



MALTA

SELECTED ISSUES

February 2019

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PROMOTING INCLUSIVE GROWTH IN MALTA¹

A. Introduction

1. Reducing poverty and improving social inclusion have been important goals of the government over the last five years. In November 2014, the government published a document summarizing its strategy for social inclusion.² Important policy initiatives included gradual reduction (tapering) of social security benefits when a beneficiary takes up work, in-work benefits for the long-term unemployed who return to the labor market, free childcare for working parents, senior citizens grant, incentives for people with disability to join the workforce and more generally measures to “make work pay”.

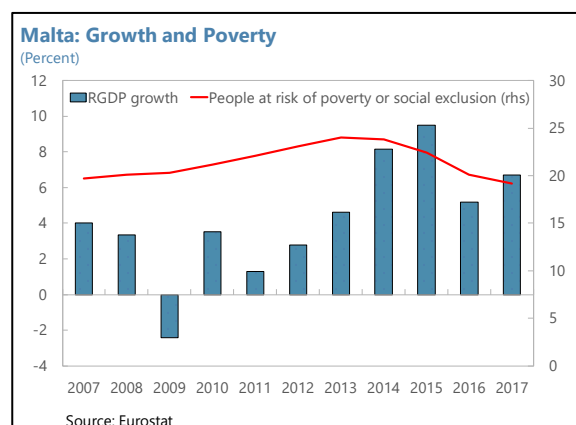
2. And indeed, the participation of female, elderly and long-term unemployed to the labor market has increased, and poverty risk has declined significantly since 2014. However, since this improvement took place against the backdrop of a sharp acceleration in GDP, it is difficult to disentangle the effects of the cycle from those of policy.

3. This short note sets out to assess the marginal impact of s those policies. More specifically, we use a macroeconomic model developed in the research department (RES) of the IMF to isolate the impact on employment, potential GDP, productivity, wages, the current account, and debt ratios (among other variables) of i) increasing childcare and after care benefits, ii) extending working lives, and iii) upskilling the labor force. Simulations will show that policies that are primarily aimed at improving social inclusion also end up boosting potential output, thereby mitigating the fiscal cost of such policies in the long term. Recent declines in poverty rate can partly be ascribed to the cycle, but recent structural reforms likely have had a significant impact on growth.

B. Stylized Facts

4. Poverty risk has been dropping at the aggregate level in recent years, reflecting both cyclical improvement and structural reforms.

The share of people at risk of poverty or social exclusion (AROPE) in Malta had been rising following the Global Financial Crisis, but the trend turned around in 2014. The proportion of underemployed people suffering from material deprivation (particularly related to living standards and financial arrears) has since dropped rapidly as

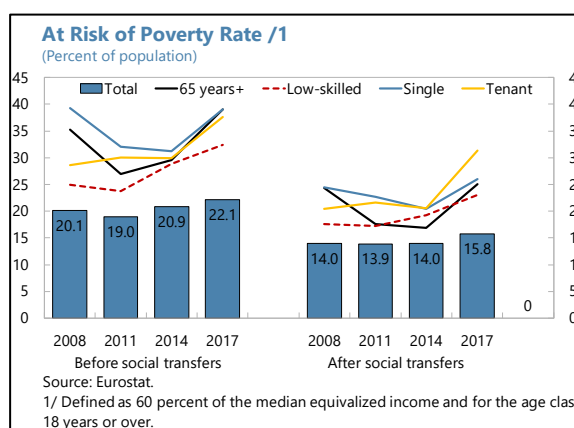
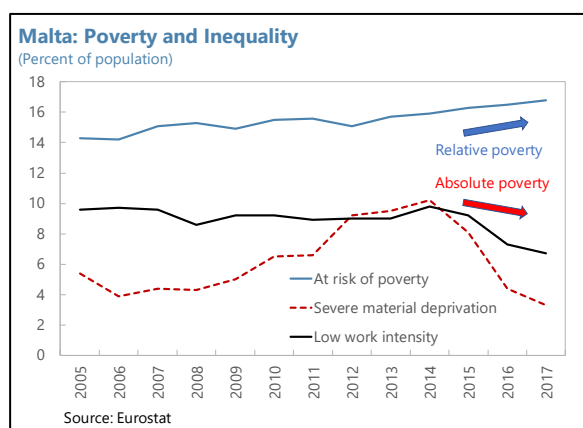


¹ Prepared by Chikako Baba (EUR) and Olivier Bizimana (RES) under the guidance of Jean-Marc Natal (EUR). A working paper is forthcoming, March 2019.

² National Strategic Policy for Poverty Reduction and for Social Inclusion 2014–2024.

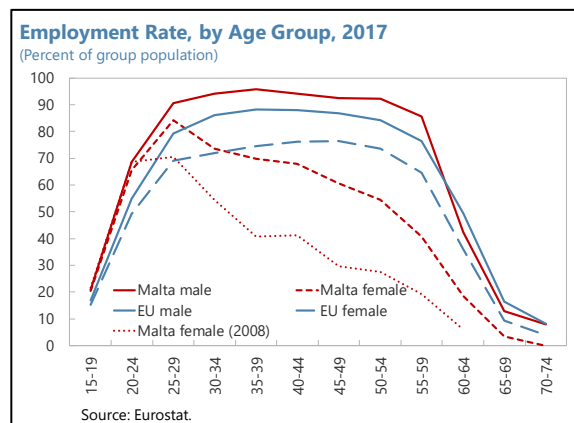
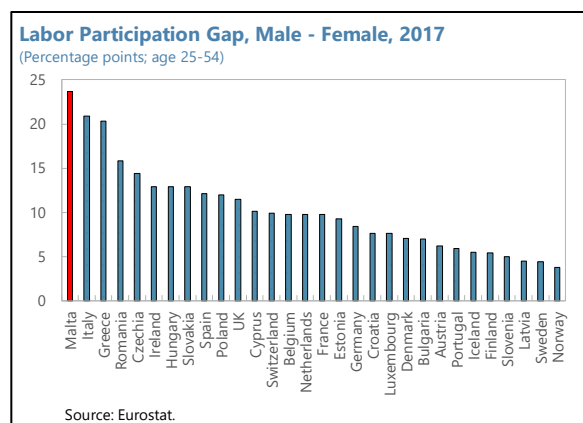
average income surged. Poverty or social exclusion risks in Malta were below the EU average in 2017, a significant improvement from the situation in 2013.

5. The reduction of absolute poverty has been accompanied by rising inequality. At the same time as the share of population suffering from material deprivation has been declining (absolute poverty), the proportion at risk of relative poverty, i.e. earning less than 60 percent of the median income, has been increasing continuously.³ This is confirmed by the Gini coefficient that has also been increasing since 2012 in Malta, while remaining at a lower level than in the rest of Europe. More importantly, the relative risk of poverty has remained high for vulnerable groups (single earners, unemployed, elderly, refugees and tenants), and has been rising recently, even after social transfers, suggesting some scope for further action.



6. Certain subgroups are particularly vulnerable to poverty risks.

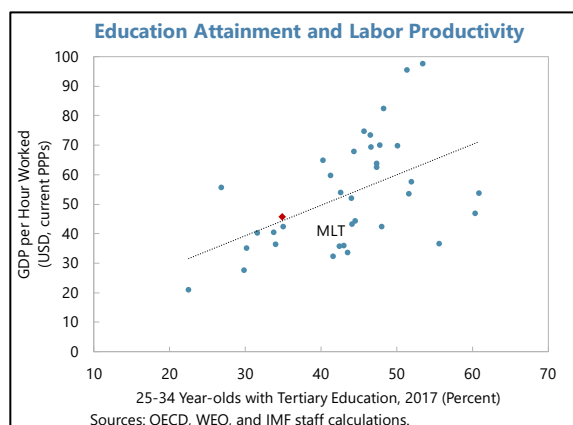
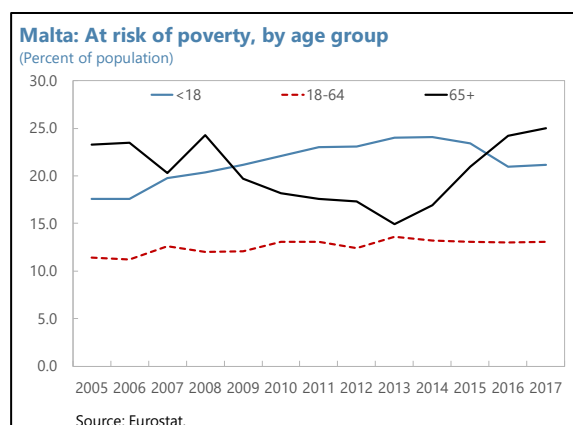
- **Female single earners with children:** The gender overall earnings gap in Malta is among the highest in Europe. This largely reflects the fact that women (especially low-skilled, single mother



³ This needs to be interpreted against a background of rapid income growth in Malta. The median disposable income in Malta rose two times faster than in the rest of the euro area between 2008 and 2016 (Darmanin, 2018).

and relatively older) tend to remain outside of the labor market in Malta.⁴ Recent economic growth and policies to promote female participation in the labor market⁵ have helped close part of the gap, and the participation rate of the younger cohorts of female has caught up with EU averages. Further encouragement and an extension of these policies is needed to ensure that recent gains are made permanent.⁶

- Elderly people:** As pensioners' income has failed to keep up with other incomes, relative poverty risk has increased among elderly.⁷ This points to the need to recalibrate social transfers for elderly, but fiscal implication of raising pension or social benefits would need to be considered carefully in light of existing concerns on pension sustainability in an aging society (IMF 2016). Ongoing changes in the statutory retirement age to 65 by 2027, from 61 for men and 60 for women in 2013, will be an important step to mitigate both fiscal and poverty risks in the long term.
- Low skilled workers:** Early school leaving rates are particularly high in Malta, well in excess of the EU average. Against a background of strong growth, labor participation of low skilled workers has improved recently. However, the relatively low proportion of tertiary educated workers is responsible for relatively low labor productivity and income, and is one of the most commonly cited reason by firms to explain the levels of investment.



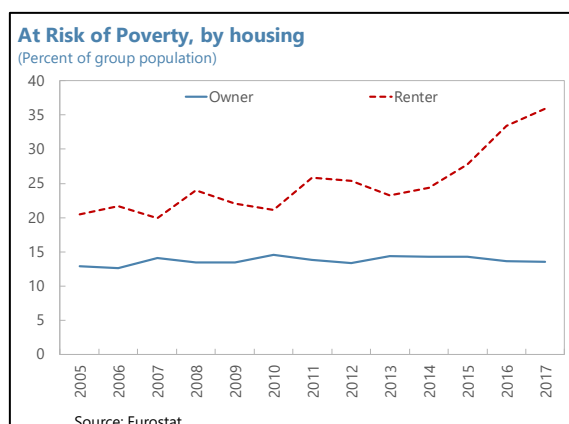
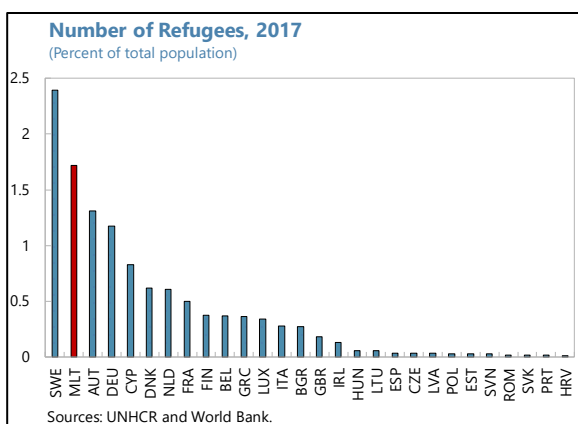
⁴ While gender gaps in hourly earnings and working hours are below the EU average, these gaps have been increasing in recent years. Poverty risk is the most acute among single mothers.

⁵ These include, among others, income tax rebates for long-term unemployed women on re-entering work, free childcare, expanding availability of before and after school care, and in-work benefits for low income households with children.

⁶ A study by the Central Bank of Malta concludes that slightly less than half of the improvement in female labor participation between 2008 and 2014 is attributable to policy reforms (Micallef, 2015).

⁷ The government has introduced budgetary measures in 2017, 2018, and 2019, aimed at increasing pensions and modifying income tax exemptions for pensioners. Their impact on the risk of old-age poverty is yet to appear in the data.

- **Refugees:** The poverty risk is high and rising among low-skilled immigrants from outside of the EU. Among these immigrants, refugees, which represent a sizable share in total population (about 2 percent),⁸ are particularly vulnerable.
- **Tenants:** The poverty risk is rising among tenants, mainly low income households, and their poverty risk is compounded by rapidly rising rents in the unregulated rental market.⁹ This points to the need to improve housing affordability, including through social policies targeted at low income households.



C. Model Simulation Approach – Why FSGM?

7. A large multi-country simulation model, the IMF’s Flexible System of Global Models (FSGM) calibrated for Malta, is used to analyze the macroeconomic impacts of ongoing and potential future reforms. The FSGM stands for a collection of multi-country dynamic general equilibrium models widely used at the IMF to analyze a vast range of policies and their implications for growth, inflation, and the public and external accounts.¹⁰ Its multi-country structure allows a general equilibrium analysis of global interdependences and spillover effects of alternative policies, including through financial spillovers associated with the effect of debt on global interest rates. The simulations presented below are based on the Euro Area module (EUROMOD) of FSGM, which contains a block for each of the 11 major euro area countries, an aggregate of the rest of the euro area, including Malta, and 13 other blocks.¹¹

⁸ Based on UNHCR statistics ([UNHCR, 2018](#)).

⁹ About 40 percent of tenants are elderly people living in controlled rents. Hence the trend also reflects the rising poverty risks among pensioners explained in the previous bullet, rather than rising rental costs.

¹⁰ For details on the structure of FSGM, see [Andrle and others \(2015\)](#).

¹¹ Details on the calibration of key parameters for the Maltese economy are as in [IMF \(2018\)](#) and available upon request.

8. Due to its non-Ricardian features, FSGM is particularly well suited to analyze the kind of labor market reforms described in the next section and their fiscal implications. FSGM's underlying overlapping generations and finite horizon structure captures important life-cycle income patterns. Moreover, the presence of liquidity-constrained households (LIQ) allows realistic responses of private consumption to temporary changes in labor income and taxation. While most households are assumed to optimize intertemporally – albeit in an OLG setting where households treat government bonds as wealth as there is a chance that the associated tax liabilities will fall beyond their expected lifetime – a significant share of households are modeled as “rule-of-thumb” consumers (LIQ households),¹² who do not have access to financial markets and do not save/borrow and follow the OLG agents in their labor supply decision. The non-Ricardian dynamics of the model also imply that the accumulation of fiscal deficits lead to lowered national savings, with a correspondent reduction in the current account.

9. Fiscal policy is anchored on a deficit stabilization rule, ensuring convergence to a (exogenously given) long-term debt objective. However, in the short-term deficits can fluctuate to accommodate the impact of the business cycle, allowing automatic stabilizers to operate, akin to what happens in a structural balance rule.¹³ To ensure convergence to the long-run debt objective, lump-sum transfers are assumed to adjust over time.¹⁴

10. Notably, the model reflects important features of the monetary union. Monetary policy is run at the euro area (EA) level and based on an interest rate rule that responds to EA output gap and inflationary pressures. This allows wage and price inflation to be different across EA countries depending on their respective cyclical position. In the model, wages are sticky and set by labor unions at a markup over workers' marginal rate of substitution (the rate at which they would optimally trade a unit of leisure against a unit of consumption in a competitive labor market). Wages are then adjusted with a lag to situation of excess demand of labor.

D. Macro Impacts of Inclusive Labor Market Policies

11. Three different policies are analyzed. All policy experiments are assessed under the conditions of both budget neutrality and deficit financing. Under the budget neutrality scenario, fiscal costs (gains) of policy reforms are offset by general transfers over the medium term, in line with the model's fiscal rule. In addition, all simulations assume that policies are fully credible, and that interest rates remain unchanged over two years due to the ECB's accommodative monetary policy.¹⁵

¹² FSGM's calibration assumes that the share of liquidity-constrained households for advanced economies is smaller (35 percent) than those for emerging market economies (60 percent).

¹³ We refer to the government's long-term balance target as the “structural balance”.

¹⁴ In principle, any expenditure or tax instrument in FSGM can be used for automatic adjustment towards the deficit objective. We choose lump sum untargeted transfers for its non-distortionary effect.

¹⁵ Interest rates remain almost unchanged for the whole forecast horizon since simulated developments in Malta will have only minor spillovers on the rest of Europe and therefore on the ECB's policy.

Policy #1: Promoting Women Labor Participation

12. The simulation evaluates the macroeconomic impact of introducing free childcare, which is the actual government policy since 2015. After the implementation of the free childcare services policy in 2015, the public expenditure on childcare increased by about 0.15 percentage point over two years. Relying on elasticities estimated in [Christiansen and others \(2016\)](#), such increase is expected to lead to a 4 percent increase in female labor supply or 1.8 percent in total labor supply. This estimate is in fact close to the actual increase in the female labor supply between 2014 and 2017 (18.6 percent), controlling for the increase in male labor supply (14.4 percent) and can loosely be attributed to the marginal effect of policies targeted at female workers. The simulation assumes that the government policy should lead to an increase of female labor supply by 4 percent, in line with the increase in childcare spending of 0.15 percentage point of GDP.

13. Promoting women labor participation leads to sizable macroeconomic impacts in the short run and long run (Figure 1). Real GDP expands by about 0.4 percent in the short term and 1.5 percent in the long run. Higher expected income bolsters private consumption in the short run, and investment increases. The medium and long-term effects on real GDP, employment and investment of deficit-financed increase in childcare services are broadly the same as under a balanced-budget scenario. In the long term, GDP is driven by supply side developments. However, private consumption is higher under the deficit-financed scenario and the current account balance deteriorates permanently due to lower income balance, as households substitute foreign assets for domestic assets.

Policy #2: Lengthening Working Lives

14. The ongoing pension reform aims at a lengthening working lives by 5 years phased in over 15 years. Following estimates from a recent study using cohort data, labor supply should increase by 3.5 percent leading to fiscal savings of around 1 percent of GDP by the 15th year ([Grech, 2017](#)). The labor supply is assumed to continue to expand gradually and to increase by 6 percent at its peak after 40 years, when today's young people reach retirement age. The fiscal gains are expected to continue to build up, albeit at a slower pace after 15 years.

15. The simulations show that real GDP, private consumption and investment increase significantly and permanently, reflecting higher labor supply (Figure 2). The current account balance deteriorates in the short term due to front-loading of consumption, but improves in the longer term, reflecting fiscal savings. Real GDP expands gradually to 5 percent above the baseline in the long run, when the increase in labor supply is fully phased-in. Real wages increase in the short run, reflecting front-loading of domestic demand, but decline relative to the baseline in the long run, allowing firms to absorb the additional labor supply.¹⁶ Private consumption is higher under the budget neutral scenario reflecting the redistribution of the fiscal savings to active populations through transfers. In contrast,

¹⁶ In the pension reform scenario, domestic demand increases immediately in expectation of longer working lives, but labor supply increases only gradually, reflecting demographic forces and the timing of the pension reforms, leading to more demand for labor in the short run and higher real wages. As labor supply gradually expands over 40 years, the long-term ratio of labor to capital will drop and wages will fall relative to baseline. This is in contrast to the increased female participation scenario where labor supply is increased immediately.

under the deficit financing scenario, which in the case of the pension reform implies fiscal savings, general transfers and income taxes are lower, while the debt-to-GDP ratio declines dramatically with respect to a baseline of no reform (30 percent of GDP lower in the long-run steady state).

Policy #3: Upskilling the Labor Force – Refugee integration and Re-skilling Natives

16. The simulation considers possible implications of government support for specialized education and job training for refugees. As of 2017, refugees represented 2 percent of the labor force, a rather high share in international comparison. For simplicity, the scenario assumes that all refugees are low-skilled, and 20 percent less productive than high-skilled labor.¹⁷ The policy is assumed to reduce the initial skill-gap between native and refugees by half within 5 years (the length of a full training cycle including language course and vocational training). Considering their share in the total population in Malta, the training of refugees would boost overall productivity by 0.2 percent. Such policy is expected to cost 0.05 percent of GDP over 5 years if the cost per labor is about the same as policy expenditure for additional education for local young Maltese.¹⁸

17. The training of refugees would have positive effect on real GDP, consumption, investment and real wages in the short and long run (Figure 3). The overall impact on real GDP (0.3 percent in the long run) is expected to be relatively modest, though, reflecting the share of low-skilled migrants in the overall labor force. The policy leads to a small increase in the fiscal deficit and debt in the short run, if the policy is deficit financed, but these fiscal implications dissipate over time due to the temporary nature of fiscal expansion.

18. Social policies aiming at further reducing the skills gap between low-skilled native workers and the average labor force would lead to the same qualitative effects. The simulation results would have to be scaled up to reflect the relatively larger share of low-skilled natives, which represent about 45 percent of the population. Back of the envelope calculation suggests that upscaling half of the low-skilled natives could have more sizable macroeconomic impacts (about 10 times as large as the refugee integration scenario).

E. Conclusion

19. Altogether, the simulation exercise confirms potentially large effects of inclusive growth policies. Recent reforms were designed to target women, elderly and low-skilled workers. Such policies are expected to boost potential growth, employment and consumption, as well as mitigating the relative risk of poverty. The fiscal cost of such policies is reduced through their positive effect on potential output.

¹⁷ The skill-gap of 20 percent is motivated by the low-skilled labor's wage gap from the national median level in Malta (about 21 percent).

¹⁸ The Maltese government has scaled up its spending on labor market initiatives, including the additional training for youth and employment incentives, by 0.1 percentage point to 0.14 percent of GDP in 2016, compared to its average between 2006 and 2010. These incentives contributed to increase the share of high-skilled by 20 percentage points from 32 percent in 2006 to 52 percent in 2016. With the same cost per labor unit, similar policy targeting the refugees, which represent 2 percent of population, for 5 years would cost about 0.05 percent of GDP.

Figure 1. Macro Impacts of Promoting Women Labor Participation

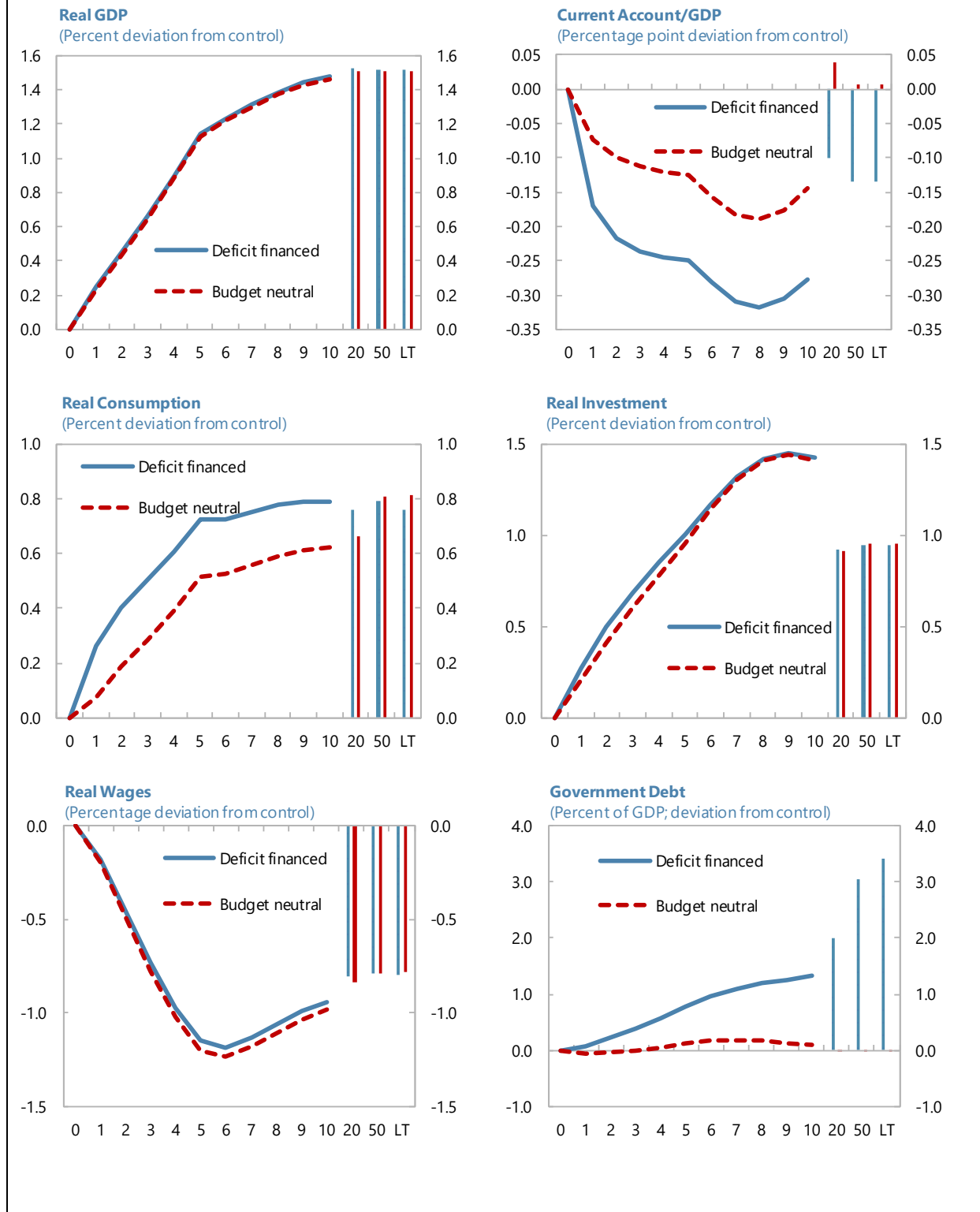


Figure 2. Macro Impacts of Lengthening Working Lives

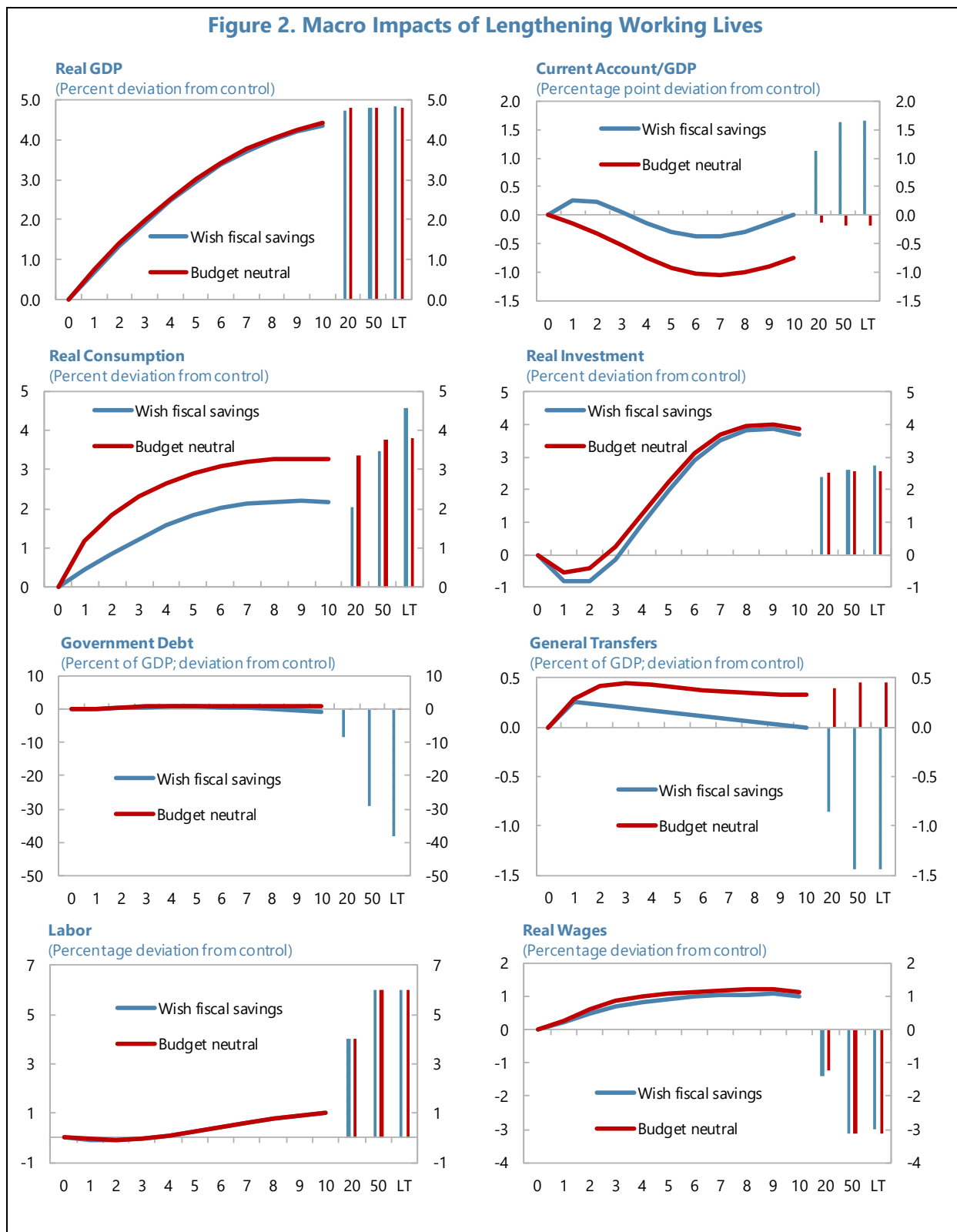
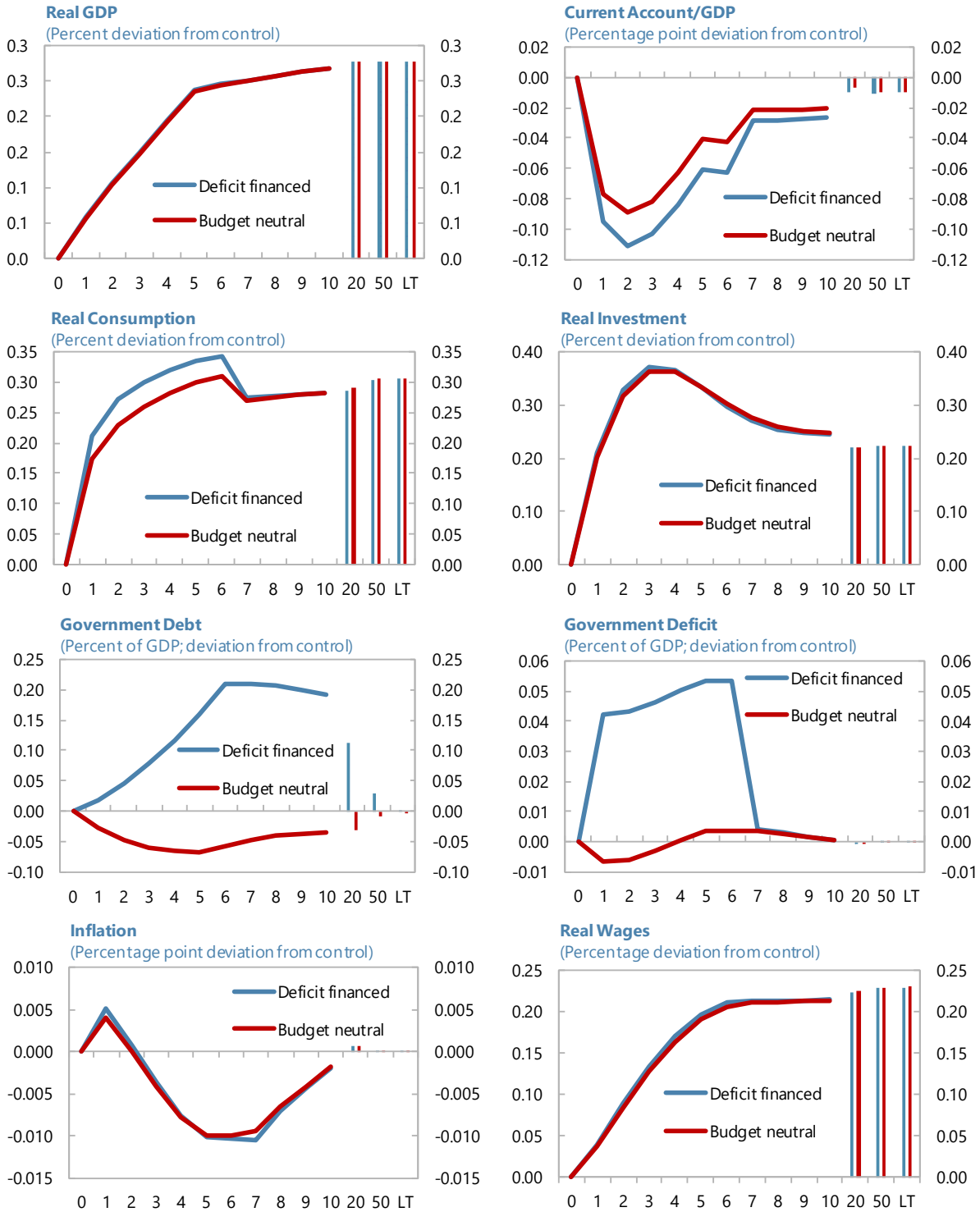


Figure 3. Macro Impacts of Upgrading Low Skill Workers (Refugee Integration)



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