unemployed or employed but earning less than the Maltese National Minimum Wage.

1.2.2 Non-Contributory Benefits

Age pension: is payable to citizens of Malta over 60 years of age. This non-contributory benefit is means tested.

Pension for the Visually Impaired: is payable to a citizen of Malta over 14 years of age whose visual activity has been certified by an ophthalmologist to be so low so as to render such persons unable to perform any work for which eyesight is essential. The conditions to be met for eligibility for this pension are that he/she must:

- suffer from visual impairment;
- have the case approved by an ophthalmologist

To be eligible for this benefit, the claimant's income, together with the rate of Pension for the Visually Impaired, does not exceed the National Minimum Wage as applicable to an 18-year-old person.

Pension for Persons with a Disability: is payable to citizens of Malta over 16 years of age. Amount depends on the type of disability. Various types of disability are listed under the Social Security Act. One may receive a Disability Pension if he/she:

- suffers from a severe disability;
- has an income not exceeding the National Minimum Wage;
- has a disability approved by the specified medical panel

Carer's pension: is payable to single, separated or widowed citizens of Malta who are taking care on a full-time basis of a bed-ridden or wheel-chair bound near relative (parents, children, grand-children, brother/sister, in laws). The carer can be also entitled to credits towards Social Security contributions.

Emergency Assistance: is granted to a female who is or has been rendered destitute by the head of household to the extent that she becomes an inmate of any institute for the care and welfare of such persons. This benefit is payable by the Department of Welfare.

Sickness Assistance: is payable to persons suffering from a chronic disease or condition that requires a special diet. It is subjected to a means-test.

Tuberculosis Assistance: is payable to head of household or any member of the household suffering from or has, within the last 5 years, suffered from Tuberculosis. This assistance is not subject to a means test.

Leprosy Assistance: is payable to head of household or any member of the household who is receiving treatment for leprosy. It is not means tested.

Social Assistance: is payable to heads of households who are unemployed or seeking employment and where the relative financial means of the assessment unit falls below that established by the Social Security Act. Payable also to single persons who lack financial resources and who are caring for an elderly or physically/mentally handicapped relative on a full-time basis.

Milk Grant: is payable to head of household receiving Social Assistance when he or any member of the household has the care or custody of a child under 40 weeks of age requiring to:

- either be weaned or,
- is losing weight in spite of being breast fed or,
- is a member of a household receiving Tuberculosis Assistance.

Free Medical Aid: benefit is granted to a person who on account of disablement, sickness, or disease (and who is not hospitalised), is in need of medical, surgical or pharmaceutical aid. Means-tested except in cases where the person is suffering from tuberculosis, leprosy, poliomyelitis or diabetes mellitus or other chronic diseases outlined in the Social Security Act.

Children's Allowance: the children's allowance is composed of a universal flat-rate element and a means-tested top-up that depends on an income test.

Special Allowance: is payable to locally residing female citizens of Malta who have the care of a child who is 16 years of age or over and who is either still at school or registering for employment. This is also means-tested.

Disabled Child Allowance: is payable to locally residing citizens of Malta who have the effective custody of a child suffering from cerebral palsy or severe mental sub normality or is severely handicapped or have a child aged under 14 who is blind.

Foster Care Allowance: is payable to recognised institutes for the care of children and to foster parents. The children are to be resident at a recognised institute and young persons or living with foster parents.

Maternity Benefit: is payable to local residing pregnant citizen of Malta in respect of the last 8 weeks of pregnancy and the first 6 weeks after childbirth (for a total of 14 weeks benefits). Only payable if the female is not entitled to maternity leave from her employer, if employed. This is not means-tested. As from 2015, the rate of maternity leave benefit was increased and paid at a rate equivalent to the national minimum wage.

Supplementary Allowance (SPA): There are four categories into which persons eligible for this Assistance can be categorised. Each category has its own conditions and income ceiling. The income ceiling for employed persons is based on income and emoluments for basic year 2015 and for pensioners and social assistance beneficiaries, it is based on the pension or assistance income for 2017. The categories for this benefit are as follows:

 A single person who is head of household and is currently in receipt of Social Assistance or Unemployment Assistance or any type of pension or disability assistance. The maximum income permissible for persons falling under this category is €012. A

- person who is not yet 65 years old can be eligible for a weekly rate of up to €4.57 whilst persons over the age of 65 can receive up to €6.49 weekly.
- A single person who is head of household and is employed or is an employed pensioner and earning less than €012 yearly. A person who is not yet 65 years old can be eligible for a weekly rate of up to €7 whilst persons over the age of 65 can receive up to €8.92 weekly.
- A single person who is not head of household and is living with his parents whilst being in gainful employment that falls within this category is eligible for €2.43 weekly provided that income is less than €012.

A married person still living within the same household with his/her spouse can be entitled for:

- A weekly rate of up to €12.54 if the applicant is under 65 years of age with an income of less than €1,180.
- A weekly rate of up to €14.46 if the applicant is over 65 years of age with an income of less than €1,180.
- A weekly rate of up to €2.68 if the applicant is under 65 years of age with an income of between €11,181 and €13,000.
- A weekly rate of up to €4.60 if the applicant is over 65 years of age with an income of between €1,181 and €12,144.
- A weekly rate of up to €2.68 if the applicant is over 65 years of age with an income of between €12,144 and €13,000.

Bonus: is payable to all persons receiving a pension, orphans' allowance, Social Assistance and Leprosy Assistance under the Social Security Act. This bonus is paid every six months in June and December of each year. Employers are mandated to pay the Bonus to their employees.

Additional Bonus: is payable to all persons who receive bonus with a rate of €3.12 per week. Employers are mandated to pay the additional bonus to their employees. The Sixth Schedule of the Social Security Act, in its parts I, II, III and IV stipulates that the rates will be increased by Lm0.50 (€1.16) per week, if the household is paying rent for its normal place of habitation, House Rent.

Energy benefit scheme: aimed to mitigate the effect of the increase in expenditure on water and electricity bills of low income families. It partly subsidises the cost of electricity consumption and the cost of renting a water meter and an electivity meter provided an income test is passed.

1.2.3 Lump Sum Benefits

Marriage grant: one-time payment payable upon marriage to persons normally resident in Malta. A grant of €271.04 is paid both to husband and wife when they get married provided that on the marriage date, the couple satisfies certain contributory conditions, that is, that the couples have paid not less than 26 contributions before marriage.

Re-marriage grant: is payable to a widow who remarries and hence forfeits her right to a widow's pension payment equivalent to one year's pension.

Disablement gratuity: is payable to a person following injury at work and where the degree of disability is estimated as being between 1% and 19%.

1.2.4 Not Strictly Benefits

Service Pension: the Social Security Act defines the 'service pension' as a pension or any allowance that is payable by or on behalf of his employer with respect to past services in Malta or abroad. In the case where a person is in receipt of a service pension that exceeds two-thirds of his or her pensionable income then he or she is entitled to a flat-rate Retirement Pension (classified under 'top-ups'). On the other hand, if the person's service pension is less than two-thirds of pensionable income then the person is awarded an Increased Retirement Pension (classified under '2/3 retirement pension') that is equivalent to the difference between the two-thirds of pensionable income and the service pension. In 2014 this pension was increased in order to improve the standard of living of such pensioners.

Hospitals and other health care scheme: this scheme covers the Maltese health care system as operated by means of an integrated health service that is organised at the national level. Parliament is responsible for enacting health care legislation and for approving the health care budget.

Subsidies on utilities scheme: subsidised telephone rent is offered to elderly people who are in possession of the pink form and are on social assistance. Water and electricity rebates are awarded to domestic households whose head is benefiting from social assistance. These rebates are in the form of a waiver on the meter rents (both water and electricity), as well as a reduction in the consumption charge for water.

Housing subsidies scheme: the benefits falling under this scheme include subsidies on the interest paid by members of the public on loans obtained to purchase housing units and subsidies on rents. These benefits are not aimed towards engaged couples.

Housing authority subsidies scheme: the Housing Authority subsidises the interest paid by members of the public on loans obtained to purchase housing units from the Authority and to build on land leased from the Authority. The Housing Authority also subsidises the cost of housing units, plots and ground rents to members of the public. Grants are also given on various schemes offered by the Authority.

Route bus subsidy for pensioners' scheme: subsidies to pensioners (in possession of the 'Kartanzjan' card) on route bus fares.

Gozo ferry subsidy for pensioners' scheme: subsidies to pensioners (in possession of the '*Kartanzjan*' card) on Gozo Channel Co. Ltd. Ferry boat trips - a boat ferry service linking the island of Gozo and Malta.

The Employment and Training Corporation (ETC): one of the tasks of the ETC is that of providing training programmes as well as training allowances to unemployed persons who are seeking employment.

Sickness days - employers' expenditure: these consist of wages and salaries paid by employers during periods of sick leave. According to local legislation, full pay must continue to be paid during the first three days of sick leave. Subsequently, sick leave pay is financed partly through social security benefits paid by the Social Security Department, with the shortfall being contributed by the employer. Depending on specific employee-employer arrangements, the employer will, after an established period of time, proceed to cover 50 per cent of the salary. At a later point, the employer may be relinquished from his/her obligations to pay any salary to employees on long-term sick leave.

1.3 Social contributions

The contributory scheme in Malta is a universal system of contributions whereby an employee, self-occupied, or self-employed person pays a weekly contribution as laid down by the Social Security Act. The Maltese system follows a pay as you go system whereby a person makes contributions towards the scheme during the period that such person is gainfully active. These contributions are then used to provide for him or herself when a later contingency such as sickness, unemployment, retirement, etc., occurs. The scheme allows for different types of contributions in order to extend coverage to all types of persons in employment. Two classes of contributions exist, namely Class-One contributions, and Class-Two contributions.

1.3.1 Class-One contributions

These are payable in respect of the employed persons. These contributions imply that any person employed under a contract of service in Malta is considered to be in insurable employment and subject to the payment of these contributions. For each person, a tripartite weekly contribution is payable on the basic pay. The tripartite is constituted of the employee, the employer, and the state. While there is a minimum contribution payable, the total contribution is also capped to a maximum wage ceiling.

1.3.2 Class-Two contributions

These are paid by self-occupied and self-employed persons. The Social Security Act distinguishes between self-employed and self-occupied, whereby, a self-employed person is that who is not gainfully self-employed in a business or profession and mainly lives on income from investments/rents, while the self-occupied person is that who derives income from an economic activity and declares net profit/loss. The rate of Class-Two contributions is shared by the state and the self-employed/self-occupied person. While there is a minimum contribution payable, the total contribution is also capped to a maximum wage ceiling.

1.4 Taxes

Taxes in Malta are mainly divided into direct and indirect taxes. The former refers to income tax and social security contributions, whilst the latter relates to VAT, excise duty, stamp duty on documents and motor vehicle registration tax. These are regulated by the Income Tax Act of 1949, Social Security Act of 1987, Value Added Tax Act of 1999, Excise Duty Act of 1995, Duty on Documents and Transfers Act of 1992 and Motor Vehicle Registration Tax Act of 1994 respectively. In general, Maltese taxes account for around 87 per cent of total recurrent revenue. Direct taxes make up around 56 per cent of total tax revenue, while indirect taxes constitute around 44 per cent.

Income tax: the income tax is levied on income in general and on the capital gains of every person, including individuals, companies and other bodies. There are no separate laws regulating the taxation of individuals and corporations and both are regulated by the Income Tax Act and the Income Tax Management Act.

Value added tax: akin to the rest of the EU, Malta's value added tax (VAT) is imposed on imports, intra-community acquisitions and supplies of goods and services that take place in

Malta. Apart from a standard rate of 18 per cent, there are also a number of reduced rates of 7 per cent, 5 per cent as well as a 0 per cent rate for a number of selected goods and services. Zero rated supplies include items such as food and pharmaceutical goods.

Vehicle road license: a vehicle road licence is an authorization for the vehicle to be on the road. There are different categories and fees for road licenses catering for each type of motor vehicle. Additionally, there is a Controlled Vehicular Access System (CVA) which is a pay-as-you-go system for vehicular access to the capital.

Vehicle registration tax: a vehicle which is newly registered in Malta must pay registration tax. The basis of taxation depends on a number of factors, such as, whether the vehicle is new or used, and whether it is for private use or a carrying vehicle.

Excise duty: this is a charge on alcohol and alcoholic beverages, manufactured tobacco, energy products, mobile telephone services and cement. The applicable rates vary within each product/service category and certain exemptions also apply.

Duty on documents and transfers: these are paid on life insurance policies, on credit cards and on transfers of securities or immovable property, unless the latter occurs as a result of succession from a deceased person.

2. SIMULATION OF TAXES AND BENEFITS IN EUROMOD

2.1 Scope of simulation

Not all benefits and taxes are simulated in EUROMOD. Indirect taxes such as VAT, excise duties etc. that do not affect net disposable income fall outside the scope of EUROMOD. The same is true for services in-kind. These are neither simulated nor included among the output variables. Other benefits and taxes may not be simulated due to lack of information in the input dataset. These are included in the final output dataset but the rules governing them may not be altered by the simulation. Tables 1 and 2 classify all the main tax-benefit instruments into one of these three groups and provide a brief explanation as to why the instrument is not fully simulated if this is the case. Information is provided regarding the treatment of all tax and benefit instruments in each policy year that has been implemented.

Table 1.	Simul	ation	of her	efite i	in F	TIRO	MOD
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	Variable	Trea	tment i	n EURO	MOD	- Why not fully simulated?
	name(s)	2014	2015	2016	2017	why not tuny simulated:
Two thirds pension	poanm	IA	IA	IA	IA	No information on contribution history and no information on pensionable income
Retirement pension	poanm	IA	IA	IA	IA	No information on contribution history and no information on pensionable income
Increased retirement pension	poanm	IA	IA	IA	IA	No information on contribution history and no information on pensionable income

Table 1. Simulation of benefits in EUROMOD

	Variable	Treatment in EUROMOD		MOD	Why not fully simulated?	
	name(s)	2014	2015	2016	2017	- Why not fully simulated?
National minimum pension	poanm	IA	IA	IA	IA	No information on contribution history and no information on pensionable income
Increased national minimum pension	poanm	IA	IA	IA	IA	No information on contribution history and no information on pensionable income
Decreased national minimum pension	poanm	IA	IA	IA	IA	No information on contribution history and no information on pensionable income
Sickness Benefit	bhl00	IA	IA	IA	IA	No information on health status & no information on contribution history
Injury Benefit	bhl00	IA	IA	IA	IA	No information on health status & no information on contribution history
Invalidity pension	pdi	IA	IA	IA	IA	No information on degree of incapacity & no information on contributory history
National minimum invalidity pension	pdi	IA	IA	IA	IA	No information on degree of incapacity & no information on contributory history
Decreased invalidity pension	pdi	IA	IA	IA	IA	No information on degree of incapacity & no information on contributory history
Disablement gratuity	pdi	IA	IA	IA	IA	No information on degree of incapacity & no information on contributory history
Injury Pension	pdi	IA	IA	IA	IA	No information on degree of incapacity & no information on contributory history
Increased injury pension	pdi	IA	IA	IA	IA	No information on degree of incapacity & no information on contributory history
Disability pension/ Severe disability pension	pdi	IA	IA	IA	IA	No information on degree of incapacity
Survivor's pension	psu	IA	IA	IA	IA	No information on the contribution history
Early survivor's retirement pension	psu	IA	IA	IA	IA	No information on the contribution history
Widow's pension	psu	IA	IA	IA	IA	No information on the contribution history
National minimum	psu	IA	IA	IA	IA	No information on the contribution history

Table 1. Simulation of benefits in EUROMOD

	Variable	Trea	Treatment in l		MOD	When not fully simulated 9
	name(s)	2014	2015	2016	2017	Why not fully simulated?
widow's pension						
Orphan's allowance	psu	IA	IA	IA	IA	No information on the contribution history
Unemployment benefit	bunctnm	PS	PS	PS	PS	Contribution history is approximated based employment in the income reference period and observed receipt in the dataset
Special unemployment benefit	bunctmt	PS	PS	PS	PS	Contribution history is approximated based employment in the income reference period and observed receipt in the dataset
Age pension	boamt	S	S	S	S	
Sickness assistance	bhlmt	I	I	I	I	No information on health status
Child allowance (means-tested)	bchmt	S	S	S	S	
Child allowance —flat rate	bchnm	S	S	S	S	
Unemployment assistance	bunnemt	PS	PS	PS	PS	Eligibility conditioned on observe receipt in the data
Social assistance	bsa	S	S	S	S	
Social assistance fo single unmarried parents	bchlp	S	S	S	S	
Supplementary assistance	bmttu	S	S	S	S	
Bonus	btuls	S	S	S	S	

Notes: "-": policy did not exist in that year; "E": *excluded* from the model as it is neither included in the micro-data nor simulated; "I": *included* in the micro-data but not simulated; "IA": included in an aggregate variable in the micro-data; "PS": *partially simulated* as some of its relevant rules are not simulated; "S": *simulated* although some minor or very specific rules may not be simulated.

Simulated benefits include the most important non-contributory benefits. EUROMOD also partially simulated all three types of unemployment benefits existent in Malta. Contributory benefits that take into account long periods of contributions-such as old-age, invalidity and survivor pensions are not simulated. In addition, invalidity and sickness benefits are not simulated due to absence of accurate detailed information about the health status of the recipient. A few specific very small benefits such as tuberculosis assistance, leprosy assistance, benefits for drug addicts, disability child allowance and milk grant are ignored in the simulation. The carer's pension is not simulated due to absence of information about care related responsibilities and the health status of other household members. The maternity benefit is not simulated as it requires information about benefits received from the employer.

Table 2. Simulation of taxes and social contributions in EUROMOD

	Variable	Treatment in		EURO	MOD	When you faller airmalated?
	name(s)	2014	2015	2016	2017	Why not fully simulated?
Personal income tax	tin_s	S	S	S	S	
Property tax	Tpr	I	I	I	I	No information on property values
Class I contributions	tscee_s tscer_s tscgv_s	S	S	S	S	
Class II contributions	tscse_s tscgv_s	S	S	S	S	
Credited social insurance contributions	tscct_s	S	S	S	S	Not all categories of beneficiaries could be simulated.

Notes: "-" policy did not exist in that year; "E": policy is *excluded* from the model's scope as it is neither included in the microdata nor simulated by EUROMOD; "PS": policy is *partially simulated* as some of its relevant rules are not simulated; "S": policy is *simulated* although some minor or very specific rules may not be simulated.

The model simulates all direct income taxes payable by households. These include the personal income tax as well as Class I and Class II social insurance contributions payable by the employees, employers, self-employed and the state.

Structural changes

Structural changes between 2014 and 2015

In 2015 the rate of personal income tax of 29 per cent (which was applicable to those earning €0,000 or less) was also reduced from 29 per cent to 25 per cent. This reform was also accompanied by the relief of income tax on minimum wage and pensioners.

In the beginning of 2015, the government introduced a child supplement of €400 for every child until the third child and €200 from the fourth child onwards to families whose household income is less than €1,900. This supplement would also be tied with school attendance and with regular medical checkups. This was a one-time benefit.

Structural changes between 2015 and 2016

In 2016 there were changes in the income tax for single, married and parental computations where the non- taxable income was raised to \bigcirc ,100 for single, \bigcirc 12,700 for joint and \bigcirc 10,500 parental computations. This change however affects the 3 lowest tax brackets only as a new system of calculating the income tax is introduced.

Structural Changes between 2016 and 2017

In 2017 the minimum contributory pension for married couples with a full contributory period living on one pension was raised by €4.15 per week to €144.15 per week.

The Supplementary Assistance paid to married low-income earners, including those on the minimum wage, who do not have children under the age of 16 and therefore do not benefit from

the Children's Allowance was also reformed. The reform raised the ceiling for married couples from $\[\in \] 1,089$ to $\[\in$

2.2 Order of simulation and interdependencies

The order of the simulation is the same in all 4 years included in this Country Report. It is simulated first as this affects subsequent tax and contribution calculations. However, by default the minimum wage is switched off in the baseline (Table 3).

Next are Class I and Class II contributions paid by employees, employers, self-employed and the state. As they are generally deductible from assessed income both in the case of the personal income tax base and in the case of means-tested benefits, they need to be calculated before those income components. The special unemployment benefit may not be received at the same time with the contributory non means-tested unemployment benefit and thus the latter is simulated first. The age pension is included in the income test of the special unemployment benefit and of the unemployment allowance. As a result, its calculation precedes that of the unemployment benefits. All contributory benefits and the age pension are included in the means-test of social assistance and social assistance for single unmarried parents. Bonuses depend on receipt of a number of contributory and non-contributory benefits and so are simulated near the end. Finally, the supplementary assistance is simulated last as eligibility and amount depends on receipt of previously simulated benefits.

Table 3. EUROMOD Spine: order of simulation, 2014-2017

Policy	Description	Main output
yem_mt	Minimum wage	Yem
tscee_mt	Class I contributions paid by the employees	tscee_s
tscer_mt	Class I contributions paid by the employers	tscer_s
tscse_mt	Class II contributions paid by self-employed and self-occupied persons	tscse_s
tscgv_mt	Class I & Class II contributions paid by the state	tscgv_s
bunctnm_mt	Contributory non-means tested unemployment benefit	bunctnm_s
boamt_mt	Age pension	boamt_s
bch_mt	Means-tested and flat rate child allowance	bch_s; bchmt_s; bchnm_s
tin_mt	Personal income tax	tin_s
bunmt_mt	Special unemployment benefit & unemployment allowance	bunctmt_s; bunncmt_s
bsa_mt	Social assistance and social assistance for single unmarried parents	bsa_s; bchlp_s
btuls_mt	Bonuses	btuls_s
bmttu_mt	Supplementary assistance	bmttu_s
tscct_mt	Credited social insurance contributions	tscct_s

Source: Euromod H1.0+

2.2.1 Unemployment benefit (Beneficcju ghal dizimpjieg) (bunctnm_s)

• Benefit description

The unemployment benefit is a contributory benefit payable to persons registered as unemployed subject to satisfying a minimum contributory period.

• Eligibility conditions

To receive the unemployment benefit, one must be below the statutory retirement age, must not be deriving any earnings and must satisfy a contributory history test. Minimum requirement for the UB is total of 20 paid or credited contributions in the last two consecutive calendar years, preceding the year during which the claim for benefit is made. Any Class Two contributions paid or credited are not taken into account. When full benefit is paid, in order to qualify for another 156 days, one should work another 13 weeks as employed (Class One). UB is issued to any person with Class One contributions.

• Benefit amount

The Social Security Act stipulates maximum entitlement to UB of 156 days (excluding Sundays). The rates are slightly increased every year, as per cost of living rate. The benefit is a flat-rate allowance that depends solely on the composition of the household.

Rates are shown in the Table 4.

Table 4. Unemployment Benefit Amounts (daily), 2014-2017

	2014	2015	2016	2017
Single parent & married person maintaining non-full-time employed spouse	€1.80	€12.05	€12.18	€12.31
Other persons	€7.72	€7.89	€7.97	€8.05

Source: Department of Social Security

• Income test

This benefit is not means-tested.

EUROMOD notes: Eligibility conditions for the receipt of unemployment benefit cannot be simulated accurately. Instead eligibility for current recipients of unemployment benefit is taken from the data. For other categories, it is assumed that the fraction of time worked during the income reference period is the same in the previous two years, if this is not higher than the entire work history. The duration of receipt of the unemployment benefit is also taken from the data. The condition that the recipient must not be earning income is not simulated.

2.2.2 Unemployment assistance (Ghajnuna ghal dizimpjieg) (bunncmt_s)

• Benefit description

While unemployment benefit is considered a short-term benefit, the unemployed person may qualify for longer-term benefits under Social / Unemployment Assistance. In case that the beneficiary is not entitled to UB, he will be paid the UA in full. Unemployment assistance is received by unemployed persons not qualifying for UB, subject to passing the capital resources test and an income test. The claimant must be registering for work under the Part 1 register.

• Definitions and eligibility

To receive unemployment assistance, one must be registered as an unemployed and satisfy an income and an asset test.

• Benefit amounts

The amount of the unemployment assistance is the difference between the maximum benefit rate and the claimant's assessed income. Weekly maximum benefit rates are shown in the Table 5.

Table 5. Benefit amounts: Unemployment assistance rates, 2014-2017

	2014	2015	2016	2017
Rate for single person (weekly)	€100.48	€100.87	€102.04	€103.21
Additional members (weekly)	€8.15	€8.15	€8.15	€8.15

Source: Department of Social Security

• Income test

Receipt of unemployment assistance is conditional on passing an asset test-termed the capital resources test and an income test.

Capital resources test (asset test)

The test is done on the value of any property (including financial assets such as savings, stocks, bonds etc.) belonging to all members of the household who are neither employed nor self-employed or self-occupied with the exception of the house of residence, private car, a garage for private use and a summer residence. A person (other than the head & spouse) is considered not to be employed/ self-employed/ self-occupied if her gross wage/ gross income does not exceed 35% of the National Minimum Wage.

Capital limits depend on the household composition and are shown in the Table 6.

Table 6. Capital resources test limits, 2014-2017

	2014	2015	2016	2017
Capital resource limit-Single person	€14,000	€14,000	€ 14,000	€14,000
Capital resources-Couple	€23,300	€23,300	€ 23,300	€23,300

Source: Department of Social Security

Income test

The test is done on the incomes of all members of the household who are assessed together (i.e. the head & partner, plus all the non-employed members of the household- where a person is considered to be non-employed if her income from earnings-wages, self-employment etc. - is less than 25% of the National Minimum Wage). These include:

- Income derived from property minus an exempted amount (⊕5 in 2015 per year);
- Estimated income from unused property (calculated as 5.5% per annum of the value of the property minus a deduction €585 in 2015);
- All labour income derived by the head of household and her partner minus any Class 1 and Class 2 contributions due;
- A percentage of all labour income derived by other household members (other than the head and the partner) minus any Class 1 and Class 2 contributions and minus any income tax due (see Table 7);
- Any social benefit received by the head of household and her partner with the exception
 of Supplementary Allowance, Children's Allowance, Care Allowance, Disabled Child
 Allowance and Maternity Benefit;
- A percentage of all social benefits received by other household members with the exceptions of the benefits mentioned above and with the exceptions of any pensions or benefits up to the national minimum pension (see Table 7).

Assessed income must be below the benefit applicable rates for the applicant to qualify. The benefit consists of the difference between the applicable rate and assessed income.

Table 7. Percentage of income of household members other than the head and her partner taken into account in the means-test, 2013-2016

Year	2014	2015	2016	2017
%	0.157	0.157	0.157	0.157

Source: Department of Social Security

EUROMOD notes: The input dataset lacks accurate information about assets. As a result, the capital resources test is simulated based on an imputed financial capital variable-itself based on information about investment income received by the household. As a result, the asset test is likely to be inaccurate. Theoretical income from unused property is not taken into account in the simulation of the income test (due to lack of information about additional properties). Eligibility to unemployment assistance is taken from the input dataset (i.e. the person is observed as receiving this type of benefit). Other eligible persons are assumed to receive social assistance (the rules of entitlement as well as the amounts received for the two benefits are identical).

2.2.3 Special unemployment benefit (Beneficcju specjali ghal dizimpjieg) (bunmt_mt)

• Benefit description

This benefit is aimed at unemployed persons who satisfy the contributory conditions of the unemployment benefit and the means-test of unemployment assistance. If both the contributory and resource conditions are met, the Unemployment Benefit is converted into a Special Unemployment Benefit. The benefit provides a higher rate than the ordinary Unemployment Benefit. A person may not receive the Unemployment Benefit and the Special Unemployment Benefit at the same time.

Eligibility conditions

To claim the benefit, a person needs to be head of household, below retirement age, registered as unemployed, not deriving any earnings and satisfying the contributory test of the Unemployment Benefit and the means-test of Unemployment Assistance (see Table 8).

• Income test

To qualify, a claimant must pass an asset test and an income test. These are identical to tests applicable in the case of unemployment assistance.

• Benefit amount

The benefit is flat rate. Its amount depends only on the household composition. Daily rates are shown in the Table 8.

Table 8. Special Unemployment Benefit daily amounts, 2014-2017

Rates	2014	2015	2016	2017
Single parent & married person maintaining non-employed spouse	€19.83	€20.26	€20.47	€20.68
Other persons	€12.94	€13.22	€13.50	€13.64

Source: Department of Social Security

EUROMOD notes: Eligibility conditions for the receipt of the special unemployment benefit cannot be simulated accurately. Instead eligibility for current recipients of unemployment benefit is taken from the data. For other categories, it is assumed that the fraction of time worked during the income reference period is the same in the previous two years, if this is not higher than the entire work history. The duration of receipt of the special unemployment benefit is also taken from the data. The condition that the recipient must not be earning income is not simulated.

The input dataset lacks accurate information about assets. As a result, the capital resources test is simulated based on an imputed financial capital variable-itself based on information about investment income received by the household. As a result, the asset test is likely to be inaccurate. Theoretical income from unused property is not taken into account in the simulation of the income test (due to lack of information about additional properties).

2.2.4 Old age pension (Pensjoni tal-Eta) (boamt_s)

• Benefit description

The old-age pension is a non-contributory benefit designed to prevent poverty in old age. It is payable to citizens of Malta over the age of 60, who do not have enough National Insurance Contributions to qualify for a Contributory Pension and applicants who satisfy a capital resources test and an income test.

• Eligibility conditions

To receive the benefit, the applicant must be over 60 years, be a resident citizen of Malta and satisfy an asset test (capital resources test) and an income test.

• Income test

There are two tests that must be passed, namely the capital resources test and an income test.

Capital resources test (asset test):

The test is done on the property (including financial assets such as savings, stocks, bonds etc.) of the applicant and her spouse. A house for residence, a private car, a garage for private use and a summer residence are exempted from the test. In order to qualify, capital must be below the thresholds shown in the Table 9.

Table 9. Old age pension: Capital resources limits, 2014-2017

	2014	2015	2016	2017
Single person	€14,000	€14,000	€14,000	€14,000
Couple	€23,300	€23,300	€23,300	€23,300

Source: Department of Social Security

Income test:

The income test is done on the income of the applicant and her spouse. It includes:

- Earnings from which any Class 1 and Class 2 contributions which are due are deducted;
- Investment and property income;
- All social benefits with the exception of Medical Assistance, Supplementary Allowance, Children's Allowance, Care Allowance, Disabled Child Allowance and Maternity Benefit.

The following lump sum is disregarded from the income base shown in the Table 10.

Table 10. Income disregard for age pension (per year), 2014-2017

	2014	2015	2016	2017
Single person	€ 270	€ 270	€ 270	€ 270
Married couple	€385	€385	€ 385	€385

Source: Department of Social Security

• Benefit amount

The benefit is equal to the difference between the applicable rate and the assessed income. See Table 11.

Table 11. Benefits: Highest rate of non-contributory Age Pension (per week), 2014-2017

	2014	2015	2016	2017
A married couple where both qualify for a pension	€132.79	€133.25	€134.66	€140.06
A married couple where only one of the spouses qualifies for a pension	€86.95	€ 87.34	€88.51	€ 93.68
Widowed, single persons or a married person where a spouse is in receipt of a State Financed Residential Service	€104.56	€104.95	€106.12	€107.29

Source: Department of Social Security

EUROMOD notes: The input dataset lacks accurate information about assets. As a result, the capital resources test is simulated based on an imputed financial capital variable-itself based on information about investment income received by the household. As a result, the asset test is likely to be inaccurate. Theoretical income from unused property is not taken into account in the simulation of the income test (due to lack of information about additional properties). Fluctuations in income throughout the income reference period are not taken into account. The age test is based on age at the end of the income reference period. Hence, persons turning 60 during the income reference period are simulated to be eligible throughout the year.

2.2.5 Children's allowance (Allowance tat-Tfal) (bchnm_s and bchmt_s)

• Benefit description

Children's allowance is payable to the head of any household having the care and custody of children under 16 years of age, residents and citizens of Malta or married to citizens of Malta. The benefit is means-tested. There is no asset test but solely an income test.

In 2008, a new flat-rate child benefit has been introduced for those families that do not qualify for the means-tested child allowance. The benefit is equal to €250 per year for every child aged under 16 and has not changed in 2009-2011. The Government has since then implemented an increase in the minimum rate for children's allowance, where Children's Allowance minimum rate was increased by €100 in 2013, thereby increasing to €450 a year for each child. This rate still applies for 2014-2016.

The **means tested** children allowance was set at €1,155.96 for 2013 onwards.

• Eligibility conditions

Must be parent or guardian of a child aged under 16 and satisfy an income test.

• Income test

The income test is carried out on the income of the applicant and her spouse. Assessed income includes all income with the exception of:

- Orphan allowance, children allowance and disabled child allowance;
- Sickness assistance, Leprosy assistance and tuberculosis assistance;
- Injury grants;
- Widow & survivor pensions.

The taken Income is net of any Class I and Class II contributions paid. Cohabiting couples are treated the same way as married ones. The income test is carried out on the income realized during the calendar year preceding the date of the claim. The benefit is granted for the duration of a year. In order to qualify for the means-tested allowance, assessed income must be below the threshold (see Table 12). Recipients of social/unemployment assistance and age pension qualify automatically. The means-tested allowance paid is a percentage calculated on the difference between the threshold and the income declared for the previous year less the social security contributions paid. When assessed income is equal or less than a lower limit threshold, the applicant qualifies for the highest rate of the benefit (i.e. income below the lower limit of assessed income is considered to be equal to the limit for benefit calculation purposes).

Table 12. Children's allowance policy parameters, 2014-2017

	2014	2015	2016	2017
Income threshold	€24,621	€24,651	€24,742	€24,833
Lower limit of assessed income	€5,356	€5,386	€5,477	€5,568

Source: Department of Social Security

• Benefit amount

The amount of the means-tested children's allowance is calculated as a percentage of the difference between the income threshold and assessed yearly income (subject to a minimum assessed income defined by the lower limit). The percentage depends on the number of children under the age of 16 as follows:

One child: 6%Two children: 12%Three children: 18%Four children: 24%

• Five and more children: an addition of 6% per child.

In case of 16 to 21 year olds registering for work for the first time or students not receiving any stipends, it is 2%.

Child Supplement: In 2015 a one-time policy was introduced to those families who have children and whose income is less than €11922 per annum. The amount of benefit given amounted to €400 per child for the first 3 children and from the fourth child onwards €200 per child is given.

EUROMOD notes: The income test is carried out on current year's income rather than previous year's income. The automatic eligibility of social and unemployment assistance recipients is not simulated. However, the income threshold for children's allowance is well above that for unemployment/social assistance. A means-tested child allowance is simulated for all persons aged 16 and up to 21 if they are observed to be in education and not receiving a scholarship. Benefits going to persons aged 16 to 21 that register for the first time for work are not simulated.

2.2.6 Social assistance (Ghajnuna Socjali) (bsa_s)

Benefit description

Social assistance is payable to heads of households, who are either unemployed, or unfit for work or seeking employment, and where the relative financial means fall below the level established by the Social Security Act. Also, social assistance is payable to separated persons who have custody of children and to single or widowed parents who lack financial resources and who are caring for an elderly or physically/mentally disabled relative on a full time basis.

• Eligibility

To be eligible for the benefit a person must be the head of a household and satisfy a means test comprising an asset test and an income test.

• Income test

To be eligible, the household must satisfy both an asset tests-termed capital resources test and an income test.

Capital resources test (asset test)

The capital resources test is done on the property of the household. The household includes the head, the partner and any non-employed members that reside together with the head and the partner. A person is considered to be non-employed if her earnings from employment, self-employment and self-occupation do not exceed 35% of the National Minimum wage. If a person is receiving social assistance for single parents (see Table 13), she and her dependents are excluded from the household for purposes of simulating social assistance. Capital (including property and financial assets) must not exceed a certain threshold that depends on the household composition. As from 2016, children's income will not be considered in the means test for social assistance. Threshold values are shown in the Table 13 for the period 2013-2016.

Table 13. Asset thresholds and weekly benefits paid under Social Assistance, 2014-2017

	2014	2015	2016	2017
Capital resources limit-single	€14,000	€14,000	€14,000	€14,000
Capital resource limit-couple	€ 23,300	€23,300	€ 23,300	€23,300

Source: Department of Social Security

Income test

The income test is conducted on the income of all household as defined above. Assessed income includes:

- Income derived from property minus an exempted amount (495 in 2014);
- Estimated income from unused property (calculated as 5.5% per annum of the value of the property minus a deduction- **4585 in 2014**);
- All labour income derived by the head of household and her partner minus any Class1 and Class 2 contributions due;
- A percentage of all labour income derived by other household members (other than the head and the partner) minus any Class 1 and Class 2 contributions and minus any income tax due. Income derived from employment of spouse of person in receipt of Social assistance is taken gross;
- Any social benefit received by the head of household and her partner with the exception of Supplementary Allowance, Children's Allowance, Care Allowance, Disabled Child Allowance and Maternity Benefit;
- In **2013**, as shown in Table 14, 15.7% of the income of household members other than the head and her partner is taken into account for the means-test.

Table 14. Percentage of income of household members other than the head and her partner taken into account in the means-test, 2014-2017

Year	2014	2015	2016	2017
%	15.70%	15.70%	15.70%	15.7%

Source: Department of Social Security

Assessed income must be below the benefit applicable rates for the applicant to qualify. The benefit consists of the difference between the applicable rate and assessed income.

• Benefit amount

The awarded benefit is equal to the difference between the applicable social assistance rate (which in turn depends on the household composition) and assessed income (see Table 15).

Table 15. Social Assistance weekly rates, 2014-2017

	2014	2015	2016	2017
Rate for single person	€100.48	€100.87	€102.04	€103.21
Additional members	€8.15	€8.15	€ 8.15	€8.15

Source: Department of Social Security

EUROMOD Notes: The input dataset lacks accurate information about assets. As a result, the capital resources test is simulated based on an imputed financial capital variable-itself based on information about investment income received by the household. As a result, the asset test is likely to be inaccurate. Theoretical income from unused property is not taken into account in the simulation of the income test (due to lack of information about additional properties). Fluctuations in income thorough the income reference period are not taken into account. A person is deemed to be employed or non-employed based on her yearly earnings.

2.2.7 Social assistance for single unmarried parents (Applikazzjoni ghall-Ghajnuna Socjali) (bchlp_s)

• Benefit description

The benefit is targeted towards single parents with low income. It is a means-tested benefit, where the means test consists of an asset test (capital resources test) and an income test.

• Definitions and eligibility

A person is considered a single parent if s/he is not married and not cohabiting and is the parent of at least one dependent child. A child is considered to be dependent when aged under 18, not married and not a parent herself/himself. For the purposes of this benefit, the single parent and her dependents are assessed separately from any other household members.

A single parent who is the head of the household (i.e. not living with other adults) is entitled to apply to social assistance even when unemployed and not actively looking for work. If the single parent is employed, she is entitled to apply for social assistance if her assessed income (calculated as for the general Social Assistance benefit) together with the social assistance rate for two persons does not exceed the national minimum wage. In effect, this translates to an income (earnings) disregard (see Table 16). Single parents who are not heads of households (i.e. are living with other adults) are entitled to 75% of the corresponding social assistance rate provided they pass the same means-test. As from 1st January 2015 the tapering system was introduced, where single parents who are on social assistance and become employed will retain 65 per cent of social assistance for the first year, 45 per cent for the second year and 25 per cent on the third year. Their employer will receive 25 per cent of the benefit for the first three years.

This also applies for persons to get married with a person in employment. As from 2015 these persons no longer lose assistance immediately but these benefits will be reduced gradually over a period of three years.

Table 16. Disregarded income/earnings (per week), 2014-2017

	2014	2015	2016	2017
Income disregard	€ 54.53	€ 57.24	€ 57.82	€ 58.40

Source: Department of Social Security

• Income test

The benefit is means-tested. It consists of the capital resources test and the income test. The capital resources test has the same rules as in the case of general social assistance. The income test has the same rules as the general social assistance with the exception that earnings up to a threshold are disregarded (see Table 16).

• Benefit amount

In the case of single parents not living with other adults, the benefit is equal to 100% of the difference between the applicable general social assistance rate (for the single person and her dependents) and assessed income. In the case of single parents living with other adults, the benefit is equal to 75% of the difference between the applicable general social assistance rate and assessed income.

EUROMOD Notes: The input dataset lacks accurate information about assets. As a result, the capital resources test is simulated based on an imputed financial capital variable-itself based on information about investment income received by the household. As a result, the asset test is likely to be inaccurate. Theoretical income from unused property is not taken into account in the simulation of the income test (due to lack of information about additional properties). The earnings disregard is applied to yearly employment earnings.

2.2.8 Supplementary assistance ('Allowance' Supplimentari) (bmttu_s)

• Benefit description

This is a benefit payable to households once per year, subject to an income test.

• Eligibility

• In 2017 there were substantial changes to this benefit both in terms of the eligibility criteria and in terms of the rates. To claim this benefit, the applicant must not be in receipt of children's allowance or disabled child allowance, whilst those in receipt of an age pension, social assistance and unemployment assistance qualify automatically for the benefit. The unit of assessment is the household which includes the head, his/her partner and all non-employed members residing together with the head and the partner. To be considered non-employed, individual income from employment, self-employment

and self-occupation must not exceed 35% of the Minimum Wage. Eligibility for 2017 was extended to: Married persons maintaining a spouse earning between €1,181-€13,000

- Single persons forming a household on his/her own with earnings from gainful occupation not exceeding the National Minimum Wage.
- Single parents with dependent children with earnings from a gainful occupation not exceeding the National Minimum Wage
- Single persons not forming a household on his/her own with earnings from a gainful occupation not exceeding the National Minimum Wage.

• Income test

The income test is conducted on the yearly income of the household during the previous year. The applicable income limits are described in the table below. Assessed income included:

- All property/ investment income;
- All earnings of the head and partner minus any social contributions (Class 1 or Class 2) due;
- All social benefits received by the head and partner with the exception of medical assistance and injury grants;
- In 2014, 15.7% of the net income (net of social insurance contributions and net of taxes) of household members who are not the head or her partner (see Table 17);
- If the head is a pensioner the income test is done solely on her income and that of the partner. Persons who receive children's allowance or disabled child allowance do not qualify for supplementary allowance.

Table 17. Yearly income ceilings, 2014-2017

	2014	2015	2016	2017
Single person	€8,800	€8,830	€8,921	€9,012
Married couple	€10,968	€10,998	€11,089	€11,180
Married couple (upper ceiling)	-	-	-	€13,000

Source: Department of Social Security

• Benefit amount

The benefit amount depends on the assessed yearly income and is worked out as follows:

[Amount – Annual assessed income (minimum applies) * Rate]

The amount and rate depend on the family composition and are shown in the Table 18.

	1 /	,		
	2014	2015	2016	2017
Amount-Single person	€20,265	€20,295	€20,386	€20,477
Amount-Married couple	€24,925	€24,955	€25,046	€25,137
Rate-Single person	1.70%	1.70%	1.70%	1.70%
Rate – Single forming a H/H in employment				2.751%
Rate-Married couple up to €11,180	2.27%	2.27%	2.27%	3.5%
Rate – Married couple >€11180 <€13000				1%
Minimum assessed annual income	€6,288	€6,319	€6,410	€6,501

Table 18. Policy parameters for the supplementary allowance, 2014-2017

EUROMOD notes: No information exists in the EUROMOD input dataset about previous year's income. As a result, the income test is simulated based on current year's income. The incompatibility with the Disabled Child Allowance is not simulated.

2.2.9 Bonuses (btuls s)

• Benefit description

Two types of bonuses are paid to majority of social beneficiaries, as well as to employed persons (all categories).

Bonus (1) is payable to all persons receiving a pension (public or service pension), Orphans Allowance, Social Assistance and Leprosy Assistance under the Social Security Act. It is paid twice a year, in June and December.

Additional Bonus (2) consists of a weekly sum payable to all recipients of Bonus (1). The benefit is paid twice per year, at the end of March and at the end of September. The Sixth Schedule of the Social Security Act, in its parts I, II, III and IV stipulates that the rates of the Additional Bonus will be increased by Lm0.50 (€1.16) per week, if the household is paying rent for its normal place of habitation, House Rent.

• Eligibility

To receive a bonus, one must be the recipient of one of the following contributory or non-contributory benefits: contributory old-age, invalidity and survivor pensions, age pension, service pension, social assistance, social assistance for single parents, leprosy and tuberculosis assistance and unemployment assistance. The bonus (or fraction thereof) is paid for every month of receipt of a qualifying benefit.

• Income test

There is no separate income test applicable for this benefit.

• Benefit amount

The benefit amounts are presented in Table 19.

Table 19. Bonus Rates, 2014-2017

	2014	2015	2016	2017
Bonus (1)/per 6 months	€135.10	€135.10	€ 135.10	€135.10
Additional Bonus (per week)	€3.12	€3.12	€3.12	€3.12
Rent supplement (per week)	€1.16	€1.16	€1.16	€1.16

Source: Department of Social Security

EUROMOD notes: The eligibility of recipients of tuberculosis assistance or leprosy assistance is not simulated. The number of months receiving a qualifying benefit is ignored in the simulation. Instead, the bonuses are simulated for a period of one year for all recipients.

2.2.10 In Work Benefit

• Benefit Description

The in-work benefit scheme was introduced at the beginning of 2015, where such benefit was paid to households with low to medium income earners and both spouses are in employment and are earning a minimum of €3000 or more on a yearly basis. Such families are entitled to a maximum of €1,000 p.a. on each child. Furthermore a parent who is raising her child alone and is working is entitled to a maximum of €1,200. A couple where both parents are working are entitled to this benefit if they earn between €10,000 and €20,400. For a single parent the income has to be between €6,600 and €15,000.

In 2016, the in- work benefit was further extended to cover also those couples where only one person is employed and who have children under the age of 23. This extension is provided to those families whose income is between 6,600 and 12,700. The maximum benefit being given in this extension is 150 per child.

• Eligibility

The in-work benefit is for couples who are both in employment whose combined annual earnings / net profit from a gainful occupation is between $\le 10,000$ and $\le 20,400$ and where the earnings / net profit of one of them is not less than $\le 3,000$ per year and with children living in the same address who have not reached the age of 23yrs.

The benefit also applies to single parents whose annual earnings / net profit from a gainful occupation is between €6,600 and €15,000 and with children living in the same address who have not reached the age of 23 yrs are also eligible.

In 2016, the benefit was extended for couples where only one of the spouses / partners is in employment whose annual earnings from a gainful occupation is between €6,600 and €13,000 and with children living in the same address who have not reached the age of 23yrs.

• Benefit Amount

Single Rates for 2016

Table 30. Rates applicable for Single parents with income between €6,600 and €15,000 for 2016-2017

Income Thresholds (€)	Average Benefit Rate per child (€)			
	2016	2017		
6,600-8,000	960	1012.5		
8,001-10,000	1120	1169		
10,001-12,000	810	880		
12,001-13,000	510	556		
13,001-15,000	260	270		
15,001-16,500	-	50		

Couples' rates for 2016:

Table 31. Rates applicable for couples with income between €10,000 and €20,400 for 2016-2017

Income Thresholds (€)	Average Benefit Rate per child (€)				
	2016	2017			
10,000-11,000	350	550			
11,001-17,100	775	975			
17,101-18,000	850	1050			
18,001-19,000	565	780			
19,001-20,400	295	-			
19,001-20,200	-	480			
20,201-22,000	-	185			
22,001-24,000	-	105			

Couples with only one spouse working – Rates:

Table 32. Rates applicable for couples with income between €10,000 and €20,400 for 2016-2017

Income Thresholds (€)	Average Benefit Rate per child (€)			
	2016	2017		
6,600-11,600	52	-		
6,600-13,000	-	300		
11,601-12,300	100	-		
12,301-13,000	150	-		
13,001-16,500	-	100		

In 2017, in order to be eligible for the In-Work Benefit, applicants must have children under 23 years of age living within their household and had an income during 2016 that falls between the following brackets:

- Single parents in employment who earn more than €6,600 and less than €6,500 are eligible for a maximum payable rate of up to €1,250 yearly per child with an additional €80 paid to the first eligible child if income falls between €3,200 and €0,099.
- Married couples with both parents in employment whose collective income is greater than €0,000 and is less than €24,000 (the income of one of the spouses must be over €3,000) are eligible for a maximum payable rate of up to €1,200 yearly per child.
- Married couples of whom only one is in gainful employment and whose income is greater than €6,600 and less than €16,500 are eligible for a maximum payable rate of up to €350 yearly per child.

• EUROMOD notes

2.3 Social contributions

The contributory scheme in Malta is a universal system of contributions whereby an employee, self-occupied, or self-employed person pays a weekly contribution as laid down by the Social Security Act.

There are two classes of contributions: the Class One contribution payable in respect of employed persons and the Class Two contribution paid by self-employed/occupied persons.

Generally speaking, contributions are payable by all persons between the age of 16 years and the age of retirement. Contributions are also payable by pensioners in gainful employment that retired after the 5 of January 2008. Pensioners who retired earlier than this date are allowed to work without prejudicing their pension rights in the ages of 61 years to 65 years without paying social security contributions, subject to a ceiling on earnings equivalent to the national minimum wage.

For this group, ceiling on earnings is removed at age of 65 years and no further contributions are due. For each person, a tripartite contribution is payable: the employed person, the employer and the State each pay 10 per cent of the basic salary of the employee; with the contribution capped to the Maximum Pensionable Income.

Maximum pensionable income thresholds are shown in Table 20.

Table 20. Maximum pensionable income thresholds in €, 2014-2017

	2014	2015	2016	2017
Persons born up to 31/12/1961	17,812.08	17,842	17,933	18,024
Born on or after 1/1/1962	21,431.80	21,749	22,137.96	22,804

Source: Department of Social Security

MPI stood at €16,420 in 2007, €16,601 in 2008, €16,813 in 2009, and €17,115 in 2010. The 2007 Pension Reform brought about the following changes to the Maximum Pensionable Income (MPI) ceiling, on which the 2/3rd First Pension is calculated:

- If a person is born on or before the 31st of December 1951: €16,420 (2007) which increases by the Cost of Living awarded up to a maximum of €17,470.
- If a person is born during calendar years 1952 and 1961: €16,424 (2007) which increases by the Cost of Living up to a maximum of €20,964.36.
- If a person is born on or after the 31st December 1961: €16,207.78 (2007) which increases by the Cost of Living up to 2010.
- Between 2013 up to 2014, the MPI increased in 3 equal tranches up to €20,964.36, as follows:
 - 2013: **€**20,964.36
- As from 2014, the MPI is indexed to a mechanism that is made up of 70% wages and 30% inflation.

The rate of Class Two contributions is equally shared by the State and self-occupied persons (a self-occupied person is a defined by the Social Security Act as "a self-employed person who is engaged in any activity through which earnings exceeding $\oplus 10$ per annum are being derived"), whereby the self-occupied pays 15 per cent and the State pays 7.5 per cent of their annual income that is subject to the same ceiling that applies for employees. In 2014 a new regulation exempted the elderly from paying social security contributions when employing a live-in carer.

Buy Back of Social contributions

As from 2015, those born between 1950 and 1956 and who are currently in employment are allowed to pay back a maximum of five years of contribution to qualify for a minimum pension once they retire.

Those between the age of 62 and 74 years and have retired from work and do not currently qualify for a pension are now going to be entitled to receive an additional bonus. Those who have paid more than 5 years in contributions will receive a bonus of $\bigcirc 200$, whilst if they paid for more than 1 year in contribution and less than 5 years will receive a $\bigcirc 100$ euro bonus.

2.3.1 Employee social contributions (tscee_s)

Employees pay Class One social insurance contributions. The rate of such contribution by the employee is equivalent to 10 per cent of the basic pay. The minimum and maximum contributions payable are shown in Table 21.

Table 21. Minimum and maximum contribution payable (Euro per week), 2014-2017

	2014	2015	2016	2017
Minimum	16.57*	16.63*	16.80*	16.98*
Maximum: for persons born up to 31/12/1961	34.25	34.31	34.49	34.66
Maximum: for persons born from 1/01/1962	41.21	41.83	42.57	43.85

^{*} Or if the employee chooses, 10 per cent of the weekly wage. This rate of contribution entitles the contributor to pro-rata contributory benefits.

Source: Inland Revenue Department, www.ird.gov.mt

Class One contributions imply that any person employed under a contract of service in Malta is considered to be in insurable employment and subject to the payment of these contributions.

The following rules also apply:

- Persons over 65 years of age are not liable to pay, even if they are employed;
- Persons between 62/60 and 65, whose earnings do not exceed the minimum wage, are also exempt;
- A person who is employed in more than one insurable employment shall be deemed to be employed in that insurable employment which carries the higher or highest basic wage or salary;
- Persons who work abroad but who retain their residence in Malta may opt to pay Class One contributions rather than Class Two contributions, without their employer paying any contribution.

The following categories of employment shall not be considered as **insurable employment**:

- Employment of a casual nature otherwise than for the purposes of the employer's trade or business:
- Employment of a person who is not ordinarily resident in Malta if the employer of that person is not resident in Malta and has no place of business there;
- Employment by any one employer for less than eight hours in a calendar week;
- Employment as secretary or clerk of a society, club, philanthropic institution, school or other similar body or institution, where personal service is ordinarily required only occasionally and outside the ordinary hours of work, provided the hours referred to above are not exceeded;
- Employment of a person who is not ordinarily resident in Malta, if the employer of that person is paying contributions in respect of that person under a scheme of social insurance in another country;
- Employment of any of the directors in any partnership, for the purposes of that partnership, wherein such partnership has been entered into between or among persons that are related to one another, up to and including cousins of the first degree and/or their spouses, provided any such directors are themselves such partners or the spouses of such partners;
- Employment of any majority shareholder in any partnership, for the purposes of that partnership; and for this purpose any shareholder shall still be deemed to be a majority shareholder if, notwithstanding the fact that the number of his shares do not constitute the majority, the value or powers attached to his holding exceed the aggregate total value or powers attached to the holding of the other shareholders in that partnership;
- With effect from the 6th January, 1992, employment of a person who has reached pension age, or a widow, if she so elects, who is in receipt of a pension in respect of widowhood, provided the weekly wage or salary of such person or widow does not exceed the NMW;
- With effect from the 4th July, 1988, employment of a person as a Casual Social Assistant by the Department for the Care of the Elderly of the Government of Malta.

If the employee works less than 8 hours per week then the employee is exempted from paying Class One Social insurance contributions.

EUROMOD notes: Employee social insurance contributions are simulated taking into account the number of months worked during the year. Minimum hours worked per week are simulated using a variable relating to year after the one in which employment income is derived. Categories of non-insurable employment are not simulated. All employment income is

considered to be derived in insurable employment. Special lower minima for part-time workers are not simulated. The exemption widows earning below the minimum wage is not simulated.

2.3.2 Employer social contributions (tscer_s)

Employers pay Class One social contributions. The weekly rate is 10 per cent of the basic gross wage. The contribution is capped to a maximum wage ceiling and there is a minimum contribution payable. Table 22 shows this for period 2013-2016.

Table 22. Weekly maximum and minimum thresholds for Class One social insurance Contributions (Euro per week), 2014-2017

	2014	2015	2016	2017
Minimum	16.57	16.63	16.80	16.98
Maximum: for persons born up to 31/12/1961	34.25	34.31	34.49	34.66
Maximum: for persons born from 1/01/1962	41.21	41.83	42.57	43.85

Source: Inland Revenue Department, www.ird.gov.mt

If the employee works less than 8 hours per week then the employer is exempted from paying Class One Social insurance contributions. The minimum threshold for employer contributions is applicable for all employees working more than 8 hours a week, including employees working less than 8 hours a day and paying less than the minimum.

EUROMOD notes: Employer social insurance contributions are simulated taking into account the number of months worked during the year. Minimum hours worked per week are simulated using a variable relating to year after the one in which employment income is derived. Categories of non-insurable employment are not simulated. All employment income is considered to be derived in insurable employment.

2.3.3 Self-employed/occupied social contributions (tscse_s)

Class-Two contributions are paid by self-occupied and self-employed persons. The Social Security Act distinguishes between self-employed and self-occupied, whereby, a self-employed person is that who is not gainfully self-employed in a business or profession and mainly lives on income from investments/rents, while the self-occupied person is that who derives income from an economic activity and declares net profit/loss. The rate of Class-Two contributions is shared by the state and the self-employed/self-occupied person. While there is a minimum contribution payable, the total contribution is also capped to a maximum wage ceiling.

The weekly rate payable on net income is 15 per cent of the income base subject to contributions. The income base subject to contributions is the net earnings/profit of the previous year for self-occupied persons and net income derived during the previous year (minus some exemptions) for self-employed persons. According to the Social Security Act, 'earnings' means the income derived by a self-occupied person from any economic activity (including the exercise of any trade or profession), and is to be taken net of expenses directly incurred in generating that income, and does not include:

- any income derived by way of any interests on any bank deposits (including any liquid assets, time deposits, bonds, stocks, shares or other securities), rents or ground rents receivable on any property, or
- any other income, if any, which is not directly related to such economic activity, or
- in any case, any income belonging to the spouse of such person (see Table 23).

Table 23. Asset & income limits (per year) to qualify for an exemption to pay Class 2 contributions, 2014-2017

	2014	2015	2016	2017
Asset limit- married person maintaining non employed wife	€16,310	€16,310	€16,310	€16,310
Asset limit-other persons	€9,320	€9,320	€9,320	€9,320
Income limit-married person maintaining non employed wife	€1,005	€1,005	€1,005	€1,005
Income limit-other persons	€ 910	€ 910	€ 910	€ 910

Source: Inland Revenue Department, www.ird.gov.mt

In addition to the income test, the person must also pass a Capital Resources test. Account is also taken of the:

- Value of any property belonging to the contributor (excluding primary residence) which could be put or invested to profitable use excluding furniture, jewellery and other personal effects;
- Cash in the bank and in hand including any liquid asset, time deposits, bonds, stocks, shares and other securities:
- Capital value of any urban immovable property (excluding the primary residence) which is not being put to profitable use.

Where the Capital Resources exceed the value of €9,317.60 for single person and €16,305.80 for married couple, the person is not entitled to be exempt from payment of Class Two Contributions.

The following categories of persons are statutorily exempt from the payment of a Class Two contribution:

- Persons in receipt of full-time education or training;
- Non-gainfully occupied married persons;
- Persons in receipt of a pension in respect of widowhood, invalidity or retirement or persons in receipt of a Parent's Pension;
- Persons in receipt of non-contributory Social Assistance or a non-contributory pension.

Table 24 shows contributions subjected to a maximum and a minimum per week.

Table 24. Minimum and Maximum thresholds (Euro per week), 2014-2017

	2014	2015	2016	2017
Minimum	28.38	28.47	28.73	28.99
Maximum	61.82	62.74	63.86	65.78

Source: Inland Revenue Department, www.ird.gov.mt

EUROMOD notes: Self-employment income (i.e. income from property and investments) is collected at the household rather than at the individual level. In establishing entitlement to be

exempt from paying Class II contributions, unearned income is allocated to the individual with the highest earnings (as an employee or a self-occupied person).

2.3.4 Social insurance contributions paid by the state (tscgv_s)

The state pays Class One social insurance contributions on behalf of employees and Class Two social insurance contributions on behalf of self-occupied/self-employed persons.

Class One social insurance contributions: the state pays 10 per cent (or half of the total rate paid by the employee and the employer) of the basic gross wage. The contribution is paid on a weekly basis. Minimum and maximum thresholds are shown in Table 25.

Table 25. Class One Minimum and Maximum thresholds (Euro per week), 2014-2017

	2014	2015	2016	2017
Minimum	16.57	16.63	16.80	16.98
Maximum	41.21	41.83	42.57	43.85

Source: Inland Revenue Department, www.ird.gov.mt

Class Two social insurance contributions: the state pays 15 per cent of the net earnings/net income of the self-occupied/self-employed income. The contribution is paid on a weekly basis. Minimum and maximum thresholds are shown in Table 26.

Table 26. Class Two Minimum and Maximum thresholds (Euro per week), 2014-2017

	2014	2015	2016	2017
Minimum	28.38	28.47	28.73	28.99
Maximum	61.82	62.74	63.86	65.78

Source: Inland Revenue Department, www.ird.gov.mt

No contribution is payable by the state when the self-employed/self-occupied person does not pay Class Two contributions on account of her being exempted.

EUROMOD notes: The state Class 1 contributions are modelled as half the amount payable by the employee and the employer. Class 2 contributions are modelled to be equal to the amount paid by the self-employed/occupied person.

2.3.5 Credited social insurance contributions (tscct_s)

The Social Security Act also provides that in the event of certain contingencies, credits are awarded. These credits are entitlements not to pay contributions, but this period of non payment still counts as if **the contributions** were made.

Crediting of contributions is allowed during certain contingencies, mainly:

- A widow, where such widow is not gainfully occupied for any period during which she does not remarry;
- An ex-member of the Malta Police Force or the Armed Forces of Malta who retires on a service pension on completion of the full service prior to reaching pension age, for any period during which he or she is not gainfully occupied and has not yet reached pension age;
- A person who goes abroad as a volunteer worker on projects in the areas of human welfare
 and development and environmental protection for any period he or she is performing such
 volunteer work and has not yet reached pension age subject to statutory defined criteria;
- A person who is entitled to sickness, injury, or unemployment benefits or to an Invalidity Pension;
- Following the implementation of the pension reform, which is explained in detail below, the categories of persons to whom credit of contributions is allowed has been extended to include persons born on or after the 1 January 1962, who have the legal care and custody of a child who is less than six years old, or ten years old in the case of a child suffering from a serious disability.

EUROMOD notes: Credited social insurance contributions have been simulated to be the minimum total amount applicable to employees, i.e. the minimum amount paid by employees, employers and the state combined. Due to absence of information in the data, credited social insurance contributions have been simulated for a period of 12 months irrespective of the number of months a person would have been eligible for such credited contributions during the year. Finally, credited contributions for ex-members of the Malta Police Force/ Armed Forces of Malta and credited contributions for volunteers working abroad have not been simulated. Likewise, the entitlemnt of parents of disabled children aged 6 to 10 has not been simulated due to lack of data on disability status among children.

2.4 Personal income tax (tin s)

2.4.1 Tax unit

Both individual and joint taxation exists in Malta. Married couples may choose whether they opt for individual or joint taxation. The income of a married couple living together is treated as the income of one taxpayer, but for the purpose of calculating the tax payable they may opt for a separate computation. In the latter case, the earned income of each spouse is taxed as if they were derived by a single person. The unearned income of both spouses is treated as the income of the spouse with the higher amount of earned income. The income of each spouse qualifies for the tax free portion applicable to single taxpayers and is taxed at the single person's rate.

A widow or separated spouse may be charged tax rates applicable to married couples as long as the following four **conditions** are met:

- The individual maintained under his/her custody a child who was not over sixteen years of age or, if at that age, was receiving full-time instruction at any educational establishment or was incapacitated by infirmity from maintaining himself/herself, and who was not in receipt of income in his/her own right in excess of €2,329.37/year;
- A children's allowance was paid in respect of that child, and was recognized as the beneficiary of the children's allowance payable in respect of that child;

- The individual was in receipt of financial assistance in respect of the maintenance of the said child from the other parent of the child; and
- The individual was not living or residing at the same house with the other parent of the said child.

EUROMOD notes: to establish the unit of taxation, EUROMOD optimizes between individual and joint taxation in the case of married couples. More specifically, payable tax is calculated for married couples using first the joint tax regime and then using the individual tax regime. The more advantageous regime (i.e. the one yielding a lower tax liability) is chosen.

2.4.2 Exemptions

The following types of income are **exempt from taxation**:

- Income from private retirement fund or scheme;
- Disability pensions and pension for the visually impaired;
- Social assistance;
- Age pension;
- Financial assistance received by an individual from his estranged spouse in respect of maintenance of a child;
- Marriage grant;
- Maternity benefit;
- Children's allowance;
- Foster care allowance;
- Disable child allowance;
- Capital sums received by way of commutation of pension, retiring or death gratuity or received as compensation for death or injury;
- Income arising from a scholarship;
- Income from a collective investment scheme other than income from immovable property;
- Interest, discount, premium or royalties derived by any person not resident in Malta; and
- Profits derived by any person not resident in Malta on a disposal of any units in a collective investment scheme and such like instruments.

Furthermore, a number of **special provisions**, such as, part-time work, investment income and fringe benefits apply also:

Part-time work

Since 2013, individuals who work part-time are taxed at a fixed rate of 15 per cent as long as income derived from part-time work does not exceed €6,988.12 per annum. This threshold was updated in 2014 to €10,000 for part time workers, and €12,000 to self-employed part-time workers. Any excess should be declared with the individual's other income in the tax return. This tax rate is applicable to full-time employees, pensioners, and full-time students (i.e. the part-time job is not the main activity of the individual). An

individual who has a part-time job and does not qualify under any of the aforementioned criteria does not qualify for the 15 per cent tax rate. However, if an individual is married, even though that person only works on a part-time basis, he/she may benefit from the part-time rate as long as the husband/wife qualifies under any of the mentioned criteria.

Also, only those working up to an average of 30 hours of part-time employment per week may qualify for this preferential rate. This applies to individuals who are full time employees, pensioners and full-time students (or those serving an apprenticeship).

• Investment income

A payee has the option of having the payer deduct tax from a payment relating to investment income at the rate of 15 per cent of such payment or include investment income together with all taxable income in the tax return. However, when the recipient receives investment income in the form of dividend, tax shall be deducted at the rate of 35 per cent.

• Fringe benefits

Employment income includes the value of any fringe benefits. The use of a company car or a car allowance, the use of company property, the provision of free or subsidized board and lodging and free non-business travel are among the fringe benefits. Share options become taxable when the option is exercised. A number of specified benefits are exempt under certain conditions, such as health insurance.

Additional policy reforms in 2015 related to Tax

Deductions and allowances

In ascertaining the total income of any person deduction will be made of:

- Expenses incurred exclusively in the production of income, such as interest upon any money borrowed, rent paid by any tenant of land or building, and also any sums expended for repairs of premises in acquiring that income (applies for self-employed only);
- Alimony payments made to an estranged spouse valued as the lesser of the amount actually paid or the individual's chargeable income (total taxable income) for the year;
- School fees valued at the lesser of the amount actually paid or €1,397.62 in respect of each child attending secondary school or €931.75 in respect of each child attending primary school:
- Fees paid for the services of the facilitator in respect of a child shall be deducted against income amounting to a maximum of €9,317.49; and
- Fees paid to childcare centres being valued as the lesser of the amount actually paid or Lm400 (€931.75).

EUROMOD notes: the deductibility of fees paid to a facilitator/ minder are not simulated. All the remaining five tax allowances are included in the model. However, the input dataset does not contain usable information about child-care or school fees. As a result, these variables are by default set to zero and, in the baseline, have no effect of the final tax allowance.

2.4.3 Tax base

Incomes subject to the personal income tax include:

- Gains/profits from any business or profession
- Gains/profit from employment
- Dividends, premiums, interest or discounts
- Pensions, charge or annual payment
- Rent, royalties, and any other profits arising from property
- Gains/profits not falling under any of the above

Social insurance contributions (Class One and Class Two) are deducted from the gross income earned.

EUROMOD notes: all pension income is included in the tax base with the exception of the age pension. Sickness and injury benefits are also included in the tax base. No information exists regarding capital gains. As a result, they are not included in the tax base.

2.4.4 Tax schedule

Personal tax is levied on each individual/couple at progressive rates with a maximum rate of 35 per cent, whilst the income tax rate on company profits is of 35 per cent except in the case of distributed dividends. A final withholding tax of 15 per cent also applies to certain categories of investment income. The respective rates of taxation for married computations are presented in the Tables 27 and 28.

Table 27. Rates applicable to single persons and married couples opting for individual Taxation (in Euros), 2014-2017

Datas	Annual taxable income (€)							
Rates	2014	2015	2016	2017				
0%	0 - 8,500	0-8,500	0-9,100	0-9,100				
15%	8,501 – 14,500	8,501-14,500	9,101-14,500	9,101-14,500				
	14,501 –	14,501-60,000	14,501-19,500	14,501-19,500				
25%	19,500							
25%			19,501-60,000	19,501-60,000				
	19501 –							
29%	60,000							
32%								
35%	60,001+	60,001+	60,001+	60,001+				

Source: Inland Revenue Department, www.ird.gov.mt

Table 28. Rates applicable to married couples opting for joint taxation (in Euro), 2014-2017

Rates	Annual taxable income (€)							
Kates	2014	2015	2016	2017				
0%	0-11,900	0-11,900	0-12,700	0-12,700				
15%	11,901 – 21,200	11,901-21,200	12,701-21,200	12,701-21,200				
25%	21,201 –	21,201-60,000	21,201-28,701	21,201-28,701				

	28,700			
25%			28,701-60,000	28,701-60,000
200/	28,701 –			
29%	60,000			
32%				
35%	60,001+	60,001+	60,001+	60,001+

Source: Inland Revenue Department, www.ird.gov.mt

New band (the "parental computation") was introduced for working parents supporting children up to 18 years old who are not gainfully employed (or 21-year-olds where they continue their studies to tertiary education). The new bands and rates are shown in Table 29.

Table 29. Rates applicable for 'parental computation' (in Euros), 2014-2017

Rates	Annual taxable income (€)							
Kates	2014	2015	2016	2017				
0%	0 – 9,800	0 - 9,800	0-10,500	0-10,500				
15%	9801 - 15,800	9801 - 15,800	10,501-15,800	10,501-15,800				
25%	15,801 – 21,200	15,801 - 60,000	15,801-21,200	15,801-21,200				
25%			21,201-60,000	21,201-60,000				
29%	21,201 – 60,000							
32%								
35%	60,001+		60,001+	60,001+				

Source: Inland Revenue Department, www.ird.gov.mt

In order to qualify for this computation, a parent must satisfy these conditions:

- The individual is currently being taxed under the 'single' tax rate;
- S/he maintained under his/her custody a child or paid maintenance (established or authorised by courts) in respect of his or her child;
- Such child was not over 18 years of age, or not over 21 years if receiving full-time instruction at a tertiary education establishment;
- Such child did not earn income in excess of €2,400 from gainful occupation.

Investment income may be taxed at a rate of 15 per cent if not received under the form of dividends. If it is received as dividends, a 35 per cent tax rate applies. As a general rule, payers of investment income have the obligation to deduct 15 per cent tax from every payment made. This 15 per cent tax is final and such income will not be subject to any further tax. In fact persons receiving this income should not declare it in their income tax return. If, however, the recipient elects to receive the income without deduction of tax, this income needs to be declared in the tax return. In this case, the income is aggregated with the rest of the income and taxed at the normal rates.

EUROMOD notes: No information exists on the source of investment income in the input dataset. Similarly no information exists on whether a taxpayer with investment income chooses to have it taxed separately rather than together with remaining taxable income. Consequently, investment income is modelled to be taxes separately at a rate of 15 per cent irrespective of

source and taxpayer. Note that given the structure of the tax schedule, only payers with low investment income sources and little/no additional income would benefit from including their investment income in the general tax return.

2.4.5 Tax credits

A. Tax credit for women returning to employment

Women who return to employment or self-employment may benefit from a tax credit. Those who may benefit from this tax credit are:

- Women who have not reached the statutory retirement age and return to employment after the 1st of January 2008 after having been absent from any gainful occupation for at least five years preceding the date of return. Such person must not be in receipt of a pension or had previously been in employment for at least 24 consecutive months in order to qualify for the said tax credit.
- Women who have children under 16 years of age and who have returned to work after the 1st of January 2010 after being absent from work for 5 years or more; or
- Women who had children after 1st January 2007 and continued or had returned back to work
 in their employment on or after this date. In this case there is no minimum absence required
 even when the return to employment is immediate. Also, there are no minimum hours of
 work to be considered in employment.

Those who satisfy the above criteria may benefit from a tax credit of €2,000 which is set off against the tax liability in respect of gains or profits from the said employment.

With regards to the duration of the benefits there are two types of tax credits:

- A full tax credit for the year of assessment during which the return to employment is effected:
- A credit of €2000 that can be availed in the year of assessment of return and the following year of assessment. In the latter case if a woman has more than one eligible child, the tax credit is €2000 per child and the credit is available for the years of assessments equivalent to the number of children plus one.

In 2014 an extension was also given by government for parents sending their children to private childcare centres. This policy extended the limit from \bigcirc 300 to \bigcirc ,000 in tax credits to these parents.

B. Other company related tax credits may be available for the self-employed

EUROMOD notes: None of the tax credits mentioned above is simulated due to lack of data (there is no detailed information on work history in the EUROMOD input dataset).

3. DATA

3.1 General description

The input dataset is constructed using the Maltese section of the European Union Statistics on Income and Living Conditions (EU-SILC) User Database (UDB). This is a rotating panel survey

(4 rotational groups), representative of the Maltese population in private households. Sampling takes place at the household level, the household being defined as all persons living at the same address. All members of the household aged 16 and above are interviewed. The SILC User Database is provided by Eurostat. More information regarding the technical aspects of the Maltese SILC can be found in the Intermediate Quality Reports issued by the Maltese Statistical Office (see Table 30).

Table 33. EUROMOD database description

EUROMOD database	MT_2014_a1
Original name	SILC_UDB_c14 (version 2014-1)
Provider	Eurostat
Year of collection	2014
Period of collection	2014
Income reference period	2013
Sampling	Simple random sample of households
Unit of assessment	Household
Coverage	Private households
Sample size	Approximately: 5,000 households
Response rate	86%
Final EUROMOD dataset sample size	HH: 4381; Individuals: 11796

Notes: Some figures are taken from the Maltese Annual Report 2012 (National Statistics Office, Malta 2013)

3.2 Data adjustment

Very few adjustments have been carried out. There is some minor data cleaning that ensures that relationships among members of the same household are coherent. So as to ensure consistency between the time reference of income components and household demographic information, children born after the income reference period are dropped from the sample.

3.3 Imputations and assumptions

3.3.1 Time period

The income reference period used for all income components is 1st January-31st December 2011. Some demographic and labour market status variables refer instead to the situation existent at the time of interviewing. The lag between the income information and demographic and labour market characteristics varies between 4 and 7 months.

All monetary information has been collected on an annual basis. These are converted for EUROMOD purposes into monthly amounts (dividing by 12). No information is collected on the number of months an income component has been paid.

3.3.2 Gross incomes

Incomes have mostly been collected as gross amounts. Where the respondent could not provide a gross amount, the net figure has been recorded. Subsequently, net incomes have been transformed into gross using a conversion table provided by the Department of Inland Revenue. Respondents were asked additional information aimed to differentiate between main and secondary earnings for purposes of correctly converting net incomes to gross.

3.3.3 Other imputed variables

The Standard SILC UDB aggregates information about some income sources as well as aggregating some income components from the individual to the household level. To perform accurate simulations, it has been necessary to disaggregate back some variables. These include:

- **Individual unemployment benefits** have been disaggregated into four variables corresponding to severance payments, the contributory unemployment benefit, the special unemployment benefit and the unemployment allowance; the disaggregation has been carried out based mainly on **benefit rules**:
 - For each recipients of unemployment benefits, the maximum annual amount of each type of unemployment benefit (UA, SUB, UB) has been simulated based on benefit rules, unemployment duration and household characteristics;
 - First the capital resources test has been simulated based on financial capital; recipients of unemployment benefits who did not pass the test were considered recipients of unemployment benefit; if the actual amount observed in the variable PY090G was larger than the maximum amount of UB benefits the person could receive, the difference was considered to be severance payments;
 - Recipients who do pass the asset test and are observed as receiving the energy benefit (HY070G) are assumed to receive unemployment allowance or special unemployment benefit, depending on which one is the more advantageous;
 - For recipients who are imputed a positive special unemployment benefit (SUB) at the
 previous step, it is assumed that they qualify for unemployment assistance for all the
 months of unemployment that are not covered under the maximum duration regulations
 of the SUB;
 - Finally, all recipients who have not been imputed a benefit under a-d, are assumed to receive unemployment allowance up to the maximum limit per year; any difference is considered severance payments.
- Individual sickness benefits have been disaggregated into contributory benefits (sickness benefit and injury benefit) and means-tested ones (mainly sickness allowance). The disaggregation has been carried out as follows:
 - A capital resources test is simulated; individuals not passing the test are assumed to be receiving sickness benefit or injury benefit;
 - For remaining households it is assumed that there is no more than one sick person per household; if the observed sickness benefit in SILC (PY120G) is observed to be larger than the maximum sickness allowance for one person, the benefit is assumed to be a sickness and/or injury benefit; otherwise the benefit is considered to be a sickness allowance.

- The old age pensions variable (PY100G) is disaggregated into a variable containing contributory pensions and another one containing the amount of the age pension. The **disaggregation** is carried out as follows:
 - Recipients of old-age pensions are assumed to be receiving contributory benefits if they are aged below 60, or they fail the capital resources test;
 - The maximum age pension a person is entitled to is computed based on age, marital status and partner age;
 - If the pension income observed in SILC is higher than the maximum receivable age pension for that person, then any pension income received is assumed to come from contributory benefits;
 - If the partner's income does not satisfy any of these conditions then the pension income received is considered to be contributory;
 - All remaining recipients are assumed to be recipients of age pension.
- **Months of receipt of an income component** are imputed based on the calendar of activities and adjusted to be compatible with income information.
- **Financial capital** is imputed based on investment income applying an annual interest rate of 4.6%.
- **Income from employment** has been disaggregated in previous years into bonuses and the rest. From this year this variable has been changed rent supplement has been added as one of the components.

3.4 Updating

To account for any time inconsistencies between the input dataset and the policy year, updating factors are used. Each monetary variable (i.e. each income component) is updated so as to account for changes in the non-simulated variables that have taken place between the year of the data and the year of the simulated tax-benefit system. Updating factors are generally based on changes in the average value of an income component between the year of the data and the policy year.

As a rule, updating factors are provided both for simulated and non-simulated income components present in the input dataset. Note however that in the case of simulated variables, the actual simulated amounts are used in the baseline rather than the uprated original variables in the dataset. Updating factors for simulated variables are provided so as to facilitate the use of the model in cases when the user wishes to turn off the simulation of a particular variable. The list of uprating factors as well as the sources used to derive them can be found in Annex 1.

4. VALIDATION

4.1 Aggregate Validation

Albeit the definition of household disposable income in EUROMOD comes very close to the one used in EU-SILC, these two are not identical. More specifically, in EUROMOD we include income from private pensions in household disposable income. However, we do not include the value of a company car, if such a fringe benefit is present. Because tax adjustments usually concern income and taxes from previous years, we do not include them in our definition, as it is often difficult to disentangle to what extent tax adjustments are already captured by EUROMOD simulations or not. Finally, although EUROMOD does include the most important means-tested benefits, it is possible that some minor and especially ad-hoc and discretionary benefits are left out. There is not enough information to accurately simulate these benefits on the one hand and they are too small to be accurately disaggregated from the EU-SILC social exclusion variable.

Table 4.1 shows the components of household disposable income, both in EUROMOD (for 2014-2017 systems) and in EU-SILC 2015.

Table 4.1. Components of disposable income

	EUROMOD	EU-SILC
	2014-2017	2015
	ils_dispy	HY020
Employee cash or near cash income	+	+
Employer's social insurance contribution	0	0
Company car	0	+
Contributions to individual private pension plans	0	0
Cash benefits or losses from self-employment	+	+
Pension from individual private plans	+	+
Unemployment benefits	+	+
Old-age benefits	+	+
Survivor' benefits	+	+
Sickness benefits	+	+
Disability benefits	+	+
Education-related allowances	+	+
Income from rental of a property or land	+	+
Family/children related allowances	+	+
Social exclusion not elsewhere classified	+	+
Housing allowances	+	+
Regular inter-household cash transfer received	+	+
Interests, dividends, etc.	+	+
Income received by people aged under 16	+	+
Regular taxes on wealth	-	0
Regular inter-household cash transfer paid	-	-
Tax on income and social contributions	-	-
Repayments/receipts for tax adjustment	0	0

Notes: A value of 0 is used to denote that the respective income concept does not enter the calculation of household disposable income.

4.1.1 Validation of incomes inputted into the simulation

Number of employed and unemployed

A comparison of the **number of employees and unemployed** in EUROMOD with external administrative data is shown in **Table 4.2** in Annex 2. Since the underlying dataset in EUROMOD contains incomes referring to the year 2014, it is most appropriate to compare it to external administrative data relating to the same period. The number of employed individuals is relatively close, a little higher compared to external data in 2014. Reasons for the discrepancy might include the different way of computing the two numbers, as well as an error in the way that the weights are not perfectly representative of this group in the population. The discrepancy is rather more pronounced in the case of the unemployed - EUROMOD includes a higher figure of unemployed than that showing in the administrative records for observed year (1.56 times bigger, on average).

• Market income in EUROMOD - number of recipients

Table 4.3 in Annex 2 presents a comparison of several market income sources in terms of recipient numbers. **Employment income** matches exactly the external statistics in 2015, and is slightly higher than external statistics in 2014. **Self-employment income** is relatively close,

marginally higher compared to external data in 2015 and somewhat higher than the external data in 2014. However, differences are small. **Private pensions** are somewhat higher than the external statistics in 2014 and equivalent to the external statistics in 2015. The sources of **rent income** and **investment income** appear to be seriously overestimated in EUROMOD in all years. The number of recipients of incomes from property and investment is between 1.5 and 1.9 times larger than what external data indicate during 2013-2014. It is not clear what factors are behind this large discrepancy.

• Market income in EUROMOD – annual amounts

Aggregates of market incomes by source in EUROMOD and in external data are shown in **Table 4.4** in Annex 2. Figures show that **average employment income** and **total employment income** between 2014 and 2016 are slightly higher when we compare them with external data. **Self-employment income** is also slightly higher when compared with external data during the same period. **Private pensions** are also slightly overestimated in 2014 and 2015 but match the external statistics in 2016.. Both **rent income** and **investment income** are overestimated between 2014 and 2016. The strong overestimation of recipients of rent income and investment income but slightly smaller overestimation of aggregate amounts indicates that the overestimation of the number of recipients is partly due to the way these incomes are allocated to individuals in EUROMOD.

• Tax-benefit instruments included but not simulated in EUROMOD – number of recipients/payers

Table 4.5 in Annex 2 displays annual numbers of recipients of tax benefit instruments that were included but not simulated in EUROMOD. The first panel in Table 4.5 shows a small misalignment between the main contributory sickness benefits and other sickness benefits. Originally, these types of benefits are aggregated into one variable in SILC. A disaggregation is performed due to the different treatment of these benefits in the Maltese tax-benefit system. Despite the fact that every effort has been made to ensure that the disaggregation is as accurate as possible, some errors remain resulting in a slight underestimation of those benefits. The energy benefit is significantly underestimated in EUROMOD compared to administrative statistics. Since the energy benefit is taken directly from data, it is possible that EU-SILC does not adequately capture the incidence of this benefit in Malta's population. In addition, survivor **pensions** are highly underestimated in EUROMOD relative to external data. On the other hand, disability pensions are overestimated in EUROMOD, Similarly, non means-tested old-age pensions are overestimated throughout the years under study, with the highest overestimation being in the base year. This result in disability pensions and non means-tested old age pensions is not surprising when considering the way these types of benefit variables have been constructed in EU-SILC which is the data source for EUROMOD. More specifically, in SILC all benefits/ pensions going to individuals aged over 65 are considered to be old-age irrespective of their actual classification in the national system. As a result, persons over 65 receiving disability or survivor benefits are observed in EUROMOD as recipients of old-age benefits. No adjustment is made in EUROMOD for this peculiarity in EU-SILC.

Tax-benefit instruments included but not simulated in EUROMOD – annual amounts

Table 4.6 in Annex 2 shows the annual amounts of tax-benefit instruments included but not simulated in EUROMOD. In Table 4.6, the **disability pensions and the non means-tested old-age pensions** are overestimated. Again, the misalignment in this second panel of the data is probably due to the classification as old-age benefits of all pensions given to persons aged over 65. Aggregate energy benefits are too high throughout the years under review despite of the too low number of recipients presented in Table 4.5. Meanwhile, energy benefit **sickness and**

injury benefits, sickness assistance and other means tested health benefits are underestimated. **Survivor pensions** follow the same patterns as in Table 4.5 thus showing significant underestimation. Survivor benefits given to widows/widowers aged over 65 appear as old-age benefits in the EUROMOD dataset and thus lead to an underestimation of total annual survivor pension income and an overestimation of total annual old-age pension income. The row showing the sum of all three pension types confirms this explanation. The sum is overestimated (by 22 percentage points in the base year).

4.1.2 Validation of outputted (simulated) incomes

• Tax-benefit instruments simulated in EUROMOD – number of recipients/payers

Simulated numbers of recipients of various social benefits and number of tax payers of income tax and social insurance contributions are shown in Table 4.7 (Annex 2). The first section of Table 4.7, presenting the benefits that were simulated in EUROMOD, indicates that only a few of the instruments are relatively well simulated. Social assistance for single parents is overestimated in EUROMOD. Possible factors explaining the misalignment of simulation and external results are lack of a fully simulated asset test, the different time periods for the income taken into account, and non-take-up by lone parents, especially if living with other adults. The number of recipients of **supplementary allowance** is well simulated and only slightly above the external statistics. The simulation of age pension is overestimated in 2014 and 2015 but very close to the external statistics in 2016. The simulation of social assistance, unemployment benefits, special unemployment benefit and unemployment allowance recipients is underestimated in EUROMOD. It is possible that the disaggregation of the unemployment benefit variable in EUROMOD into the various types of unemployment benefits and severance payments is flawed. On the other hand, it is also possible that the SILC unemployment variable does not adequately capture the incidence of unemployment benefits. Although no external data separating the two components of the child allowance is available, the total number of recipients of child allowance is relatively well simulated being just slightly above the external benchmark between 2014 and 2016. With regards to taxes and social insurance contributions, employee and employer social insurance contributions are the two main indicators that are close to the external benchmark. Income tax and self-employed social insurance contributions paid are overestimated in EUROMOD, especially the social insurance contributions paid by the self-employed, which are around 4 times higher than the external data. It is possible that tax evasion plays a role in explaining the discrepancy between EUROMOD and external data. Please note that some external data was not available in the moment of writing this document.

• Tax-benefit instruments simulated in EUROMOD – annual amounts

Total aggregate amounts for the simulated income components together with external benchmarks are shown in **Table 4.8** (Annex 2). As in the previous table, **social assistance for single parents** is overestimated in EUROMOD when compared to external data. The oversimulation is also present in the **supplementary allowance** for 2014 and 2016 being around 40 and 18 percentage points respectively. This discrepancy may be due to the inability to accurately replicate asset tests, misalignment of time periods and non-take-up. Simulated amounts of the **unemployment benefit**, **the special unemployment benefit** and **age pension** are also overestimated in EUROMOD. Note that this is due to a sharp drop in unemployment benefit recipients, observable in external data but not captured to such an extent in EUROMOD.

As shown in Table 4.7, simulated recipients of general social assistance and unemployment allowance are underestimated in comparison with external statistics, but when social assistance and unemployment allowance are added together the simulated results show a slightly improved simulated result. The fact that we are using annual instead of monthly income may lead to a situation that is leaving out the short-term scenario of a situation with low-income and thereby benefit entitlement. Although there are no separate external benchmarks for the flat-rate and income tested components of the child allowance, when the two are summed up, the total amount in EUROMOD is on average around 10 percentage points below administrative figures for 2014 and -2016 and 25 percentage points below for 2015. Given that generally in this case the simulation succeeds in reproducing relatively faithfully the total number to recipients, it appears that the average income tested benefit is too small. It is possible that incongruities in the time periods of household circumstances and income, explain partly the observed difference. In both cases, we use current year's income instead of previous year's income in the simulation and this might constitute another source of divergence. All social insurance contributions shown in the second panel of Table 4.8 are somewhat over-simulated, with the over-simulation being less severe in the employee and the employer social insurance contributions. Two potential explanations are the fact that the number of employees present in the EUROMOD dataset is slightly above the official figures and that the average wage is slightly higher in EUROMOD compared to external data. Self-employed social insurance contributions are significantly over-simulated between 2014 and 2016. It is not entirely clear what determined this pattern but it is possible that tax evasion is an important factor. It is also possible that to a smaller extent the difference is explained due to the different time periods used to compute the figures (current year versus previous year). Finally, **personal income tax** is relatively close to external statistics with the biggest difference in 2016 of under-simulation by 5 percentage points. Please note that some external data was not available in the moment of writing this document.

4.2 Income distribution

All income distribution results presented in **Table 4.9** (Annex 2) are computed for individuals according to their household disposable income (HDI) equivalised by the "**modified OECD**" **equivalence scale**. HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions. The weights in the OECD equivalence are: first adult=1; additional people aged 14+=0.5; additional people aged under 14=0.3.

4.2.1 Income inequality

Indicators of the distribution of household disposable income (**Table 4.9**, Annex 2) are quite close to the ones released by EUROSTAT. The **mean** and **median disposable income** indicators in EUROMOD and SILC are slightly overestimated in 2014 by only 2 percentage points. Inequality, as measured by the **Gini coefficient**, is very close to the SILC value. In general, the distribution of disposable income is closely aligned in EUROMOD with external data with the exception of the first decile in 2014 where income is overestimated in EUROMOD. *Please note that some external data was not available in the moment of writing this document*.

4.2.2 Poverty rates

Poverty rates as derived from EUROMOD are compared to EUROSTAT figures in **Table 4.10** (Annex 2). Poverty at the **40 per cent level, the 50 per cent, the 60 per cent and the 70 per cent** are all underestimated in 2014. This may suggest that some of the near-poor in EUROMOD simulations might actually experience higher levels of disposable income. Taking into consideration the **60 per cent median** of HDI, EUROMOD overestimates poverty rates for the people aged 50-64 years. The overestimation of the number of poor aged 50-64 was probably caused by pension entitlements and where payment of the particular benefits was affected during this same year. *Please note that some external data was not available in the moment of writing this document.*

4.2.3 Validation of minimum wage

Finally, Table 4.11 in Annex 2 shows a comparison of some basic results with and without the minimum wage. Including the minimum wage in the simulation has virtually no effect.

4.3 Summary of "health warnings"

This section summarizes the most important issues to be kept in mind when using the Maltese model existent in EUROMOD.

- The year of the **underlying data set** is 2014. No adjustments are made for changes in employment or the demographic characteristics of the population;
- 2014 incomes are adjusted to their average values in 201, 2015, 2016 and 2017. However, although every effort is made to use detailed uprating factors, the exact **distribution of incomes** betweem 2014 and 2017 cannot be reproduced;
- The **quality** of data available in EU-SILC mainly depends on the respondents' ability to indicate correctly the household income received during the income reference year and their ability to distinguish between the different sources of income. Although most of these errors are corrected during analysis by the use of auxiliary information within the dataset, errors may still exist, which might create distortions in the model;
- Several variables in the underlying dataset that enter the micro-simulation model are the result of a **disaggregation**. The disaggregation is generally based on benefit rules and other external information. However, significant error is likely to persist;
- Couple of **means-tested benefits** are over-simulated. This is due to the inability to accurately replicate some eligibility conditions (asset test), use of current year instead of previous year's incomes in the simulation of the income test and very likely non-take up;
- Social insurance contributions for the self-employed are over-simulated;
- Several very small benefits means-tested or contingency based (such as for example leprosy assistance or milk grant) are ignored in the simulation;
- Poverty at the 60 per cent and the 70 per cent of the median HDI are slightly under simulated whereas poverty at the 40 per cent and the 50 per cent median HDI are significantly more under simulated.

5. REFERENCES

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- Verbist, G. (2004) "Redistributive effect and progressivity of taxes An International Comparison across the EU using EuroMOD", EuroMOD Working Paper No. EM5/04.

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- Income Tax Act (Chapter 123 of the Laws of Malta)
- Social Security Act (Chapter 318 of the Laws of Malta)
- OECD (2007), Benefits and Wages, Country chapter Malta
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- OECD (2009), Benefits and Wages, Country chapter Malt

ANNEX 1: UPRATING FACTORS

Table A 1. Uprating factor values and sources, 2014-2017

	Constant	Values of the raw indices			ces	-	Income components	
Index	name	2014	2015	2016	2017	Source	uprated by the index	Notes
Harmonized Consumer Price index from EUROSTAT	\$f_hicp	98.84	100	100.9	102.48	Eurostat	bed, kfb, kivho, tad, yot, ypt, tis, xpp, xhcot, xhcmomi, xhcrt, xmp, bfa	
Mean annual gross basic salary	\$f_yem	16094	16559	17261	17261	Annual Labour Force Dataset	yem00, yse, bunls, yem_a	
Mean annual old age pension	\$f_poanm	7453	7549	7832	7832	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	poanm	
Mean annual disability pensions	\$f_pdi	5241	5254	5642	5642	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	pdi	
Mean annual survivor pension	\$f_psu	7337	7343	7439	7439	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	psu	
Mean annual contributory unemployment benefit	\$f_bunctnm	563	568	585	585	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	bunctnm	
Mean annual contributory special unemployment benefit (SUB)	\$f_bunctmt	966	914	828	828	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)		
Basic UB daily benefit for single individuals (lower rate)	\$f_bunctnm_ index	7.72	7.89	7.97	8.05	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	bunctnm	

Table A 1. Uprating factor values and sources, 2014-2017

Constant			Values of tl	he raw indic	ces		Income components	
Index	name	2014	2015	2016	2017	Source	uprated by the index	Notes
Basic SUB daily benefit for single individuals (lower rate)	\$f_bunctmt_i ndex	12.94	13.22	13.5	13.64	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	bunctmt	
Mean annual sickness benefit	\$f_bhl00	365	356	343	343	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	bh100	
Mean annual sickness assistance	\$f_bhlmt	1373	1368	1408	1408	Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)	bhlmt	
Basic social assistance weekly rate	\$f_bsa	100.48	100.87	102.04	103.21		bunctmt, bsa, bunnemt	
Basic age pension weekly rate	\$f_boamt	86.95	87.34	88.51	93.68		boamt	
Total property tax collected	\$f_tpr	85931	111132	135326	135326		ypr, tpr	
Average energy benefit	\$f_bho	42.28	40.6	39.9	39.9		bho	
Employment bonuses	\$f_yemls	135.1	135.1	135.1	135.1		yemls, yls	
Indexation rules for pensioners born after 1962	\$f_poa_index	121	124	124	124		poanm, pdi, psu	
Previous average wage	\$f_yempv	15849	16094	16559	16559		yivwg	
GDP at market prices	\$f_gdp	8443	9273	9896	9896	Eurostat	yiy, afc	
CPI (cumulative)	\$f_cpi	2.0171	2.0141	2.0174	2.0174	Eurostat	ypp, yds, ydses_o	

Source: EUROMOD H1.0+ and National Statistics Office, Gainfully Occupied Population, Annual Averages

ANNEX 2: VALIDATION TABLES

Table 4.2. Number of employed and unemployed

	EUROMOD	Externa	1			Ratio			
	2014	2014	2015	2016	2017	2014	2015	2016	2017
Number of employed	173618.9	163760	172104	180320	N/A	1.06	1.01	0.96	N/A
Number of unemployed	10864.89	6971	5295	3566	N/A	1.56	2.05	3.05	N/A

Notes: **EUROMOD:** Numbers of employed and unemployed computed are based on months in employment (including self-employment)/unemployment. Numbers are computed as averages of monthly data over the year.

External statistics: Numbers are computed as annual averages.

Sources: EUROMOD H1.0+ and National Statistics Office, Gainfully Occupied Population, Annual Averages

Table 4.3. Market income in EUROMOD - Number of recipients

	EUROMOD	External				Ratio			
	2014	2014	2015	2016	2017	2014	2015	2016	2017
Employment income	194153.70	189425.80	194152.69	N/A	N/A	1.02	1.00	N/A	N/A
Self-employment income	30592.02	27256.40	31640.93	N/A	N/A	1.12	0.97	N/A	N/A
Private pensions	2328.85	1997.88	2328.90	N/A	N/A	1.17	1.00	N/A	N/A
Rent income	16398.80	8537.98	10394.90	N/A	N/A	1.92	1.58	N/A	N/A
Investment income	267534.79	159377.31	162806.99	N/A	N/A	1.68	1.64	N/A	N/A

Notes: In EUROMOD, the number of recipients is computed as number of people who have received some income of the type indicated during the income reference period

Sources: EUROMOD H1.0+ and EU-SILC

Table 4.4. Market income in EUROMOD - Annual amounts (in mil)

		EURO	MOD		External					Ratio				
	2014`	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017		
Average employment income	17822.90	18327.30	19088.79	19088.79	16118.3	16819.1	17822.93	N/A	1.11	1.09	1.07	N/A		
Employment income	3460.38	3558.31	3706.16	3706.16	2943.7	3186.0	3460.37	N/A	1.18	1.12	1.07	N/A		
Self-employment income	413.79	425.74	443.79	443.79	386.1	409.5	413.78	N/A	1.07	1.04	1.07	N/A		
Private pensions	14.98	14.96	14.98	14.98	12.7	12.9	14.98	N/A	1.18	1.15	1.00	N/A		
Rent income	44.46	57.49	70.01	70.01	28.4	36.9	44.46	N/A	1.57	1.56	1.57	N/A		
Investment income	169.77	186.46	198.98	198.98	121	157.39	169.77	N/A	1.41	1.18	1.17	N/A		

Notes: Amounts refer to total aggregate incomes received throughout the year.

Sources: EUROMOD H1.0+ and EU-SILC

Table 4.5. Tax-benefit instruments included but not simulated in EUROMOD - Number of recipients/payers

	EUROMOD	External				Ratio			
	2014	2014	2015	2016	2017	2014	2015	2016	2017
-									
Benefits									
Sickness and injury benefits	20133.18	21,162	21,231	20,317	N/A	0.95	0.95	0.99	N/A
Sickness assistance and other means-tested health benefits	12877.62	13,680	13,292	12,971	N/A	0.94	0.97	0.99	N/A
Energy benefit	4590.22	133,751	125,704	117,386	N/A	0.03	0.04	0.04	N/A
Disability pensions	6309.81	5,171	4,921	4,688	N/A	1.22	1.28	1.35	N/A
Survivor pensions	4090.02	15,857	16,118	16,761	N/A	0.26	0.25	0.24	N/A
Non means-tested old-age pensions	71421.84	56,964	58,972	61,265	N/A	1.25	1.21	1.17	N/A
Taxes and Social Ins	urance contribu	itions							
Property tax	0.00	85,931	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes: In EUROMOD, the number of recipients is computed as number of people who have received some income of the type indicated during the income reference period.

Sources: EUROMOD H1.0+ and Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)

Table 4.6. Tax-benefit instruments included but not simulated in EUROMOD - Annual amounts (in mil)

	EUROMOD External						,		Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Benefits												
Sickness and injury benefits	7.31	7.13	6.87	6.87	7.72	7.57	6.31	N/A	0.95	0.94	1.09	N/A
Sickness assistance and other means-tested health benefits	18.23	18.16	18.69	18.69	18.78	18.18	18.26	N/A	0.97	1.00	1.02	N/A
Energy benefit	3.68	3.72	3.75	3.81	5.66	5.06	4.62	N/A	0.65	0.74	0.81	N/A
Disability pensions	40.20	40.36	40.70	40.96	25.92	24.74	25.34	N/A	1.55	1.63	1.61	N/A
Survivor pensions	30.80	31.09	31.35	31.60	116.30	118.36	124.69	N/A	0.26	0.26	0.25	N/A
Non means-tested old-age												
pensions	631.74	633.76	648.18	656.26	424.43	444.81	479.23	N/A	1.49	1.42	1.35	N/A
Total pensions (old-age,												
disability, survivor)	692.70	692.77	693.25	694.55	566.65	587.90	629.26	N/A	1.22	1.18	1.10	N/A
		•1 4•										
Taxes and Social Insura	nce cont											
Property tax	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes: Amounts refer to total aggregate incomes received throughout the year.

Sources: EUROMOD H1.0+ and Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS)

Table 4.7. Tax-benefit instruments simulated in EUROMOD - Number of recipients/ payers

	EUROMOD				SILC	Ratio	External				Ratio			
	2014	2015	2016	2017	2014	2014	2014	2015	2016	2017	2014	2015	2016	2017
Benefits														
Social assistance for single parents	5,664	5,664	5,650	5,650	0	N/A	3585	4009	3495	N/A	1.58	1.41	1.62	N/A
Child allowance-means-tested component	23,574	22,720	21,667	21,691	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Child allowance-flat rate Child allowance- Sum of means-tested and flat rate components	23,223 46,797	24,076 46,797	25,130 46,797	25,106 46,797	32,574 0	0.71 N/A	N/A 44340	N/A 43246	N/A 43478	N/A N/A	N/A 1.06	N/A 1.08	N/A 1.08	N/A N/A
In work benefit	0	3,485	4,390	8,179	0	N/A	N/A	1359	2227	N/A	N/A	2.56	1.97	N/A
Supplementary allowance	29,513	28,946	27,839	33,652	0	N/A	25901	24891	24244	N/A	1.14	1.16	1.15	N/A
Age pension	5,991	5,903	5,195	5,175	5,066	1.18	5328	5420	5329	N/A	1.12	1.09	0.97	N/A
Social assistance	6,307	6,280	6,514	6,438	79,524	0.08	10401	7331	6616	N/A	0.61	0.86	0.98	N/A
Bonuses	104,872	104,704	104,797	104,721	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unemployment benefit	1,893	1,950	1,887	1,950	1,983	0.95	2840	2177	1713	N/A	0.67	0.90	1.10	N/A
Special unemployment benefit	252	195	258	195	633	0.40	747	488	351	N/A	0.34	0.40	0.74	N/A
Unemployment allowance Social assistance + unemployment	4,377	4,277	4,157	4,178	1,821	2.40	5924	4816	3597	N/A	0.74	0.89	1.16	N/A
allowance	10,684	10,557	10,671	10,616	81,345	2.48	16325	12147	10213	N/A	0.65	0.87	1.04	N/A
Taxes and Social Insurance contributions														
Income tax	202,677	203,830	204,246	200,546	0	N/A	157,579	162,534	151,754	N/A	1.29	1.25	1.35	N/A
Employee social insurance contributions Self-employed social insurance	187,816	187,816	187,816	187,816	0	N/A	173,538	187,932	199,959	N/A	1.08	1.00	0.94	N/A
contributions Social insurance contributions paid by the	63,212	66,326	67,084	67,084	0	N/A	14,758	15,205	17,383	N/A	4.28	4.36	3.86	N/A
government	217,563	218,062	218,216	218,216	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Employer social insurance contributions	192,856	192,856	192,856	192,856	0	N/A	173,538	187,932	199,959	N/A	1.11	1.03	0.96	N/A

Notes: In EUROMOD, the number of recipients is computed as number of people who have received some income of the type indicated during the income reference period.

Sources: EUROMOD H1.0+ and Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS), and Inland Revenue Department

Table 4.8. Tax-benefit instruments simulated in EUROMOD - Annual amounts

	EURC	OMOD			SILC				Ratio				Extern	al			Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Benefits																				
Social assistance for single parents Child allowance-means-tested component	25.43 22.54	25.38 21.79	25.56 20.90	25.84 20.97	0.00	0.00	0.00	0.00	N/A	N/A N/A	N/A	N/A N/A	14.66 N/A	14.94 N/A	16.11 N/A	N/A N/A	1.73 N/A	1.70 N/A	1.59 N/A	N/A
Child allowance-flat rate Child allowance- Sum of means- tested and flat rate components	14.88 37.42	15.45 37.24	16.13 37.02	16.11 37.07	19.80 0.00	20.04 0.00	20.22 0.00	20.53 0.00	0.75 N/A	0.77 N/A	0.80 N/A	0.78 N/A	N/A 41.73	N/A 49.82	N/A 40.17	N/A	N/A 0.90	N/A 0.75	N/A 0.92	N/A N/A
In work benefit	0.00	3.11	3.49	4.84	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	1.06	N/A	N/A	N/A	3.29	N/A
Supplementary allowance	9.56	9.30	8.74	11.34	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	6.84	8.88	7.37	N/A	1.40	1.05	1.18	N/A
Age pension	22.37	22.40	21.19	21.46	21.57	21.66	21.96	23.24	1.04	1.03	0.97	0.92	20.28	21.37	21.61	N/A	1.10	1.05	0.98	N/A
Social assistance	14.82	14.79	15.18	15.36	75.15	75.44	76.31	77.19	0.20	0.20	0.20	0.20	37.76	40.47	29.63	N/A	0.39	0.37	0.51	N/A
Bonuses	46.95	46.87	46.90	46.87	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	59.46	64.55	66.20	N/A	0.79	0.73	0.71	N/A
Unemployment benefit	1.41	1.48	1.41	1.51	1.07	1.09	1.10	1.12	1.32	1.35	1.28	1.35	1.75	1.59	1.24	N/A	0.80	0.93	1.14	N/A
Special unemployment benefit	0.43	0.40	0.55	0.42	0.58	0.60	0.61	0.62	0.74	0.68	0.89	0.68	0.94	0.72	0.45	N/A	0.46	0.56	1.22	N/A
Unemployment allowance Unemployment allowance +social assistance	15.22 30.03	14.72 29.51	14.60 29.78	14.79 30.15	11.52 86.67	11.56 87.00	11.70 88.01	11.83 89.02	1.32 0.35	1.27 0.34	1.25 0.34	1.25 0.34	22.86 60.63	22.45 62.93	17.09 46.72	N/A N/A	0.67 0.50	0.66 0.47	0.85	N/A N/A
Taxes and Social Insurance contribut		27.31	27.76	30.13	80.07	87.00	00.01	07.02	0.33	0.34	0.54	0.54	00.03	02.73	40.72	IV/A	0.50	0.47	0.04	IV/A
Income tax	475.8	479.9	509.3	505.2	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	467.39	492.03	536.23	N/A	1.02	0.98	0.95	N/A
Employee social insurance contributions Self-employed social insurance	261.0	267.0	275.3	279.4	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	202.80	214.35	232.99	N/A	1.29	1.25	1.18	N/A
contributions Social insurance contributions	114.4	120.8	124.5	125.9	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	35.76	36.60	38.61	N/A	3.20	3.30	3.22	N/A
paid by the government Employer social insurance contributions	377.2 264.6	389.6 270.6	401.6 278.9	407.1 283.1	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A 204.67	N/A 216.38	N/A 234.80	N/A N/A	N/A 1.29	N/A 1.25	N/A 1.19	N/A

Sources: EUROMOD H1.0+ and Department of Social Security (DSS) Unique Beneficiaries Report; Departmental Accounting System (DAS), and Inland Revenue Department

Table 4.9. Distribution of equivalised disposable income

	EUROMOD				Extern	al			Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
D 1	3.98	3.98	3.90	3.94	3.7	N/A	N/A	N/A	1.08	N/A	N/A	N/A
D2	5.30	5.24	5.15	5.21	5.2	N/A	N/A	N/A	1.02	N/A	N/A	N/A
D3	6.23	6.19	6.14	6.16	6.2	N/A	N/A	N/A	1.01	N/A	N/A	N/A
D4	7.22	7.16	7.18	7.16	7.2	N/A	N/A	N/A	1.00	N/A	N/A	N/A
D5	8.31	8.26	8.19	8.26	8.3	N/A	N/A	N/A	1.00	N/A	N/A	N/A
D6	9.50	9.36	9.39	9.38	9.4	N/A	N/A	N/A	1.01	N/A	N/A	N/A
D7	10.56	10.61	10.59	10.60	10.7	N/A	N/A	N/A	0.99	N/A	N/A	N/A
D8	12.20	12.10	12.20	12.17	12.2	N/A	N/A	N/A	1.00	N/A	N/A	N/A
D9	14.44	14.48	14.55	14.48	14.5	N/A	N/A	N/A	1.00	N/A	N/A	N/A
D10	22.26	22.61	22.71	22.65	22.5	N/A	N/A	N/A	0.99	N/A	N/A	N/A
Median	13733	14065	14550	14621	13,493	N/A	N/A	N/A	1.02	N/A	N/A	N/A
Mean	15467	15964	16532	16573	15,168	N/A	N/A	N/A	1.02	N/A	N/A	N/A
Gini	27.54	27.92	28.27	28.07	28.1	N/A	N/A	N/A	0.98	N/A	N/A	N/A
S80/S20	3.96	4.02	4.11	4.06	4.2	N/A	N/A	N/A	0.94	N/A	N/A	N/A

Notes: Based on household disposable income (HDI) equivalised by the "modified OECD" equivalence scale. HDI are calculated as the sum of all income sources of all household members net of income.

Sources: EUROMOD H1.0+ and EUROSTAT statistics database

Table 4.10. Poverty rates by gender and age

	EUROMOD					nal			Ratio	Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	
40% median H	וטו												
Total	1.97	1.49	2.18	2.02	3.0	N/A	N/A	N/A	0.66	N/A	N/A	N/A	
Males	2.32	1.77	2.57	2.38	3.1	N/A	N/A	N/A	0.75	N/A	N/A	N/A	
Females	1.62	1.20	1.79	1.66	2.9	N/A	N/A	N/A	0.56	N/A	N/A	N/A	
50% median H		7.20	7.71	7.00	0.5	N/A	NT/A	NT/ A	0.05	27/4	NT/A	NT/A	
Total	7.24	7.28	7.71	7.32	8.5	N/A	N/A	N/A	0.85	N/A	N/A	N/A	
Males	7.55	7.58	8.10	7.73	8.8		N/A	N/A	0.86	N/A	N/A	N/A	
Females	6.92	6.99	7.32	6.91	8.3	N/A	N/A	N/A	0.83	N/A	N/A	N/A	
60% median H	HDI												
Total	15.09	15.19	15.92	15.57	16.3	N/A	N/A	N/A	0.93	N/A	N/A	N/A	
Males	14.92	15.08	15.88	15.60	16.1	N/A	N/A	N/A	0.93	N/A	N/A	N/A	
Females	15.25	15.31	15.97	15.53	16.6	N/A	N/A	N/A	0.92	N/A	N/A	N/A	
70% median H	HDI												
Total	24.91	24.98	25.25	25.23	25.7	N/A	N/A	N/A	0.97	N/A	N/A	N/A	
Males	23.99	23.98	24.13	24.05	24.6	N/A	N/A	N/A	0.98	N/A	N/A	N/A	
Females	25.85	25.98	26.38	26.42	26.8	N/A	N/A	N/A	0.96	N/A	N/A	N/A	
60% median H	·IDI												
0-15 years	17.75	16.88	18.05	17.96	23.1	N/A	N/A	N/A	0.77	N/A	N/A	N/A	
16-24 years	11.25	10.69	11.69	11.47	13.1	N/A	N/A	N/A	0.86	N/A	N/A	N/A	
25-49 years	12.22	11.99	12.40	12.21	13.8	N/A	N/A	N/A	0.89	N/A	N/A	N/A	
50-64 years	15.03	15.53	16.13	15.98	13.3	N/A	N/A	N/A	1.13	N/A	N/A	N/A	
-	20.99	22.60	23.52	22.28	21.0	N/A	N/A	N/A	1.00	N/A	N/A	N/A	
65+ years	20.77	22.00	43.34	22.20	21.0	**	1 V / / 1	1 N/ FA	1.00	1 N / / 1	1 V / / 1	1 N/ /A	

Notes: Computed for individuals according to their household disposable income (HDI) equivalised by the "modified OECD" equivalence scale.

HDI are calculated as the sum of all income sources of all household members net of income tax and social insurance contributions.

Sources: EUROMOD H1.0+ and EUROSTAT statistics database

Table 4.11. Minimum wage validation

	Baseline				Min W	age Incl.			Ratio			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Equivalised disposable income	4,297	4,432	4,590	4,603	4,298	4,433	4,591	4,617	1.00	1.00	1.00	1.00
Employment income	3,460	3,558	3,706	3,706	3,460	3,558	3,706	3,706	1.00	1.00	1.00	1.00
Total income tax Total employee social	476	480	509	505	476	480	509	505	1.00	1.00	1.00	1.00
insurance contributions	261	267	275	279	261	267	275	279	1.00	1.00	1.00	1.00
Total social assistance	14.82	14.79	15.18	15.36	14.85	14.82	15.22	15.40	1.00	1.00	1.00	1.00
Gini coefficient	27.54	27.92	28.27	28.07	27.53	27.91	28.27	27.97	1.00	1.00	1.00	1.00
Poverty rate (60% median HDI) Social assistance for	15.09	15.19	15.92	15.57	15.19	15.18	16.03	15.47	0.99	1.00	0.99	1.01
single parents	25.43	25.38	25.56	25.84	25.43	25.38	25.56	25.84	1.00	1.00	1.00	1.00
Unemployment allowance	15.22	14.72	14.60	14.79	15.20	14.69	14.43	14.63	1.00	1.00	1.01	1.01

Source: EUROMOD H1.0+

ANNEX 3: POLICY EFFECTS IN 2016-2017

Table A1 and Figure A1 show the effect of 2017 policies on the mean equivalised household disposable income by income component and income decile group, as a percentage of mean equivalised household disposable income in 2016. The effect is estimated as a difference between simulated household net income under the 2017 tax-benefit policies (deflating monetary parameters by *projected* Eurostat's Harmonized Index of Consumer Prices, HICP) and net incomes simulated under 2016 policies.

Measured in real terms, policy changes led to an overall decrease in average household disposable income by around 0.18%. Only the first decile saw an increase (0.53%) with means-tested benefits having by far the biggest impact. However this positive impact for the first decile cannot be attributed to a specific benefit but it is rather the overall result of multiple small changes to the amounts of different benefits.

Overall the mean policy effects of different components were very small and always staying within the range of -0.1% to 0.1%. Nominally there were some positive gains but pension and benefit indexation was in most cases below the rate of inflation and therefore resulted in a loss in real terms. Income tax rebate for pensioners also nominally had a small positive effect on direct taxes but those income gains were again offset by inflation.

Table A1: Policy effects for MT in 2016-2017, using the CPI indexation [1.0157] on dataset MT_2015_a2, %

Decile	Original income	Public pensions	Means- tested benefits	Non means- tested benefits	Employee SIC	Self- employed SIC	Direct taxes	Disposable income
1	0.00	0.05	0.55	-0.07	0.00	0.02	-0.02	0.53
2	0.00	-0.17	0.08	-0.02	0.00	0.01	-0.04	-0.14
3	0.00	-0.11	0.01	0.01	0.00	-0.02	-0.01	-0.13
4	0.00	-0.12	-0.07	0.05	-0.02	0.01	0.01	-0.15
5	0.00	-0.08	-0.03	-0.02	-0.03	0.00	0.00	-0.15
6	0.00	-0.10	0.00	-0.02	-0.03	0.01	-0.06	-0.19
7	0.00	-0.07	0.01	-0.01	-0.05	0.01	-0.12	-0.25
8	0.00	-0.03	-0.01	-0.01	-0.06	0.00	-0.15	-0.26
9	0.00	-0.03	0.00	-0.01	-0.07	0.00	-0.14	-0.25
10	0.00	-0.02	0.00	-0.01	-0.06	-0.01	-0.13	-0.22
Total	0.00	-0.06	0.02	-0.01	-0.04	0.00	-0.09	-0.18

Notes: Shown as a percentage change in mean equivalised household disposable income by income component and income decile group. Income decile groups are based on equivalised household disposable income in 2016, using the modified OECD equivalence scale. Each policy system has been applied to the same input data, deflating monetary parameters of 2017 policies by Eurostat's Harmonized Index of Consumer Prices (HICP).

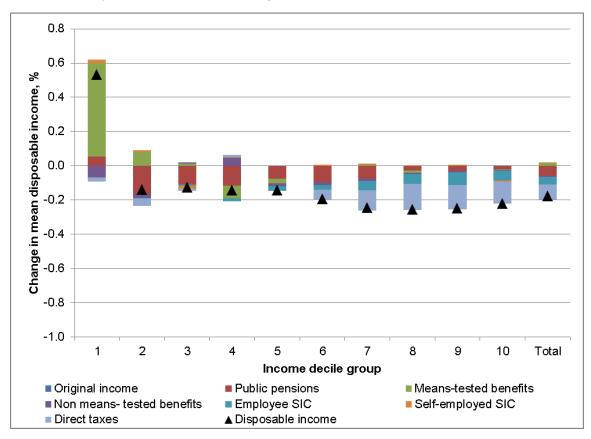


Figure A1: Policy effects in 2016-2017, using the CPI-indexation, %