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Assessing Design Principles and Possible Impacts of an In-Work Benefit Scheme in Greece

Chris Allen, Chrysa Leventi, Hannes Serruys and Irene Vlachaki

Abstract

The paper provides a comprehensive analysis of the potential benefits and challenges of a possible in-work benefit scheme in Greece. It reviews the design of in-work benefits in other EU countries and identifies key considerations for implementing such a scheme in an effective way. The paper discusses an illustrative in-work benefit for Greece, which would offset the employee social insurance contributions of low-income earners up to a certain threshold and estimates its fiscal and distributional impact. For doing so, the paper combines the use of the tax-benefit microsimulation model EUROMOD, and of EUROLAB, a discrete choice econometric model that allows to determine the impact of policy reforms on labour supply. Estimates suggest that the scheme could increase labour market participation by 0.9 percentage points of the workforce, particularly among women. This would add approximately some 60,000 additional workers to the economy and increase overall labour hours by 1.2%. The overall fiscal cost of the new scheme is estimated at €290 million a year once second-order employment effects are accounted for. These findings also suggest that the at-risk-of-poverty rate would decrease by approximately 0.6 percentage points for the active population.

JEL Classification: J200, J210, J220.

Keywords: labour force participation, employment, labour supply, female labour.

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ABBREVIATIONS

EA	Euro Area
EU	European Union
EITC	Earned Income Tax Credit
EMTR	Effective Marginal Tax Rate
GDP	Gross Domestic Product
GMI	Guaranteed Minimum Income
LFS	Labour Force Survey
PTR	Participation Tax Rate
SIC	Social Insurance Contributions

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1. INTRODUCTION

In-work benefits have become a key component of policy strategies aimed at 'making work pay', which involve designing social policies to support employment while also reducing poverty. In-work benefits are social benefits provided to low-income workers, with the primary goal of encouraging employment and reducing reliance on welfare benefits. The benefits work by boosting employee's net income from working, thus widening the gap between income from employment and benefits received when not working. They thus create stronger incentives for labour force participation and employment. In practice, in-work benefits can be designed in various ways and can be provided either directly through benefit transfers or alternatively through targeted reductions in taxes and social security contributions. In-work benefit schemes have been successfully used in many EU Member States particularly as part of a wider labour market reform to encourage participation in employment and reduce poverty (Laun, 2019).

The aim of this paper is to examine the potential role, design and impact of the introduction of a possible in-work benefit in Greece. An in-work benefit could provide a valuable option to address the country's labour market challenges, including high levels of unemployment and inactivity, particularly among women and certain disadvantaged groups. A central component of the analysis is the identification of trade-offs between the increased incentives for new labour market participation, possible disincentives on existing workers, and the overall fiscal costs of the new scheme. These trade-offs are crucial in determining the overall impact of an in-work benefit scheme on employment, poverty and the public finances.

Benefit design is critical in determining its effectiveness in achieving its objectives. In designing an in-work benefit scheme in Greece, it is essential to consider the specific labour market context and institutional framework in the country. This includes taking into account the distribution of working hours, the prevalence of part-time work, and the existing tax and benefit system. We survey the experience of in-work benefit schemes in other countries, including the United States, Germany, France, and the Netherlands, highlighting key design considerations that can inform the development of an effective and efficient scheme for Greece.

Methodologically, microsimulation has been extensively used as a tool for assessing the distributional impact of social benefits, as it allows for detailed analysis of those policies and their effects on disposable income (Almeida et al., 2022; Hernández et al., 2022; Jara and Simon, 2024; Popova, 2016; Verbist and Van Lancker, 2016). However, the modelling framework for the behavioural impacts of reforming social benefits is much less developed. Nevertheless, it essential to assess such impacts for labour market reforms that have heterogeneous effects. Moreover, the fiscal cost estimates of in-work benefit reforms crucially depend on indirect effects on tax bases: such reforms can often eventually become partly or fully self-financing or even may support fiscal sustainability.

To assess the potential impacts of an in-work benefit scheme in Greece, we combine the use of the microsimulation model EUROMOD, which provides a detailed model of the taxes and social benefits of all EU Member States, and of EUROLAB, a discrete choice econometric model that allows to determine the impact of reforms on labour supply taking into account labour demand restrictions.[1] Such a new benefit is estimated to increase the labour participation rate substantially, by 0.9 percentage points of the workforce, approximately some 60,000 additional workers. Women's participation rate is expected to increase by 1.2 percentage points, about twice the increase in the men's participation rate. The overall fiscal cost of the new scheme is estimated at €290 million a year once these second-order employment effects are accounted for. These findings also suggest that the at-risk-of-poverty rate would decrease by approximately 0.6 percentage points for the active population. [2]

[1] For more information on EUROMOD, see Dreoni et al (2024), and on EUROLAB, see Narazani et al (2021). Other recent work combining these models includes Thiemann et al (2021), Grünberger et al (2022), and Agúndez García and Christl (2023).

[2] The analysis of this paper is based on end-December 2023 benefit and income tax rates.

The structure of the paper is as follows. The second section examines current developments in the Greek labour market and identifies a significant employment gap compared to the EU average, especially evident for women. The contributions of unemployment and inactivity to this employment gap are analysed. The third section looks at the Greek Guaranteed Minimum Income scheme and its employment incentives. Section four reviews some successful in-work benefit schemes implemented in the EU and internationally and identifies some design features that would be appropriate for a possible scheme in Greece. Based on this review, section five examines the design and potential impact of a new in-work benefit scheme in Greece. The microeconomic models EUROMOD and EUROLAB is used to calibrate and quantify the impacts of am illustrative in-work benefit on work incentives, labour participation, poverty reduction and fiscal costs. Section six provides a summary of the conclusions.

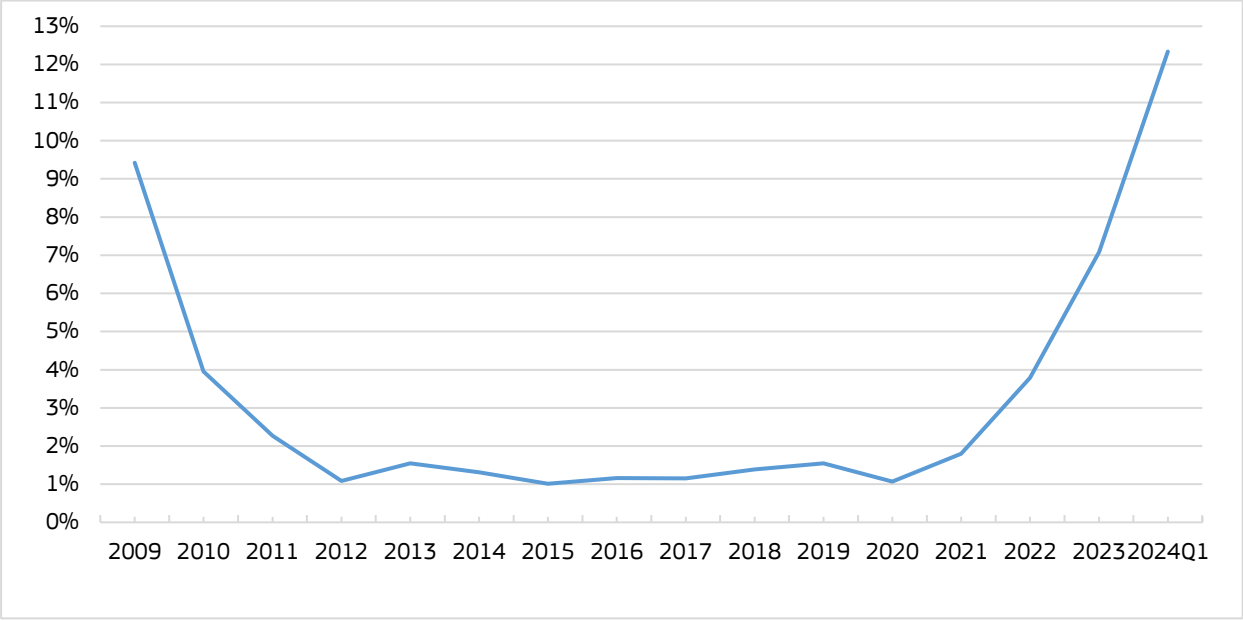
2. ASSESSING THE EMPLOYMENT GAP

2.1 THE EMPLOYMENT GAP

Greece has significantly outperformed other euro area Member States in the post-COVID19 recovery, with real GDP 5.8% higher in 2023 compared to 2019. The delivery of a substantial reform agenda has undoubtedly played a major part in this success. Notable reforms include consistently prudent fiscal policy, targeted tax reductions, and a series of major business and labour market reforms. The successful implementation of the €36 billion Greek Recovery and Resilience Plan, worth some 18% of GDP split almost equally between public investments and a major low-cost loans programme, has enabled a rapid green- and digital transition and underpinned domestic private investment.

This strong economic recovery has already affected labour markets, with some indications of labour shortages emerging in some sectors. Total employment has expanded by 6.6% since 2019 and unemployment rate has fallen from 16.8% to 10.5% between the fourth quarters of 2019 and 2023. There is also evidence of a sharp rise in vacancies as a percentage of unemployment, the so-called Beveridge ratio that is often used as a measure of labour market tightness (see e.g. Blanchard and Bernanke 2023). This ratio has showed a substantial increase from 1.5% in 2019 to 6.9% in 2023 and reached 12.1% in the first quarter of 2024 (Graph 2.1.1).

Graph 2.1.1. **Vacancies to unemployment ratio**



Source: Greek Statistical Agency.

Ensuring the smooth continuation of recent fast economic growth could be facilitated by tackling the long-standing employment gap between Greece and the EU. The overall employment rate in Greece was only 66.3% in 2022 (age group 20-64 years), more than 8 percentage points lower than the EU average employment rate of 74.6% (Table 2.1.1).

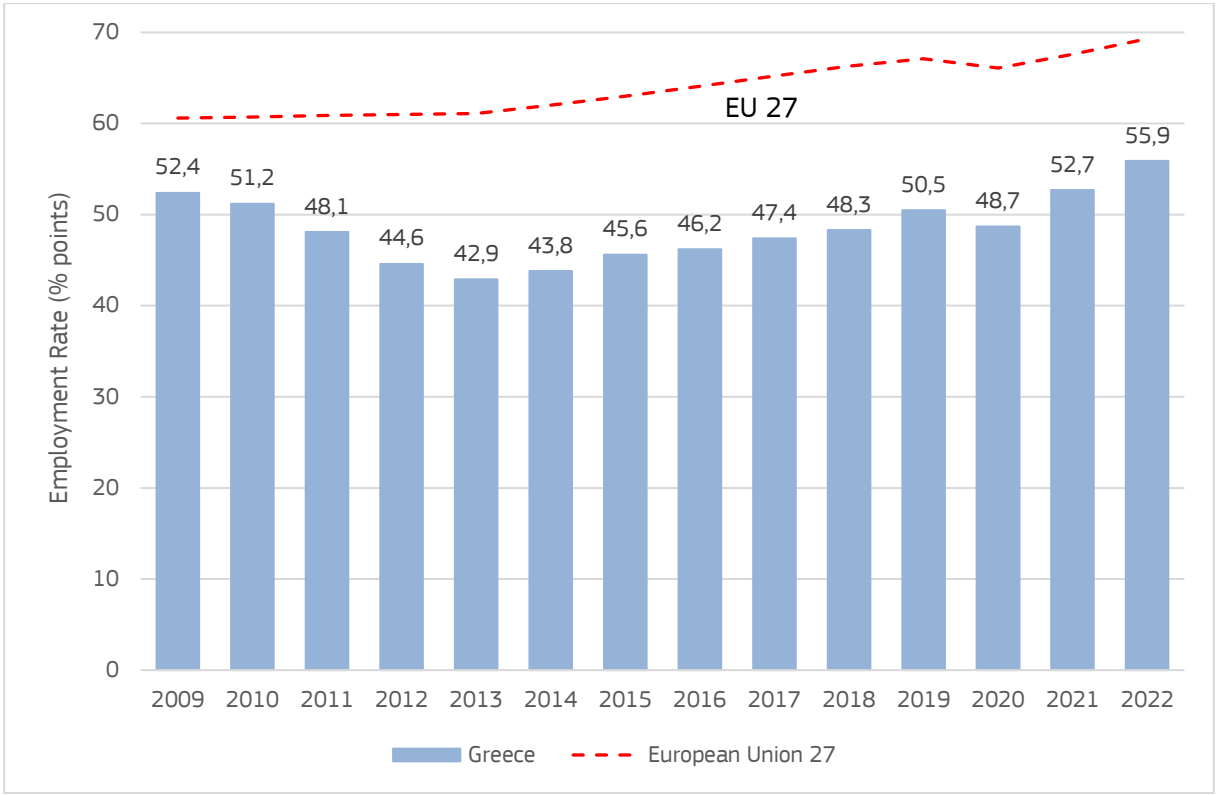
Table 2.1.1. **Employment rates for Greece and EU, 2022 (ages 20-64)**

	Greece	EU	Difference in % points
Total	66.3%	74.6%	-8.3%
Male	76.9%	80.0%	-3.1%
Female	55.9%	69.3%	-13.4%

Source: Eurostat 2023.

Whilst the male employment gap of 3.1 percentage points is relatively small, the female employment gap of 13.4 percentage points shows a serious divergence from most other EU countries. Even before the 2010 economic crisis, Greece had a lower female employment rate than the EU average (Nicolitsas, 2006). However, one of the results of the prolonged economic crisis is that the Greece missed out upon the substantial rise in the female employment rate that has occurred in many other EU countries since 2012 (Graph 2.1.2).

Graph 2.1.2. **Female employment gap: Greece vs EU-27**

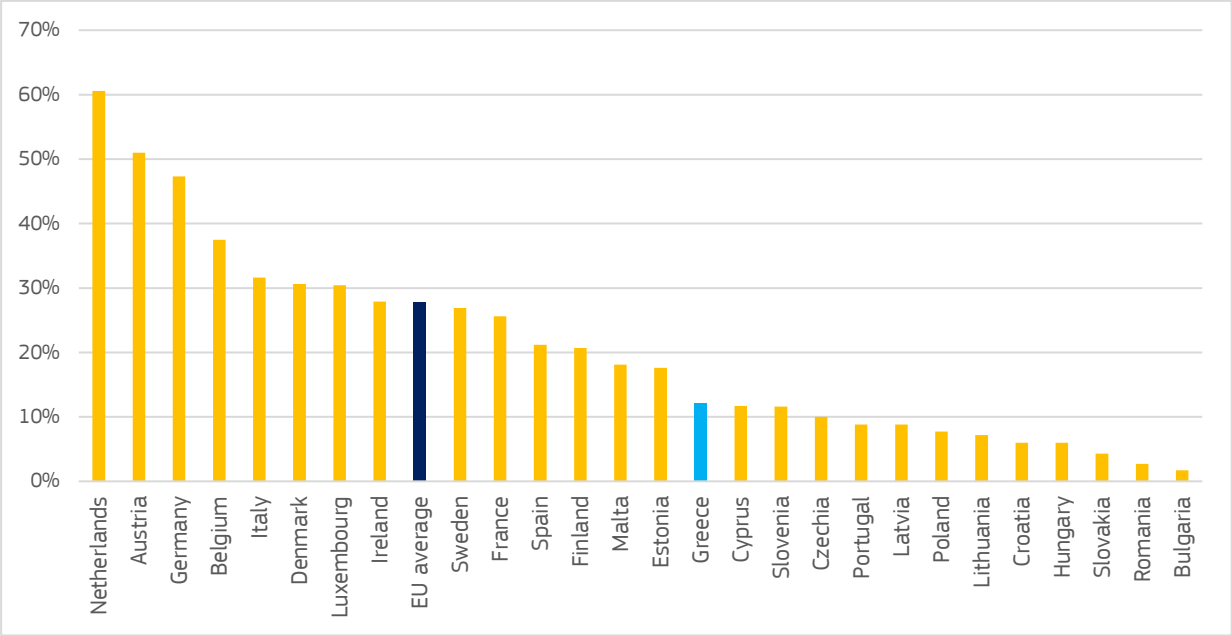


Note: The figure shows female employment rates (ages 20-64) in percentage points.
Source: Eurostat 2023.

A substantial part of the divergence in the Greek versus EU female participation rate is explained by the significantly lower share of part-time employment in Greece. For example, the Greek part-time

employment rate of 12.1% in 2022 is well-below that of other comparable Mediterranean countries: e.g. the Italian rate of 32% and the Spanish rate of 21.5% (Graph 2.1.3). A potential reason for this exceptionally low rate of part-time employment is the rather restrictive regulation of part-time employment that has remained unchanged for many years, such as the stipulation that part-time working hours must be continuous and provided once a day and the requirement for any excess of usual part-time hours to be paid as overtime (Lyberaki et al., 2017).

Graph 2.1.3. **Part-time work as share of female employment in the EU (2022)**



Source: Eurostat 2023.

2.2 THE COUNTERPART OF THE EMPLOYMENT GAP: THE UNTAPPED POTENTIAL WORKFORCE

In order to build a policy framework to address the employment gap, it is useful to examine its counterparts, the jobless people who are either unemployed or otherwise remain outside the labour force. The annual labour market survey for 2023 shows some 1.34 million of the working-age population are either long-term unemployed or currently inactive in the labour market (excluding those in full-time education and those who suffer from long-term ill or disability). The overwhelming majority of the jobless, some 960,000 or 72% of the total, are women.

The labour market remains fractured following the long-lasting economic crisis. Whilst the unemployment rate has fallen from its 28% peak in 2013 to 11.1% in 2023, more than half of the current total (56%) are long-term unemployed. Women make up some 63% of the long-term unemployed (Table 2.2.1). In their detailed econometric investigation of the dynamics of unemployment transitions during the economic crisis up to 2019, Andriopoulou and Karakitsos (2022) found that women were particularly disadvantaged. Whilst both younger workers (aged 15-24) and female workers were more likely to lose jobs than others, women found it proportionally much more difficult to find subsequent jobs than others. This effect can be seen to have continued in the post-2019 data. Whilst the authorities have put extensive efforts into reducing long-term unemployment, these efforts have in fact proportionately benefited men. Women's share in total long-term unemployed since 2019 has increased by some 5 ppts. If both male and female long-term unemployment had been reduced by the same proportion, there would have been some 15,000 fewer women in the total.

Turning to the figures from the Labour Force Survey on inactivity (Table 2.2.1), there are more than a million working-age people who are currently inactive in the labour market, excluding those in full-time education and those who suffer from long-term ill or disability.

- There are 314,000 inactive people with other personal or family responsibilities, overwhelmingly women, who look after their children and their disabled or elderly relatives. Comparison with other countries suggest many people in this group would like to work at least part-time, provided they had reliable and affordable care alternatives.
- With respect to the category of early retirees, there are 343,000 people split almost 50:50 between men and women. Pensioners have faced a 30% pension reduction if they decided to work, but a recent reform (law 5078/2023) has reduced this pension reduction to just 10%.
- The category of "other reasons for non-participation" consists in 390,000 people, of whom some 360,000 are women. Most of these women are aged over 30 and may have children and a working partner. They may therefore not have strong incentives to rejoin the workforce even after their children go to school, especially given the current relative lack of part-time jobs. Some other are on benefits, particularly the Guaranteed Minimum Income, who face particularly strong work disincentives due to potential benefit loss (see next section).
- The remaining two groups of inactive population, people in education or training (378,000) and those with own illness or disability (74,000), are much less likely to be able to contribute to the workforce.

Counting only the first three groups who are most likely to return to the labour market, there are over a million inactive people with a potential interest in the labour market. Women make up 74% of this inactive group.

Table 2.2.1. **Estimate of the untapped potential workforce in 2023 (ages 15-64 thousand persons)**

	males	females	total	% male	% female
Inactive population for personal or family responsibilities	25.8	288.2	314.1	8.2%	91.8%
Inactive population for early retirement	173.5	169.8	343.3	50.5%	49.5%
Inactive population for other reasons, excl. education /training or disability	69.7	319.4	389.1	17.9%	82.1%
Total inactive population, excluding education/ training or disability	**269.0**	**777.4**	**1046.5**	**25.7%**	**74.3%**
Long-term unemployed	109.2	182.8	292.0	37.4%	62.6%
Total inactive population (excluding education & disability) with long-term unemployed	**378.2**	**960.2**	**1338.5**	**28.3%**	**71.7%**

Source: Annual Labour Force Survey 2023.

Overall, some 1.34 million of the working-age population (Table 2.2.1) are either long-term unemployed or currently inactive in the labour market (excluding those in full-time education and those who suffer from long-term illness or disability). Some 960,000 of this long-term unemployed / inactive group are women. In particular, compared with other EU Member states, Greece exhibits very low employment rates for women and part-time workers and a rather high rate of female long-term unemployment. In principle, many of these people could be attracted back to the labour market under the right conditions. Specific actions have been and can further be envisaged to encourage their labour market participation (e.g. improved childcare provision, more favourable tax and social security treatment of retirees returning

to work etc.). However, such policies might be enhanced through the set-up of an in-work benefit scheme.

3. THE GUARANTEED MINIMUM INCOME BENEFIT AND EMPLOYMENT INCENTIVES

3.1 THE GUARANTEED MINIMUM INCOME BENEFIT AND ITS BENEFICIARIES

The Greek Guaranteed Minimum Income (GMI) is a general fallback benefit that was introduced in 2017 to provide an important safety net for poor families facing extremely difficult labour market conditions during the economic crisis (World Bank 2019). It was expected that the take-up of the scheme would fall gradually along with cyclical recovery. However, despite recent fast economic recovery and jobs growth and special assistance from the employment service in finding jobs, the number of GMI recipients has remained significant. At end December 2023, there were still 204,000 individual beneficiaries receiving GMI, compared to the peak of 277,000 households and 660,000 individual beneficiaries at its peak in 2018.

The financial amount of the GMI is relatively modest, offering a maximum benefit of €216 per month for a single person and €432 per month for a couple with two children at end-December 2023. Nevertheless, the scheme presents sizeable disincentives for recipients to enter the workforce, owing to rather high reductions for earned income and because the initial cash benefit subsequently has been reinforced through a series of additional non-cash benefits (including childcare). The household's eligibility for GMI depends on assessments every six months of their net income from all sources (including other benefits such as family and housing benefits). Their GMI benefit is calculated by subtracting the average of their post-tax income over the previous six months - excepting 20% of their net employment income - from their maximum GMI benefit. If their assessed net income minus the earned income disregard exceeds their GMI benefit, their eligibility for non-cash benefits is also terminated.

According to EUROMOD simulations based on SILC 2020 data (Table 3.1.1), of the 267,000 simulated beneficiaries in 2023, the overwhelmingly largest group is 125,000 single persons, who make up 47% of beneficiaries and account for more than 60% of recipient households. Single parents make up only a small group of 3% of beneficiaries, whilst other families with children make up some further 20%. The rest are couples or extended families. Only 4.8% of beneficiaries are elders over 65, while 4.4% of beneficiaries are sick or disabled.

The distribution of GMI recipients by labour market status is shown in Table 3.1.2. The great majority of recipients are unemployed or are largely inactive in the labour market. Only 25% of recipients are employed or self-employed. A further 35% are unemployed. The rest are inactive, although a large proportion of remaining recipients are students (24% of total).

Survey evidence on hours worked by GMI recipients is not fully consistent with the above classification of labour market status (Table 3.1.3). Nevertheless, it still suggests potential for greater contribution to the workforce. Excluding children, those in full-time education and the sick/disabled, some 110,000 of GMI recipients (57%) are not working at all, with a further 24,000 reporting only 1-20 hours a week of work. Interestingly, 44,000 or 23% of beneficiaries in the survey report more than 35 hours a week. This would suggest that they either have only recently started working full-time or else that their incomes may be under-declared for benefit purposes. In this regard, it is interesting that 30,000 of GMI recipients are self-employed.

Table 3.1.1 **GMI beneficiaries by household type (2023 estimates)**

Household types	Number	%
Single parent families	8,668	3.2%
Families with children	55,353	20.7%
Single adults, no children	125,491	46.8%
Couples, no children	36,600	13.7%
Extended families, no children	32,991	12.3%
Elderly people >65, no children	8,234	3.1%
Total	267,989	100.0%

Source: EUROMOD (based on EU-SILC 2020 survey data).

Table 3.1.2. **GMI recipients by labour market status (2023 estimates)**

Labour market status	Number	%
employee or self-employed	67,474	25.2%
unemployed	92,931	34.7%
inactive or other	22,377	8.3%
pensioner	10,151	3.8%
student	63,211	23.6%
sick or disabled	11,845	4.4%
total	267,989	100.0%

Source: EUROMOD (based on EU-SILC 2020 survey data).

Table 3.1.3. **GMI recipients by number of hours worked (2023 estimates)**

Hours per week	Number	%
0	109,173	56.6%
1-10	4,189	2.2%
11-20	15,105	7.8%
21-35	19,986	10.4%
35+	44,390	23.0%
Total	192,842	100.0%

Note: zero-hour beneficiaries, excludes children 0-14, students, and sick/disabled.

Source: EUROMOD (based on EU-SILC 2020 survey data).

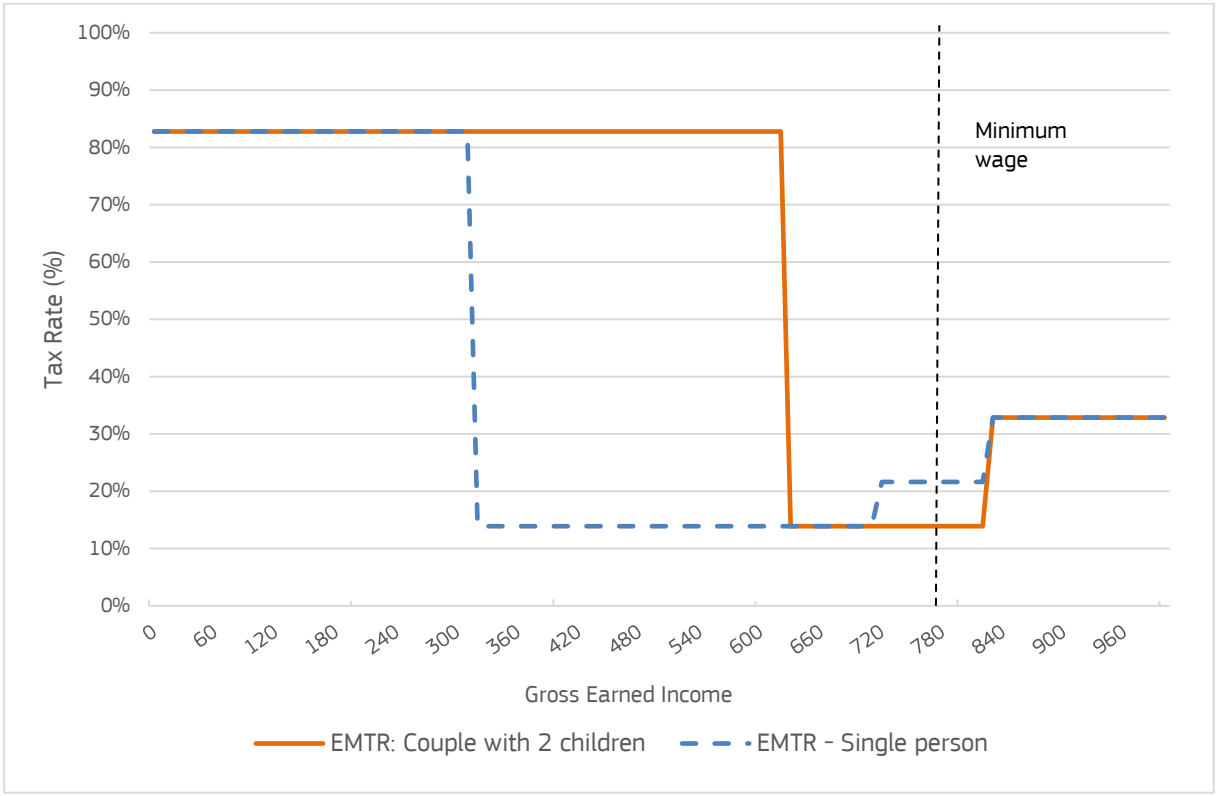
3.2 THE GMI AND EMPLOYMENT INCENTIVES[3]

A standard indicator of tax and benefit disincentives is the effective marginal tax rate (EMTR) that reflects the percentage of additional gross income paid in the form of taxes and social security contributions or lost from benefits, for someone already working that marginally changes their working hours. Graph 3.2.1 compares the effective marginal tax rates for the two different types of GMI recipients: a couple with two children and a single person. Taking into account of both the 20% earnings disregard and the need to pay higher social security payments, the EMTR is 83% for any GMI recipient up to their GMI benefit eligibility threshold: for a couple with two children this is a gross income of some €627 per month, for a single person it is half that amount €313.60. A marginal effective tax rate of 83%

[3] Calculations are made based on tax and benefit rates of end-December 2023.

means that for every additional euro they would earn on an on-going basis, 83 cents will be lost in additional taxes and social security payments or in terms of lost benefit. This very high marginal tax rate provides a very big disincentive for GMI recipients who have started working to decide to work additional hours. Nevertheless, once outside the GMI scheme, the METR initially falls sharply to 13.9%, the social security contribution rate, before rising slightly at higher incomes as income tax thresholds bare reached.

Graph 3.2.1. **Effective marginal tax rates (EMTR) for GMI beneficiaries: Couple with two children and single person**

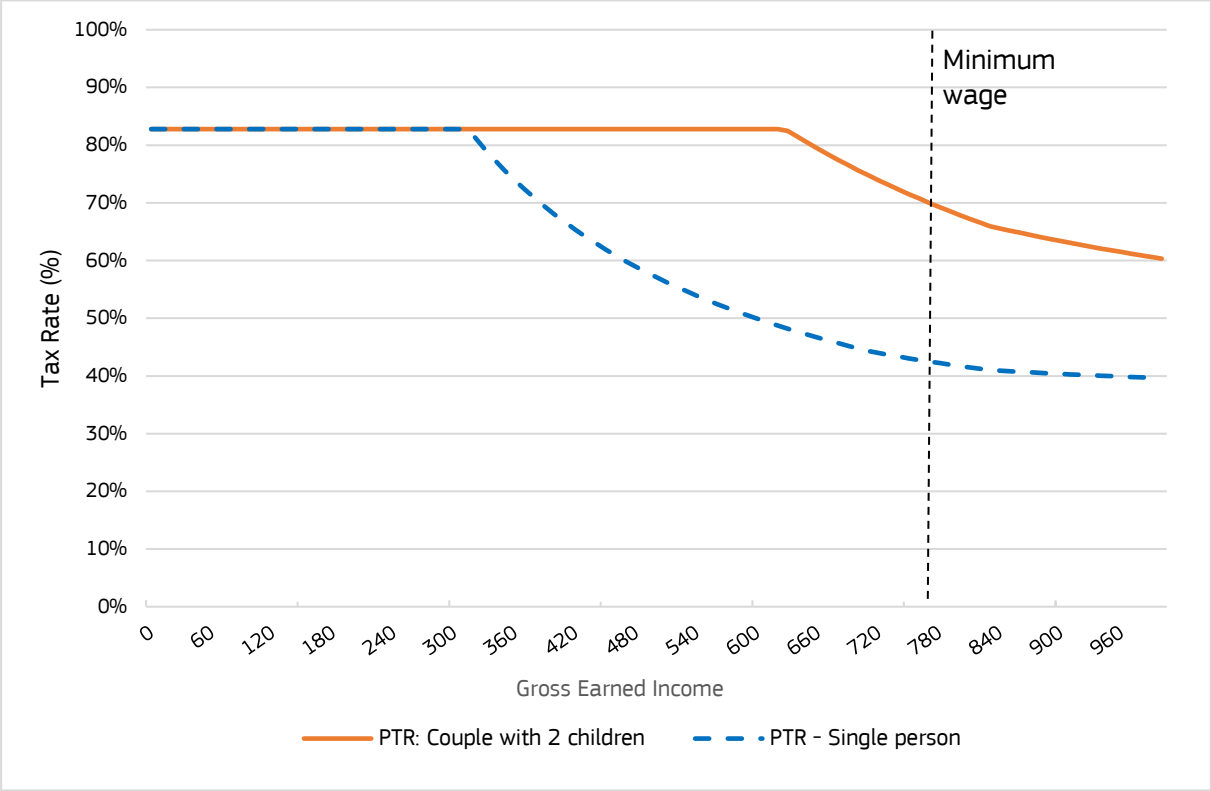


Source: Own analysis based on end-December 2023 benefit and income tax rates.

A second important indicator of tax and benefit disincentives on labour supply is the participation tax rate (PTR) (or effective average tax rate). This measures for a person not currently working, what percentage of earned income is paid in the form of taxes and lost benefits, should they begin to participate in the labour market and earn a salary. The participation tax rate for the same two GMI recipients- a couple with two children and a single person- are shown in Graph 3.2.2. Up until the GMI eligibility threshold, the participation tax rate is initially the same as the effective marginal tax rate of 83%, since the effective marginal tax rate is constant up until this point.[4] However, taking into account of the loss of the GMI benefit, the participation tax rate reduces only slowly past that point. For instance, at the full-time minimum wage rate, the participation tax rate remains at 69.3% for the couple with two children and at 42.2% for a single person. These extremely high participation tax rates illustrate the very high disincentives that currently face GMI recipients that wish to move into work.

[4] Given the effective marginal tax rate is constant, the effective average tax rate is constant over this range.

Graph 3.2.2. **Participation tax rates for GMI beneficiaries: Couple with two children and single person**



Source: Own analysis based on end-December 2023 benefit and income tax rates.

In the Annex, we show that increasing the GMI disregard from 20% to 40% could indeed attract many more GMI recipients to join the labour market. However, such a policy would also have an unintended effect of greatly widening the eligibility for GMI and hence the group of existing workers affected by the GMI-related disincentives for participation. The net impacts of these effects on labour market participation were found to broadly offset each other. Therefore, increasing the GMI disregard, though beneficial for current GMI recipients, would probably not help to increase overall labour supply.

4. LEARNING FROM EXPERIENCE WITH IN-WORK BENEFIT SCHEMES IN OTHER COUNTRIES

4.1 REVIEWING THE DESIGN AND PERFORMANCE OF IN-WORK BENEFIT SCHEMES IN THE UNITED STATES AND EU

In-work benefits aim to provide an initial wage supplement to low-income earnings to counteract work start-up costs, including the loss of other social benefits, which make the transition into employment difficult for low-income households (Saez (2002) and Barrios et al. (201)). In practice, this wage supplement can be provided either directly through benefit transfers or else through targeted reductions in taxes and social security contributions for low-income earners. In order to maximise incentives, the total amount of in-work benefit typically increases initially with wage income, before either reaching a maximum amount at higher incomes or becoming gradually phased-out. Whilst in-work benefits can

provide strong incentive for labour market participation by lower-wage workers, careful attention also needs to be given to the phase-out of the benefit that provide disincentives to existing workers, who may reduce their working hours. The careful design of in-work benefits is therefore crucial.

Originally introduced in the United Kingdom and United States in the 1990s, more than a dozen EU countries have now implemented in-work benefit schemes, including Germany, France, Italy, Netherlands, Belgium, Spain, and Sweden (Laun, 2019). However, there are significant differences in the successfulness of individual interventions and these partly reflect more-or-less appropriate designs in the structure of the schemes. In order to explore further how a potential in-work benefit scheme could most effectively contribute to a labour supply strategy, in this section we focus on the structure and design of a number of successful best-practice examples from the United States, Germany, France, and the Netherlands.

The proto-typical in-work benefit is the Earned Income Tax Credit (EITC) introduced in the United States in the 1990s. The scheme was specifically designed to incentivise full-time labour market participation (Blundell and Hoynes, 2004). The EITC in-work benefit was thus maximised at the bottom of the full-time wage distribution, providing a maximum wage supplement of some 25-40% of earned income depending on family size. The scheme incorporated a relatively gradual phase-out of the benefit at higher incomes levels. There is a broad empirical consensus that the U.S. EITC has had a significant impact on employment participation with only a relatively small impact in reducing average hours of work at higher incomes.[5] Nevertheless, studies have shown that the scheme could have been even more effective if its bureaucracy could be reduced. In particular, beneficiaries face significant payment delays and uncertainties, since the benefit calculation is based upon the following year's tax return. A recent paper by Caldwell et al (2023) found that the average EITC payment delay was longer than a year, which reduced the effective value of benefits by at least 10 percent once uncertainties and a discount rate are taken into account. The most heavily cash-constrained households were of course most affected by these payment delays.

In EU Member States, a rather different approach to the design of in-work benefit schemes has been taken compared with the US EITC.[6] Here, much more attention has been paid to the potential disincentive effects of the phase-out of in-work benefits on the working time of full-time workers paid just above the minimum wage (e.g. van Oers et al 2000).[7] This is because EU countries typically have much more compressed wage distributions than the US, owing to the fact that minimum wages are generally much higher in relation to median earnings.

Most in-work benefit schemes in EU countries have tried to avoid or reduce the effect of the phase-out of benefits above the minimum wage. By and large, countries have taken one or another of the following approaches:

a) Emphasising the encouragement of part-time work. The in-work benefit is thus maximised below the full-time minimum wage rate and is then phased-out relatively quickly. Examples include:
    - In-work benefit support for part-time jobs, such as the German Mini-Jobs.
    - Hybrid income support and in-work benefit schemes, e.g. French Prime d'activité.

b) Increasing in-work benefits up to the minimum wage but postponing the phase out of in-work benefits until higher income levels. Examples include:
    - Employee Tax Credit Schemes, such as the Dutch Arbeidskorting and the Swedish and Finnish systems.

In what follows, we examine in some detail three specific examples of EU in-work benefit schemes that have all been found clearly successful in their own terms (Laun 2019).

[5] See i.e. Eissa and Liebman (1996), Hoynes and Patel (2018), and Schanzenbach and Strain (2021), although Kleven (2019) is more sceptical. The impacts of the more generous UK scheme were estimated to be smaller, but still significant (Blundell and Hoynes 2004).
[6] See Vandelannote and Verbist (2016 and 2020) and Laun (2019).
[7] For example, van Oers et al (2001) concluded in an early review of the implications of implementing the US EITC in the Netherlands: Targeting the EITC to the low skilled induces adverse effects on the quality and quantity of labour supply because it raises the marginal tax burden on medium-income workers.

Part-time work focussed schemes (e.g. German Mini-Jobs scheme)

The German Mini-Jobs reform of 2003 was specifically designed to boost low-wage part-time employment in the services sector from a very low base. The scheme has been extremely successful: currently some 6.8 million workers benefit from the Mini-Jobs scheme, with an additional estimated 2.9 million benefiting from the associated Midi-Jobs scheme, altogether amounting to more than 20% of total employment.[8] The participation rate rose particularly through stimulating part-time employment for women and the long-term unemployed (Carrillo-Tudera et al., 2021). Mini-Jobs provides an in-work benefit of just over 20% for low-income earners earning up to €538 per month.[9] The associated Midi-Jobs scheme provides a linear phase-out of the in-work benefit up to €2,000 per month.[10] The full phase-out occurs just below the full-time minimum wage of €2136 per month. A major administrative strength of the Mini-Jobs schemes is that it is simple enough for the benefit to be immediately incorporated in weekly or monthly pay packets. Overall, the Mini-Jobs scheme has successfully developed a new labour market for limited-hour part-time jobs but has some significant limitations. In particular, the scheme only incentivises part-work with the maximum incentive given to those working 10 hours a week. In contrast, the scheme currently provides no incentives at all to move into full time work. Moreover, the Micro-Jobs scheme is not well integrated with the German benefit system: in fact, high welfare benefit-withdrawal rates on earned income tend to fully offset the additional work incentives of the Micro-Jobs scheme for benefit recipients.

Hybrid income support scheme and in-work benefit schemes (e.g. French Prime d'activité)

The French Prime d'activité scheme provides an example of the full integration between the income support scheme and the in-work benefit scheme.[11] A basic targeted income amount is defined based on household composition to which 61% of family earned-income is added plus some an additional supplement ("bonification individuelle") at a 24.4% marginal rate for earning between 50% - 100% of the full-time minimum wage. The net benefit amount is then defined as the difference between this targeted amount and total household revenues. The effective benefit earned income disregard is therefore 61% of family earned income up to the 50% of the minimum wage and then 85.4% (income disregard plus the supplements) from 50%-100% of the full-time minimum wage. The Prime d'activité scheme therefore does provide incentives for individual members of low-income households to earn more than 50% of the minimum wage, whilst retaining a right to benefits. However, its limitation as a low-income focused benefit scheme means that it cannot provide wider incentives for labour market participation, for example, for second earners in medium- and high-income households (e.g. married women).

Employee Tax Credit schemes (e.g. Arbeidskorting, Netherlands)

Employee tax credit schemes are characterised by in-work benefits that increase at least up to the minimum wage, with the gradual phase out of in-work benefits postponed to higher income levels. The first scheme of this type was the Dutch Arbeidskorting introduced in 2002. Based on the economic analyses of Oers et al 2000, the in-work benefit was initially not phased-out in order to avoid disincentive effects on higher-income workers. Eventually, given the high fiscal cost of not phasing out the benefit, a gradual benefit phase-out was introduced at high-income levels where any disincentive effects are small. The scheme had significant positive effects on the labour supply of previously non-working married women, amounting to around 2% of the average working hours of the population (Bosch and van der Klaauw 2012). The current Arbeitskorting[12] has a complex schedule: an 8% marginal in-work benefit rate up to around half the minimum wage, rising to a 29.8% up to the full-time minimum wage, and then with a further small increase in the in-work benefit rate up to 167% of the minimum wage. The in-work benefit is then fully phased-out at five times the minimum wage. A similar approach was widely adopted in several countries including Italy, Sweden, Finland, and Denmark. Administratively, the Arbeidskorting itself is immediately incorporated in salary payments as part of the withholding tax system. This is not the case in all of the other countries.

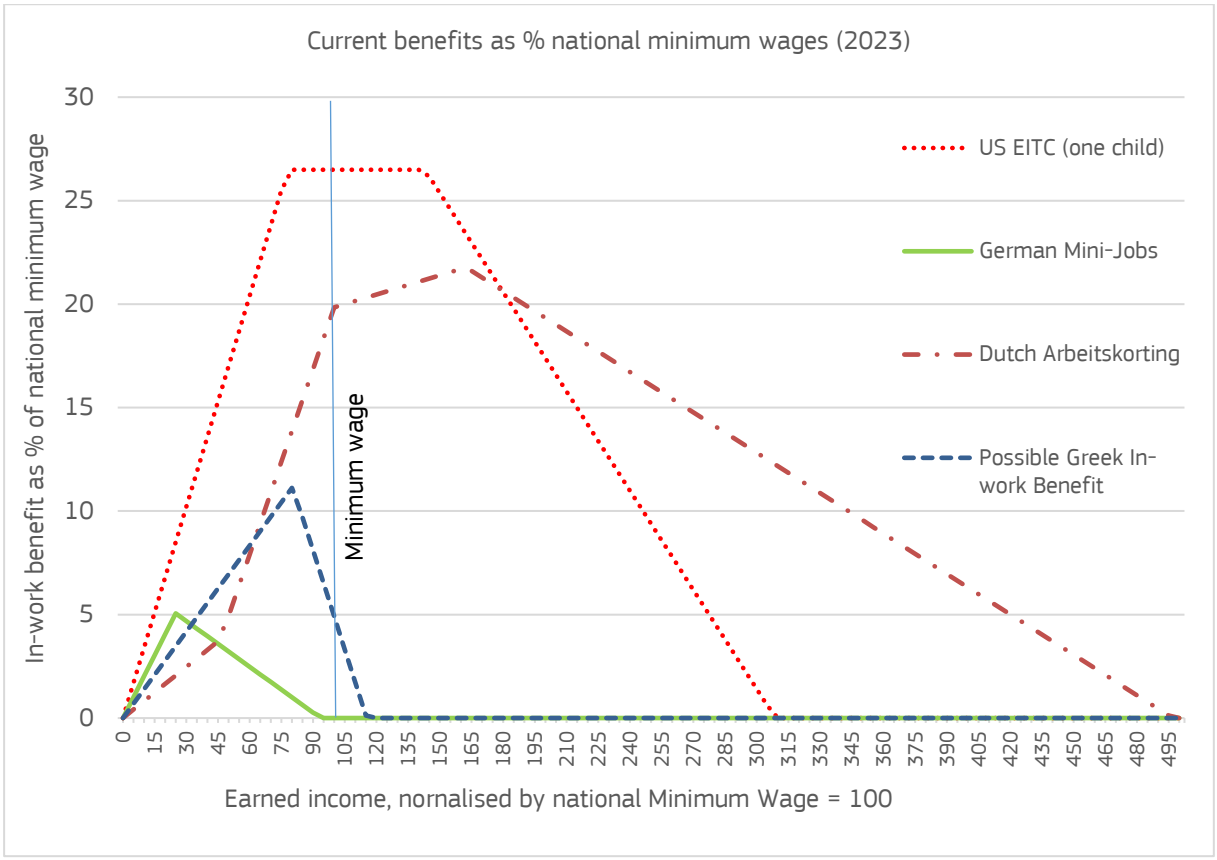
[8] Figures on Mini-Jobs for Q1 2024 from Minijob Zentrale (2024); the estimate for Midi-Jobs comes from Herget and Riphahn (2022).
[9] The in-work benefit is provided through an exemption from employee social security contributions. Earnings from several different part-time jobs can be aggregated together subject to the overall earnings limits.
[10] EUROMOD formula in Lay et al. (2023).
[11] Code de la sécurité sociale, Livre VIII: Titre IV: Prime d'activité: Chapitre III: Détermination de la prime d'activité (Articles D843-1 a D843-4). See Kavkasidze (2024) for a clear explanation.
[12] Belastingdienst (2024).

4.2 CROSS-COUNTRY LESSONS FOR THE DESIGN OF IN-WORK BENEFIT SCHEMES

Graph 4.2.1 uses a heuristic device to compare the structures of in-work benefits schemes in the United States, the Netherlands, and Germany[13]. In order to facilitate a comparison of the design of the design of various schemes, the graph shows in-work benefits as a percentage of the national minimum wage (y axis) versus earned income normalised by the national minimum wage (x axis)[14]. An increasing line shows in-work benefit benefits rising with earned income; a falling line shows the phase-out of in-work benefit as earned income increases.

It can be seen that the Dutch and the German schemes target entirely different segments of the labour market. As described above, the German Mini-Jobs scheme focusses purely on part-time jobs, with no incentive for moving to full-time employment. In contrast, the Dutch Arbeitskorting targets full-time employment, but also provides important incentives on shifting part-time workers into full-time jobs. The phase-out of the Dutch benefit is very low at 6.5%. A comparison with the US EITC (benefit for one child shown) shows a much greater percentage benefit is given, mainly targeting full-time employment, but also giving substantial incentives for part-time employment. The scheme has a much faster phase-out rate of 16% compared to the Dutch scheme.

Graph 4.2.1 **Heuristic cross-country comparison of in-work benefit schemes**



Source: Own analysis based upon US Internal Revenue Service (2024), Lay et al. (2023) and Netherlands Belastingdienst (2024). The illustrative Greek In-work benefit is discussed in section 5.2 below (see also graph 5.2.1).

Based on an assessment of the strengths and weakness of these various schemes (see Box on "Key design considerations for in-work benefit schemes"), four important design considerations for in-work benefit schemes can be identified:

[13] The chart also includes for comparison purposes the illustrative possible Greek in-work benefit discussed in section 5.2 below.
[14] This heuristic device is inspired by Blundell and Hoynes (2004), who achieve a similar comparative result using a non-market exchange rate to compare the US EITC and the UK in-work benefit schemes.

- To maximise impact and ensure cost-effectiveness, in-work benefits should be targeted towards areas where substantial new labour participation is possible.
- To limit the potential disincentive effects of the phase-out of in-work benefits through limiting the number of existing workers that would be negatively affected.
- To maximize the incentive-effectiveness and poverty-reduction effects of in-work benefits on low-income households, benefit payments should be paid on a real-time basis.
- To enable poverty reduction, it is important to ensure good integration between the in-work benefits and existing welfare benefit schemes.

BOX 4.2.1 .**KEY DESIGN CONSIDERATIONS FOR IN-WORK BENEFIT SCHEMES**

Based on US and EU experience, a number of key trade-offs can be identified in the structure of in-work benefit schemes. These trade-offs offer important lessons for the design of effective, efficient, and fair in-work benefit schemes.

Trade-off 1: Scale of incentive to enter the labour market versus short-term fiscal cost

Providing in-work benefits increases work incentives, but also can have substantial short-term fiscal costs. New job creation from in-work benefits will generate new tax revenue and reduce spending on other welfare benefits, on average offsetting some 60% their initial fiscal costs and sometimes having a net positive fiscal effect in the long-run (Barrios et al 2016). Nevertheless, the induced rise in employment is gradual and there will inevitably be short-term fiscal costs to a new benefit scheme. To maximise impact and ensure cost-effectiveness, in-work benefits can therefore be targeted at those segments of the labour market, where substantial new labour participation can be envisaged. For example, the German Mini Jobs scheme particularly targeted part-time jobs of 10 hours a week, based on the perceived need of a newly-developing consumer services market. In contrast, the Dutch Arbeitskorting scheme focussed on improving the incentives for part-time workers to move into full-time jobs. In the Greek case, it is essential to examine closely the distribution of hours of work amongst existing workers, as an indication of the existing demand for labour: for example, since some 75% of all existing jobs are for more than 35 hours a week, it would be sensible to take this into account when targeting a new in-work benefit scheme.

Trade-off 2: Encouragement of new participation versus disincentives for existing workers

For fiscal cost reasons, most in-work benefit schemes include a phasing-out of in-work benefits at higher income levels. The phasing out of benefits creates disincentives for the hours of work of existing workers. The net effect of the in-work benefit on labour supply of course needs to offset the negative effects of possible reductions in hours by employees, from the positive effects on hours from new labour participants. Since these disincentive effects can always be reduced by a slower and more costly phase-out of the in-work benefit, this trade-off is in reality a trade-off between minimising disincentives and fiscal cost. It is therefore important to limit the potential disincentive effects of the phase-out of in-work benefits through minimising the number of existing workers that would be negatively affected. In Germany and the Netherlands, there was a concern about the high number of existing workers earning at or just-over the full-time minimum wage. In Germany, the Mini-Jobs scheme was thus phased-out prior to the full-time minimum wage rate. In the Netherlands, the Arbeitskorting scheme increases until some 160% of the full-time minimum and then is only gradually very phased out to limit any negative effects. In the Greek case, it is essential to examine the distribution of monthly wages of existing workers to be able to examine whether or not a compressed wage structure above the full-time minimum wage is a feature also of the Greek labour market. A more detailed model-based assessment of the effects of a specific in-work scheme in Greece is provided in the next section.

Trade-off 3: Labour market incentives versus poverty reduction

All in-work benefit schemes can have significant effects in terms of reducing poverty, especially amongst those who are enabled to enter the workforce. There can however be a trade-off between in-work benefit schemes providing incentives to everyone in low-income employment and those schemes that are focussed solely on those assessed as living in low-income households. The latter type of scheme is more effective at poverty-reduction, but excludes many categories of people who may be incentivised to enter the labour market, notably women living with higher-income partners and retired people with pension income. To enable poverty reduction, it is therefore important to ensure good integration between the in-work benefits and existing welfare benefit schemes. A disadvantage of the German Mini Jobs scheme in reducing poverty was

that high welfare benefit-withdrawal rates on earned income reduced its effectiveness. In contrast, the French Prime d'activité scheme integrates an in-work benefits scheme directly into the welfare benefit system that maximizes its impact on poverty reduction. However, a disadvantage of this scheme is that it limits the scope of in-work benefits to low income families. In the case of Greece, it is very important that many new in-work benefits are well integrated with the Guaranteed Minimum Income benefit system. A decision would also need to be taken on the relative important of mobilising additional labour supply versus poverty reduction.

Trade-off 4: Benefit effectiveness versus benefit targeting

A further trade-off that in-work schemes face is between administrative simplicity and poverty targeting. Full poverty targeting requires a full assessment of household income, involving frequent assessments or a comprehensive annual assessment through income tax returns. Frequent assessments involve additional administrative costs, whilst use of income tax returns results in a considerable delay in benefits payments. To ensure the transparency and effectiveness of in-work benefits for low income households, it is therefore most efficient that benefit payments are made on a real-time basis. An important disadvantage of the US EITC is that use of annual tax returns greatly increases payment uncertainty and delays the actual payment of benefits by more than one year. The French Prime d'activité requires comprehensive three-monthly reporting of earnings. In contrast, the German Mini Jobs scheme is simple enough to be paid along with monthly pay packets. In the case of the introduction of a new in-work benefit in Greece, transparency and effectiveness of the new work incentives would be improved by a system that could be implemented through monthly pay packets.

5. ROLE, DESIGN, AND IMPACT OF A POSSIBLE NEW IN-WORK BENEFIT SCHEME IN GREECE

5.1 DESIGNING AN IN-WORK BENEFIT SCHEME IN GREECE

This section examines the development of a possible new in-work benefit scheme in Greece. Based on the design principles discussed in the last section, it is examined how such a scheme could be made both effective and cost efficient by targeting its impact on new labour market entrants, whilst limiting unintended disincentives for existing employees. Also examined is how to maximise its impact on poverty reduction, through ensuring close integration with existing welfare benefit schemes. Finally, a simple benefit structure is considered that could facilitate the timeliness and transparency of the benefits provided to cash-constrained beneficiaries.

I. Maximising impact and cost-effectiveness through targeting incentives for labour market entry

Greece still faces strong budgetary constraints, with the need to progressively reduce the debt to GDP ratio over the coming years. In order to limit fiscal costs, a highly targeted in-work benefit scheme could maximise incentives for labour market entry, whilst minimising the disincentive effects on the hours of existing workers.

The current distribution of the working hours of employees is highly skewed towards full-time employment, with almost 75% of employees working more than 35 hours a week (Table 5.1.1). Moreover, only 13.5% of employees work 20 hours or less. Hence, in order to maximise policy effectiveness, an in-work benefit scheme would as far as possible need to provide incentives both for part-time and full-time employment.

Table 5.1.1: **Distribution of Working Hours of Employees (Q4 2023)**

Hours/week	Number of workers	% distribution	Cumulative % distribution
1-4	33,295	1.5%	1.5%
>4 - 10	61,410	2.7%	4.1%
>10-20	215,857	9.4%	13.5%
>20-35	268,182	11.7%	25.2%
>35	1,718,101	74.8%	100.00
Total	2,296,845	100.0%	100.0%

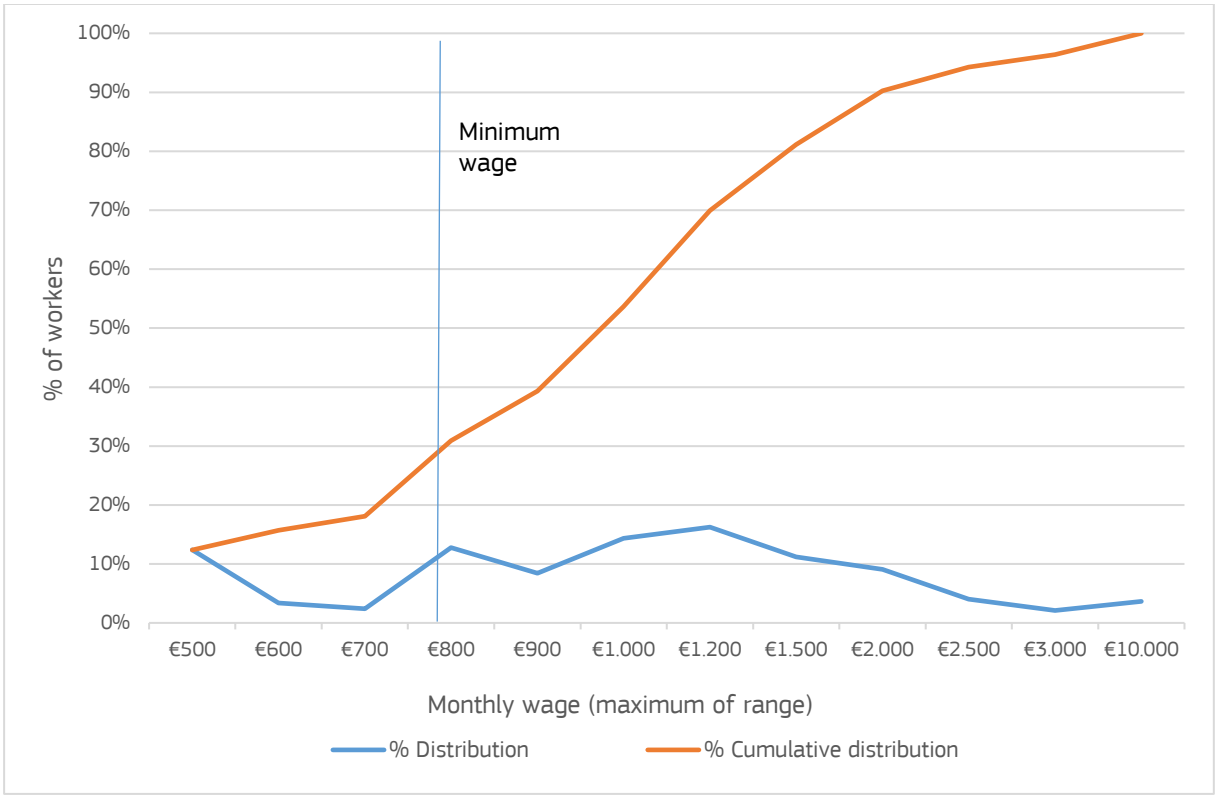
Source: Ministry of Labour (2024) ERGANI Annual filing of Enterprise Data October/December 2023.

II. Minimising disincentive effects on hours of existing workers

The second principle for in-work benefit design is that cost-efficiency can only be maximised through limiting the band of existing workers that would be negatively affected by the phase-out of the benefit. This requires giving attention to the overall distribution of the wage income of existing workers.

In Germany and the Netherlands, the scope of the in-work benefit scheme was constrained by highly compressed wage structure above the full-time minimum wage. Although common in many other EU Member States, this wage-compression phenomenon does not seem to apply to the distribution of wages in Greece. This may in part reflect the 2012 reforms, in which the minimum wage was reduced by 22 per cent for those aged 25 and above and by 32 per cent for younger workers. Graph 5.1.1 shows the distribution and cumulative distribution of monthly wages in Greece; the latest available data are from Q4 2023 at which time the full-time minimum wage was €780 per month. At that time, only 12.8% of workers were in the same earnings interval as the minimum wage (the €701-800 per month wage category), whilst only a relatively small 8.4% proportion of the total were in the next highest category (€801-900 per month). Overall, only 23.6% of the existing wage distribution is between €601-900 per month, so a phase-out the in-work benefit over this wage range would affect only a relatively small number of existing workers. At wages beyond €900 per month, however, the cumulative distribution of workers increases steeply: raising the benefit phase-out threshold to €1000 per month, for example, would increase its coverage to 38% of the wage distribution.

Graph 5.1.1. **Distribution and cumulative distribution of monthly wages in Greece**



Note: Data correspond to monthly wages of all workers in Q4 2023.
Source: Ministry of Labour (2024) ERGANI Annual filing of Enterprise Data October/December 2023.

III. Optimising the potential interaction of in-work benefits with the GMI benefit scheme

Given the size of the existing GMI scheme, it is important to ensure that GMI recipients can benefit from the new incentives to join the labour market. To achieve this, the in-work benefit itself must be excluded from the definition of earned income used to assess GMI eligibility and benefits. Moreover, in-work benefits should ideally provide a substantial enough incentive above the GMI maximum earnings

threshold to persuade recipients to start to earn enough in the labour market that they can entirely relinquish their dependence on GMI.[15]

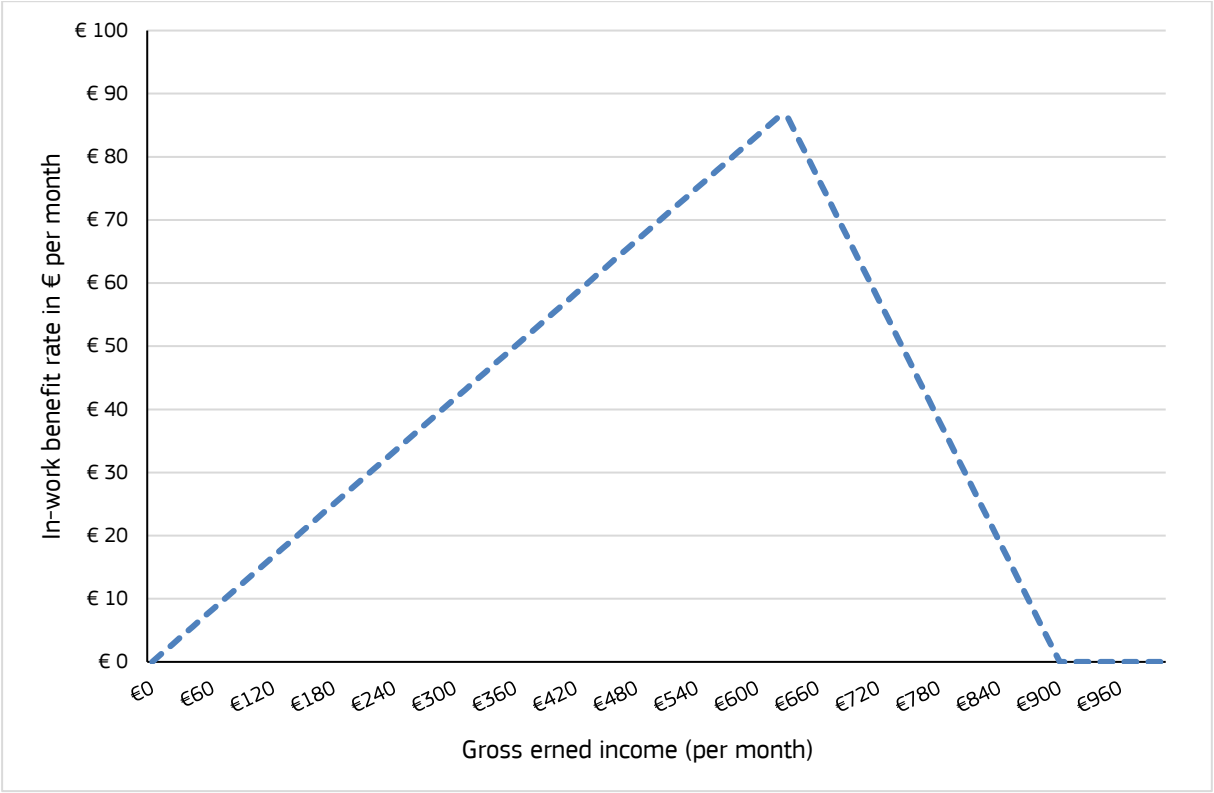
IV. Ensuring administrative simplicity

As noted in the section 4, the transparency and real value of in-work benefits for low-income recipients is maximised though their direct inclusion in monthly or weekly pay packets. A simple proportional structure of in-work benefits greatly facilitates improve this. In the Greek context, an in-work benefit that offsets for low-income workers the 12.9% social security contribution rate fully or in-part would allow the direct payment of in-work benefits through employee payroll.

5.2 AN ILLUSTRATIVE IN-WORK BENEFIT SCHEME IN GREECE AND IMPACT ON LABOUR MARKET INCENTIVES

Based on the above design considerations, an illustrative in-work benefit scheme is being considered. The scheme is designed in a way that it offsets the employee social insurance contributions of all low-income earners up to the GMI income threshold of a couple with two children of €627 per month. This ensures a maximum benefit amount of just less than €90 per month, providing improved participation incentives for all low-income workers, whether or not they are GMI recipients. Beyond the maximum benefit threshold, the benefit is phased out until it zero at around €900 per month, avoiding the main peak in the wage distribution. This design provides small but significant incentives for low-income workers to declare their earnings up to and beyond the current €780 per month minimum wage. Its schedule is illustrated in Graph 5.2.1 (see also the comparison of this schedule with in-work benefits in other countries in Graph 4.2.1).

Graph 5.2.1. **Illustrative in-work benefit based on design principles**



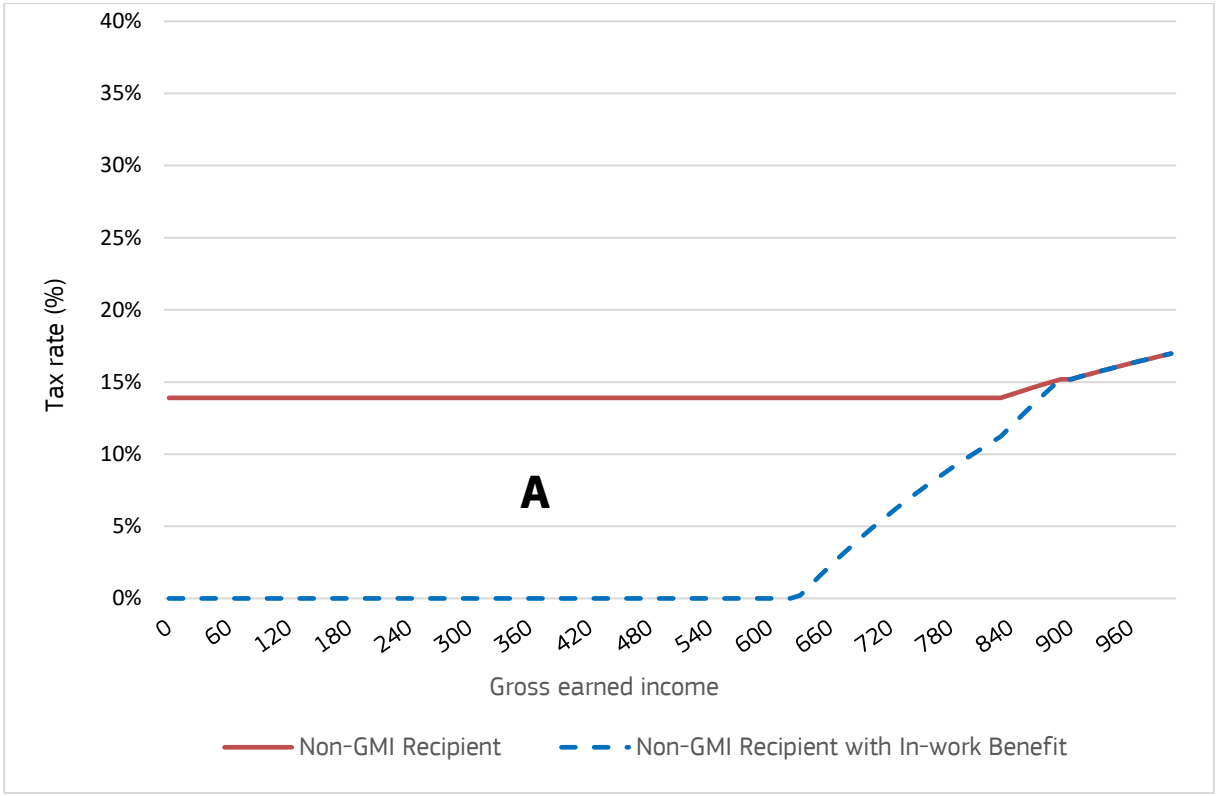
Source: Own elaboration.

[15] In the Annex, we examine a complementary reform that would increase the earnings disregard in the existing GMI scheme.

The incentive effects of the in-work benefit on new labour market participants can be assessed through the participation tax rate (PTR), measuring the impact of taxes and benefits on take-home pay for new labour market participation.

First, the impact of the in-work benefit is examined for somebody who is not a GMI recipient. For such people, the new scheme would provide substantial incentives for them to join the labour market. It would effectively fully offset the employee social security contributions of low-income earners up to a gross earned income of €627 per month. The relevant participation tax rate is reduced from 14% to 0% over this income range, improving good incentives to take on a new part-time job (Graph 5.2.2). Above gross earned incomes of €637, the in-work benefit is gradually phased out up to an earned income of €900 per month. Thus, for all monthly earned incomes up to €900 per month (the region labelled "A" on the chart), greater incentives are given to participate in the labour market.

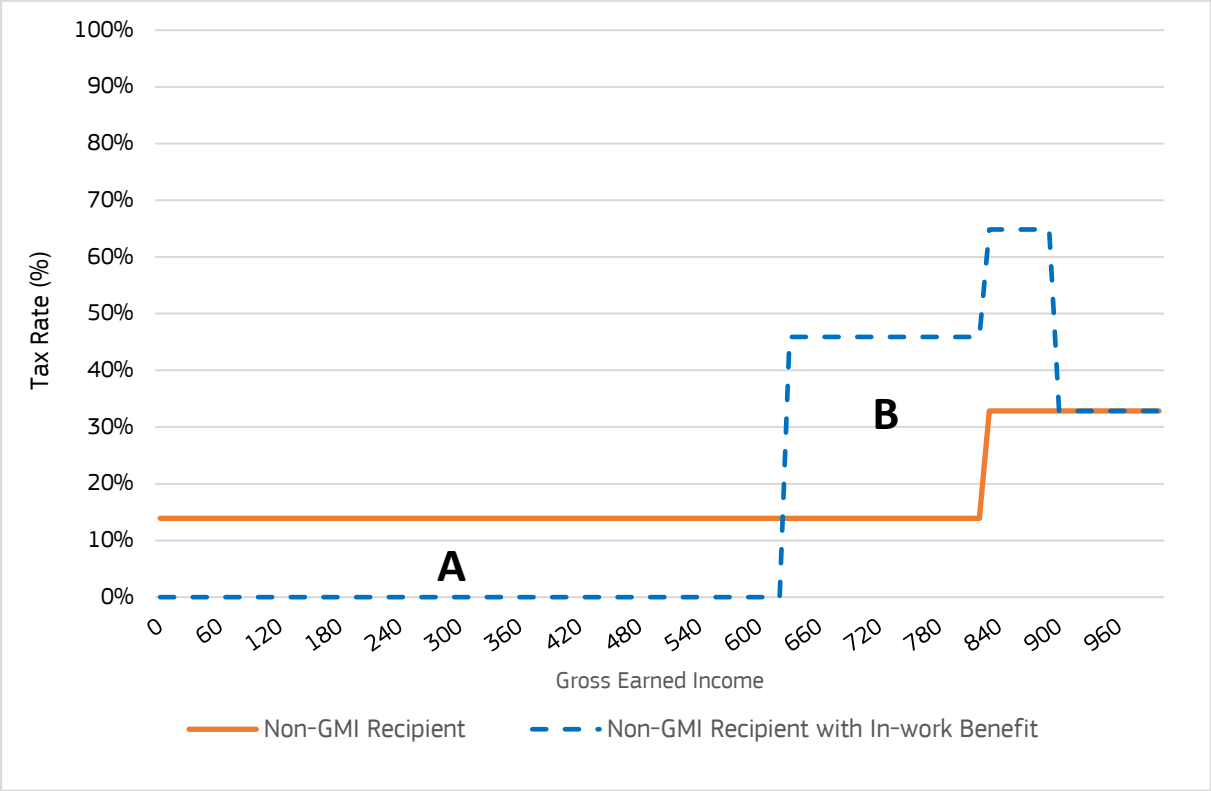
Graph 5.2.2. **Participation tax rates: Impact of in-work benefit on non-GMI beneficiaries**



Source: Own analysis based on end-December 2023 benefit and income tax rates.

Graph 5.2.3 shows the impacts of the illustrative in-work benefit scheme on effective marginal tax rates (EMTR) for non-GMI recipients. As with the participation tax rate (PTR) in the previous Graph, the effective marginal tax rate (EMTR) is zero up to a gross earned income of €627 per month (zone A). However, as a result of the phase-out of the in-work benefit, the EMTR would rise to 46% for gross earnings of between €630-830 per month and briefly to 65% for gross earnings of €830-900 per month as result of reaching the income tax threshold (zone B). This could negatively affect the working time decisions of those already in jobs. We evaluate empirically the scale of this impact later in this section. For the moment, official statistics (Table 3.1.3 and Graph 5.1.1) suggest that some 20-25% of existing workers may be affected by this effect.

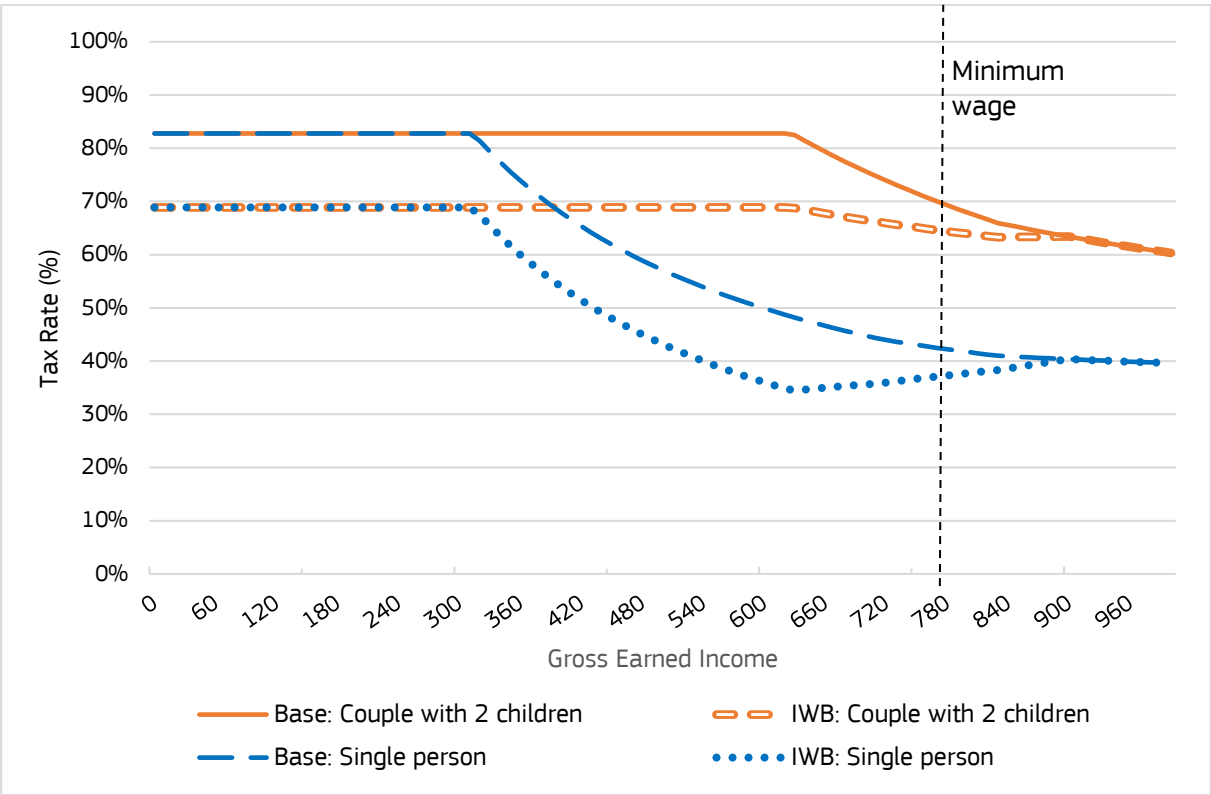
Graph 5.2.3. **Effective marginal tax rates: Impact of in-work benefit on non-GMI beneficiaries**



Source: Own analysis based on end-December 2023 benefit and income tax rates.

The in-work benefit also would provide more limited support for GMI recipients, focussed on single people, who make up more than half of all recipient households. As discussed earlier, an important current disincentive for GMI recipients to take an on-going job is that only 20% of their earned income will be disregarded in their next six-monthly assessment for GMI benefits: the other 80% of their earned income will directly be offset against their benefit entitlement. Once social insurance contributions are taken into account, this means that GMI beneficiaries face a very high participation tax rate of some 83%. The relevant participation tax rates would be substantially by an in-work benefit, as shown in Graph 5.2.4. For a couple with two children the PTR would fall from 83% to 69%, whereas for single people, who make up 60% of GMI beneficiaries, the effects would be larger with the participation tax rate falling to 50% for a job of €450 a month and 36% for a job at €600.

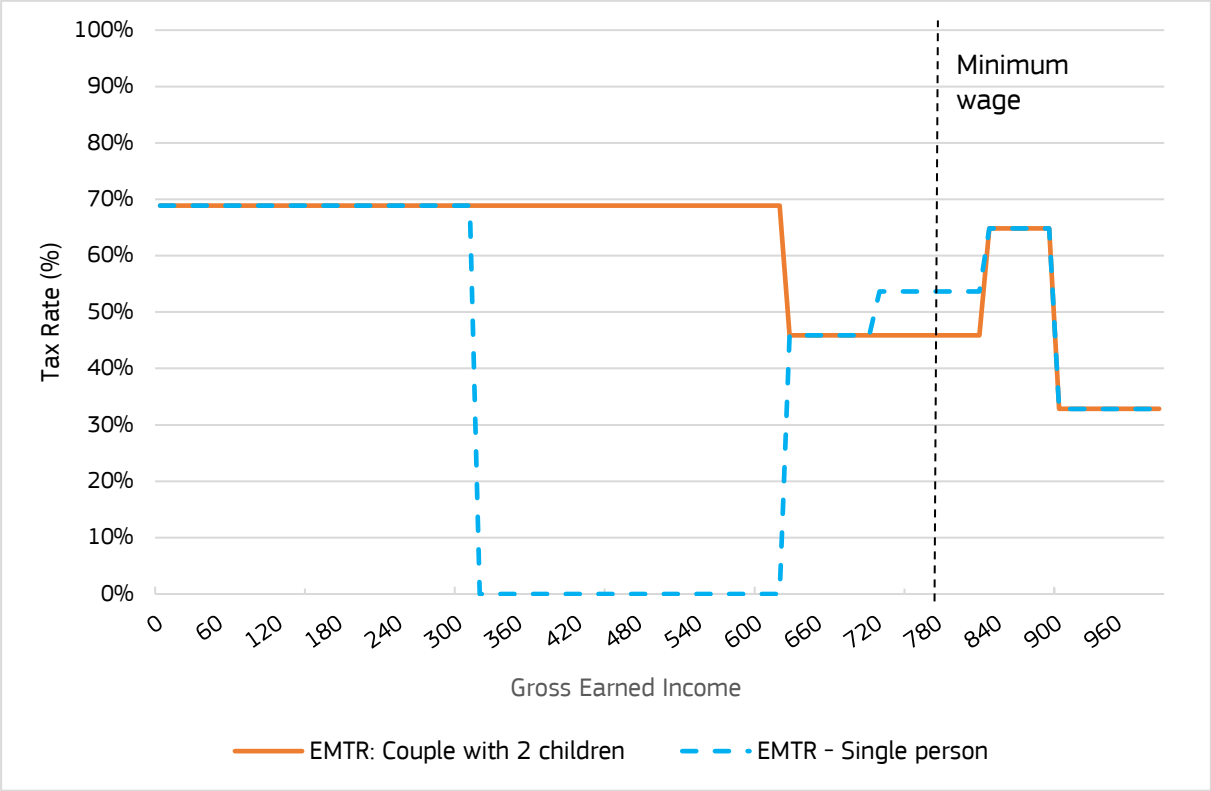
Graph 5.2.4. **Participation tax rates: Impact of in-work benefit on GMI beneficiaries**



Source: Own analysis based on end-December 2023 benefit and income tax rates.

The impacts of the illustrative in-work benefit scheme on effective marginal tax rates for GMI recipients are shown in Graph 5.2.5. The EMTR for those continuing to claim the GMI would fall by some 14 percentage points from the current 83% to 69%. Reinforcing the participation tax rate effect, the effective marginal tax for single persons would remain zero in the earnings range of €330-630 per month. The EMTR for both single persons and a couple with two children would rise to 46% at €630 per month and further up to 65% from €830-900 per month as a result of the income tax thresholds. However, since most GMI recipients are currently out of the formal labour market, the EMTR is not so important for this group.

Graph 5.2.5. **Effective marginal tax rates: Impact of in-work benefit on GMI beneficiaries**



Source: Own analysis based on end-December 2023 benefit and income tax rates.

5.3 SIMULATING THE IMPACT OF AN IN-WORK BENEFIT SCHEME

In this section, EUROMOD, the tax-benefit microsimulation model for the European Union, is used to make a first assessment of the impacts of this illustrative in-work benefit scheme. The model, developed and maintained by the Joint Research Centre (JRC) of the European Commission in collaboration with Eurostat and a network of national experts from the EU Member States, allows researchers and policy analysts to study, in a comparable way, the first-order fiscal and distributional effects of taxes, social insurance contributions (SIC) and cash benefits on household incomes.[16] The model's underlying data used for this work are based on SILC 2020 (2019 incomes). In this analysis, EUROMOD is used jointly with EUROLAB, JRC's discrete choice econometric model. The latter allows to estimate the impact of the in-work benefit introduction on labour supply, thus factoring in the potential behavioural impact of the reform and determining the extent to which its direct fiscal impact differs from its full impact considering such behavioural aspects.[17]

The overall employment impacts of an in-work benefit have been assessed using the EUROLAB model that estimates behavioural labour supply responses. The dynamics of employment growth are shown in Graph 5.3.1. Overall, the introduction of the in-work benefit, is estimated to increase substantially the labour participation rate, by 0.9 percentage points of the workforce, approximately some 60,000 additional workers. Women's participation rate is expected to increase by 1.2 percentage points, about twice the increase in the men's participation rate. In numbers, women's labour market participation would increase by some 39,000 and men's participation by some 22,000. Most of the new workers are expected to move into full-time jobs. Overall labour hours are expected to increase by 1.2%.

The participation effects are mainly due to the encouragement of non-GMI recipients back into the workforce though effectively creating a 0% participation tax rate for starting new low-income jobs. The in-work benefit, however, creates a proportionally much smaller reduction in participation tax rates for GMI recipients. In fact, simulations show that an in-work benefit scheme would have a small impact on

[16] More details about EUROMOD can be found at https://euromod-web.jrc.ec.europa.eu/. See also Leventi et al (2022).
[17] More details about EUROLAB can be found in Narazani et al. (2020).

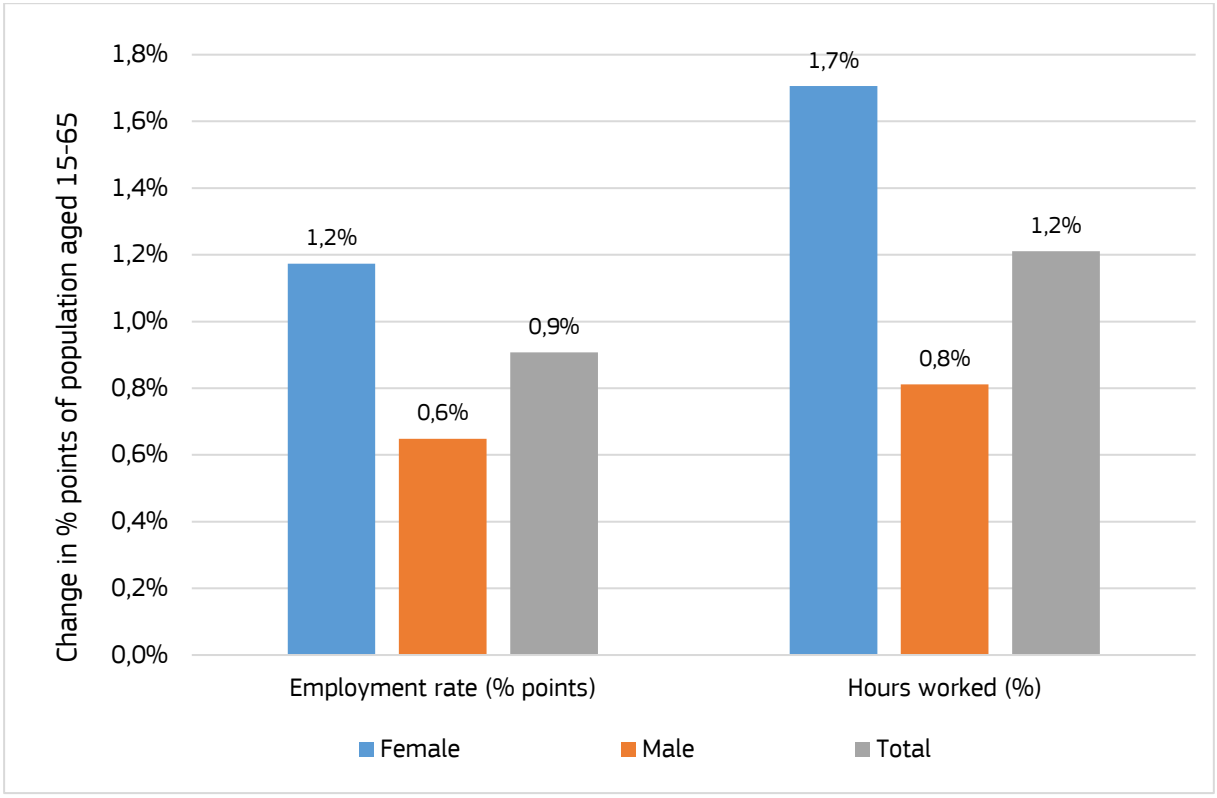
the participation rate of GMI recipients, raising it by only 0.4 percentage points or approximately 1000 people. Nevertheless, GMI-recipients who already work are expected to increase their hours by some 7% owing to lower marginal tax rates.

The EUROLAB model simulation is based upon the existing distribution of jobs in the labour market, where more than 75% of all jobs are for more than 35 hours. The effects on employment could thus be considerably larger than those estimated if regulatory and other reforms were to strengthen part-time job opportunities.

The distribution of income is also estimated to improve, with the Gini coefficient falling slightly (by 0.5%) and the at-risk-of-poverty rate decreasing by approximately 0.6 percentage points for the active population.

The overall fiscal cost of the new scheme is estimated at €290 million a year once induced-employment effects on taxes and benefits are taken into account compared with a baseline estimate of some €320 million. The potentially sizeable macroeconomic effects of the increase in employment hours by 1.2% of the workforce are not included in this estimate and could substantially reduce the overall cost.

Graph 5.3.1. **Estimated impact of in-work benefit scheme by gender**



Note: The employment rate corresponds to percentage points of working population aged 15-65 years
Source: Own calculations using EUROLAB.

6. CONCLUSION

In this paper, the potential role, feasibility and potential impact of a possible in-work benefit scheme in Greece has been examined. Such schemes have been successfully used in other EU Member States to encourage labour market participation and reduce poverty, most often as part of a wider labour market reform.

Greece has a substantial employment participation gap compared to most other EU Member States, with substantially lower employment rates for women and part-time workers and a higher rate of female long-term unemployment. Some 1.3 million of the working-age population are either long-term unemployed or currently inactive in the labour market (excluding those in full-time education and those who suffer from long-term ill or disability). Some 960,000 of this jobless group are women. An important group amongst those inactive in the labour market are the beneficiaries of the Guaranteed Minimum Income (GMI) welfare benefit, who face particularly strong disincentives for labour market participation.[18]

The paper thus examined the potential role for a new in-work benefit scheme to provide financial incentives for new participation in the labour market and to reinforce other labour supply policies. In order to explore the optimal design of such a scheme, we have examined the structure and design of a number of successful best-practice examples from the United States, Germany, France, and the Netherlands. It is notable that these schemes targeted different segments of labour supply: e.g. the German Mini-Jobs targets low-income part-timers, the Netherlands scheme targets full-time minimum-wage and medium-skill jobs, whereas the US EITC gave incentives for a wide cross-section of the workforce. In each case, the trade-offs between the increased incentives for new labour market participation, possible disincentives on existing workers, and the overall fiscal costs of the scheme played a large role in both its design and effectiveness. Examining these schemes, four important design considerations for in-work benefit schemes have been identified:

- To maximise impact and ensure cost-effectiveness, in-work benefits should be targeted where substantial new labour participation can be expected.
- Cost-efficiency can be maximised through limiting the number of existing workers that would be negatively affected by the phase-out of the benefit.
- To maximise the incentive-effectiveness and poverty-reduction effects of in-work benefits on low-income households, benefit payments should be paid on a real-time basis.
- To enable poverty reduction, it is important to ensure good integration between the in-work benefits and existing welfare benefit schemes.

The broad outlines for a new effective and cost-efficient in-work benefit scheme in Greece can be developed through applying these principles. Since an overwhelming 75% of all existing jobs in Greece are for more than 35 hours, the new scheme would need to target new full-time jobs, as well as giving incentives for new part-time work. In fact, the disincentive effects of such a scheme for existing workers are limited owing to the relatively small number of existing workers earning just below or above the full-time minimum wage.[19] Choosing an in-work benefit that is a simple proportion of the gross wage would enable the benefit to be immediately included in weekly or monthly wage packets. Full-consistency with the GMI welfare benefit could most easily be achieved by the fully excluding in-work benefits from the definition of income used to assess GMI eligibility and benefits. Taking account of fiscal constraints, an illustrative in-work benefit scheme is examined that would offset the 13.9% rate of employee social insurance contributions of all low-income earners up to a gross wage of €627 per month (the GMI

[18] In the annex we show that increasing this GMI disregard from 20% to 40% in itself would probably not help to increase overall labour supply.

[19] This is in contrast with the severe compression of the wage structure above the minimum wage found in other EU countries, such as the Netherlands and Germany.

income threshold of a couple with two children) and which then is gradually phased out until it become zero at a gross wage of €900 per month.[20]

The EUROMOD and EUROLAB microsimulation models are used to simulate the behavioural effects of the illustrative in-work benefit scheme. Overall, the introduction of the in-work benefit is estimated to increase the labour participation rate substantially, by 0.9 percentage points of the workforce, approximately some 60,000 additional workers. Women's participation rate is expected to increase by 1.2 percentage points or 39,000 persons, about twice the increase in the men's participation rate of 0.6 percentage points or some 22,000 persons. Most of the new workers are expected to move into full-time jobs of more than 35 hours. Overall labour hours are expected to increase by 1.2%. The distribution of income is also estimated to improve, with the Gini coefficient falling slightly (by 0.5%) and the at-risk-of-poverty rate decreasing by approximately 0.6 percentage points for the active population. The overall fiscal cost of the new scheme is estimated at €290 million a year once induced-employment effects on taxes and benefits are taken into account compared with a baseline estimate of some €320 million per year. However, these costs would be likely to be reduced substantially further, if the positive macroeconomic effects of a 1.2% increase in overall employment would be taken into account.

The conclusion therefore is that an in-work benefit scheme along the lines here illustrated could contribute to an overall strategy to help mobilise and facilitate the long-term unemployed and inactive population to return to the labour market.

[20] The baseline cost of such an in-work benefit scheme, i.e., in the absence of any job creation, would be approximately €320 million per year.

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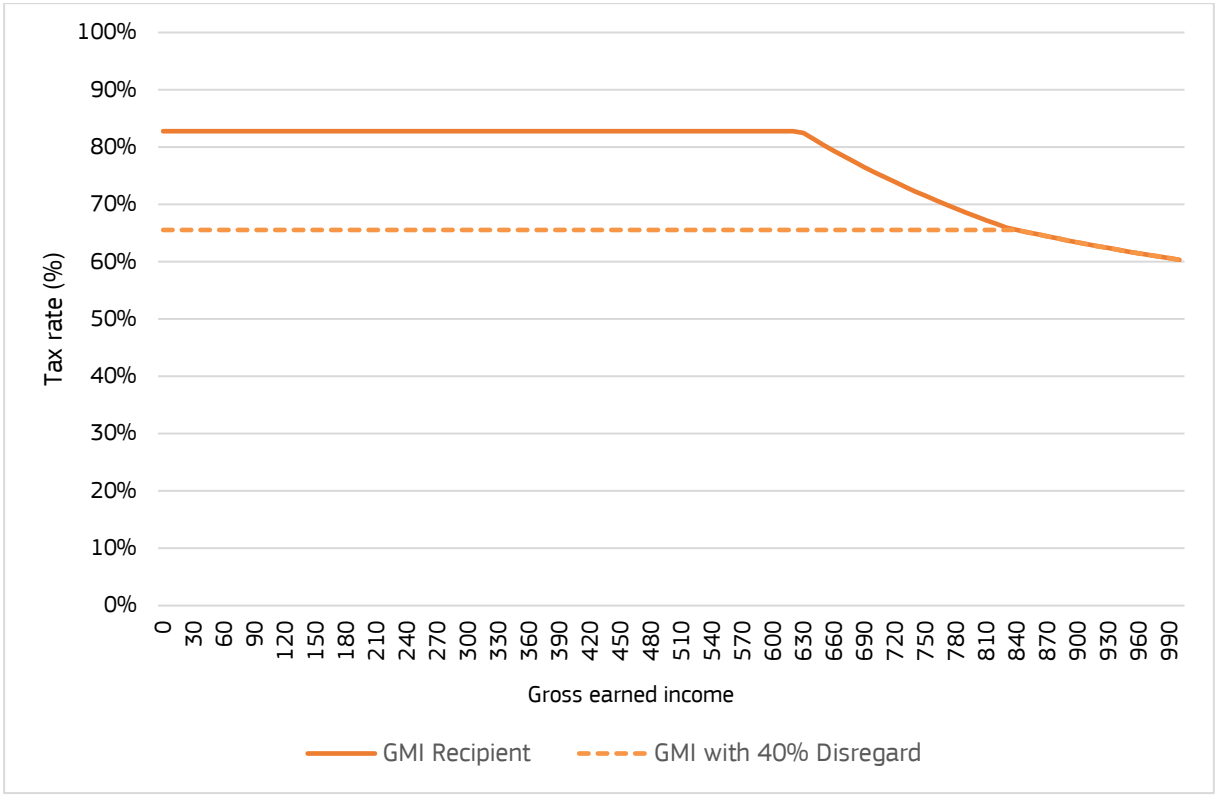
ANNEX: INCREASE IN THE GMI INCOME DISREGARD

As shown in the main text in part 3, GMI beneficiaries provides face particularly strong disincentives for labour market participation owing to the low 20% GMI disregard for earned income: effectively 80% of any sustained increase in their employment income will be deducted from their benefit.

For this reason, we have examined a further scenario in which the GMI income disregard would be doubled from the current 20% rate to a 40% rate. Theoretically, raising the GMI disregard could improve labour incentives for existing GMI recipients, as discussed in the main text. However, it could also result in negative labour incentive effects on higher earners who are currently not eligible for the GMI. For example, doubling the disregard rate would raise GMI eligibility for a couple with two children from €627 per month to €836 per month.

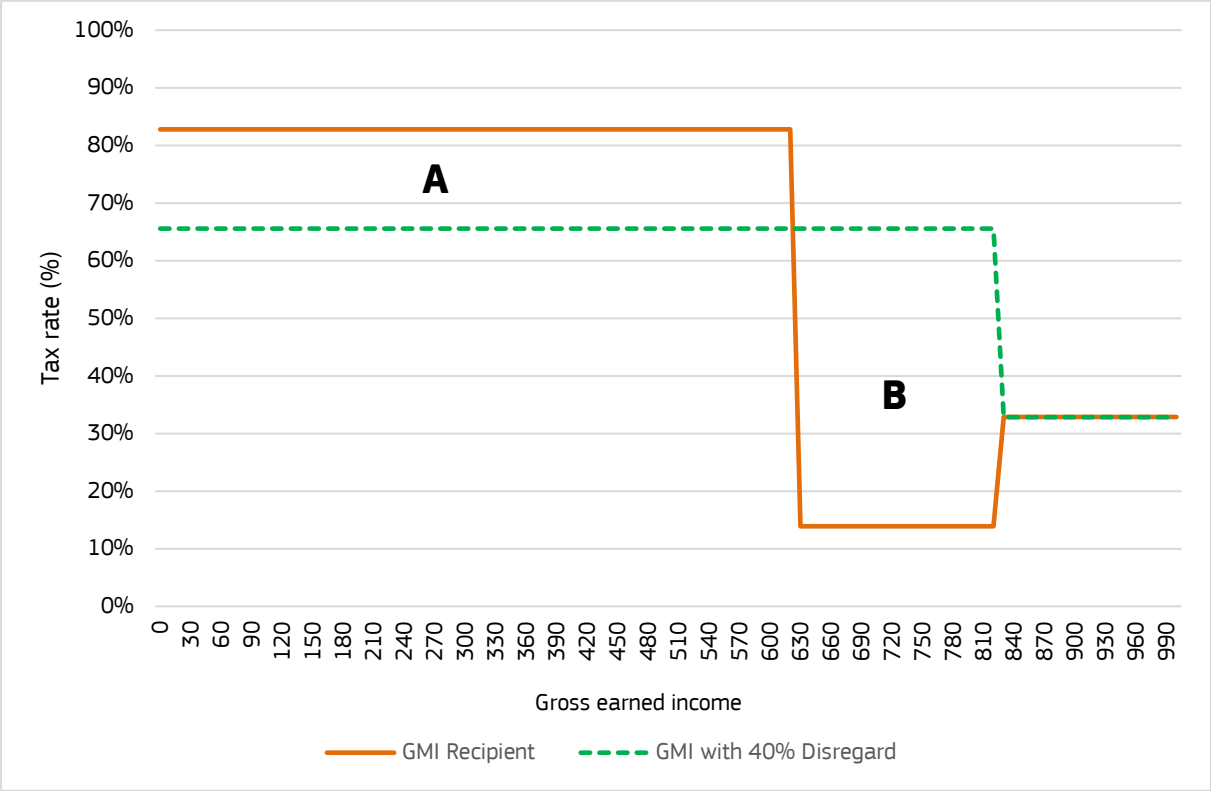
The effects on labour incentives of increasing the disregard can be seen from the effective participation and the marginal tax rate for a couple with two children (Charts A1 and A2). Chart A1 shows the impact on the participation tax rate: the reduction in the PTR rate from 83% to 66% would provide incentives for current GMI recipients them to begin to work. Chart A2 shows the effects of the reduction of the disregard on marginal tax rates. Whilst current GMI recipients will see their marginal tax rates substantially reduced (by area "A"), the effective marginal tax rates beyond the current GMI threshold would in principle rise for existing workers who might decide to begin to participate in the GMI scheme because of its higher threshold (by area "B"). In principle, some of these new GMI recipients might decide to reduce their current number of working hours.

Chart A1: **Effects of increased GMI disregard on participation tax rates**



Source: Own calculations using EUROMOD.

Chart A2: **Effects of increased GMI disregard on marginal effective tax rates**



Source: Own elaboration.

Simulations using EUROMOD and EUROLAB show that the overall effect of an increase in the GMI disregard rate is broadly neutral for overall participation. The positive labour supply effects on existing GMI recipients increasing their participation rate by some 1.5 percentage points are slightly more than offset by the impact of the rise in marginal tax rates on the labour supply of the higher income groups that become eligible for GMI. The aggregate effect is a small net reduction in the overall participation rate by 0.1 percentage points and overall labour hours reduce by 0.14%.

The static fiscal cost of the reduction in the GMI disregard is €50 million per year. This cost is increased to €60 million a year once the slightly negative induced-employment effects on taxes and benefits are taken into account.

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