# COMMENTS ON SESSION 2
# GOVERNMENT BUDGETS AND POTENTIAL GROWTH

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**Comments on "Dynamic Labor Supply with Taxes: The Case of Italian Couples" by Maria Rosaria Marino, Marzia Romanelli and Martino Tasso (Banca d'Italia) and "Do Public Policies of A Net Revenue Maximizing Government Also Promote Informality?" by Nivedita Mukherji and Fuad Hasanov**

## *1 Focus and complementarities of the two papers*

Both papers consider the impact of tax policy on economic behaviour (labour supply, informality and sectoral structure). The paper by Marino *et al.*, referred to as Paper 1 in the remainder of this discussion, focuses on the labour supply of second earners and the role of the tax and benefit system. It builds on a double consensus in the economic literature: financial incentives to work are key for growth, while labour supply issues are particularly relevant for specific labour-market groups, where elasticities to net earnings is stronger. This policy question is particularly relevant for Italy, where the labour force participation rate among married women is particularly low (see Table 1). The paper by Mukherji and Hasanov, referred to as Paper 2 later on, considers the impact of tax rates on informality and tax revenues. It revisits the consensus in the literature by taking into account sectoral heterogeneity, tax evasion and corruptions and enquires about the possibility of a Laffer curve effect in case of high taxation. This policy issue is of particular relevance for developing countries and EU countries with a large tax burden and high tax non-compliance.

The two papers take very different approaches. While the first one uses micro data on Italy, the second one is based on cross-country macroeconomic indicators. However, the complementarity is blatant between the two papers: they both address two relevant structural features of the economy. They both can also be seen as part of a fiscal optimization exercise. As such, they could also help policy makers to improve the design of fiscal policy, with a view to boosting female participation and reducing poverty (Paper 1) and increasing net revenues, via a modulating tax burden, providing an adequate level of public good and reshaping regulations (Paper 2).

## *2 Results*

Paper 1 builds on a micro-econometric model to assess the effect of changes in the tax-benefit system on female labour market participation. Consistently with the prediction of the economic theory, an increase in households' non-labour income (e.g., income support to poor household) is estimated to decrease overall poverty (in terms of head-count ratio) but to lower the incentives of married women to participate in the labour market. In contrast, policies aimed at increasing the return of the hours worked have positive effects on both dimensions.

Paper 2 examines the effects of fiscal and regulatory policies on the size of a country's informal economy and its government's net revenue. Changes in public policies are found to influence not only the size of the informal economy, but also the composition of production within the formal sectors. These effects are amplified when tax evasion and bribes are taken into

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**Table 1**

**Tax Burden on Second Earners and Female Employment Rates**

| Country | Labour Market Performance[1] | | Disincentives to Work[2] | |
|---|---|---|---|---|
| | Employment Rate Female (2010) | Employment Rate Male (2010) | Inactivity Trap (67% AW) 2009 | Low-wage trap (33% to 67% AW, 2009) |
| **BE** | 74.4 | 85.5 | 46.3 | 58.0 |
| **DE** | 76.3 | 86.5 | 51.0 | 49.0 |
| **EE** | 73.9 | 75.7 | 22.6 | 23.0 |
| **IE** | 65.7 | 75.0 | 35.4 | 32.0 |
| **EL** | 61.1 | 85.3 | 31.9 | 19.0 |
| **ES** | 63.2 | 75.7 | 17.5 | 18.0 |
| **FR** | 76.7 | 87.1 | 38.1 | 23.0 |
| **IT** | 58.7 | 83.5 | 42.5 | 48.0 |
| **CY** | 76.6 | 88.4 | - | - |
| **LU** | 72.6 | 92.0 | 32.8 | 29.0 |
| **MT** | 47.8 | 88.7 | 33.3 | 23.0 |
| **NL** | 79.3 | 90.0 | 46.8 | 41.0 |
| **AT** | 79.7 | 88.7 | 29.2 | 39.0 |
| **PT** | 74.6 | 83.9 | 21.5 | 28.0 |
| **SI** | 82.1 | 85.2 | 55.8 | 42.0 |
| **SK** | 70.1 | 81.4 | 21.1 | 34.0 |
| **FI** | 79.2 | 83.9 | 29.2 | 32.0 |
| **BG** | 73.6 | 77.9 | 20.1 | 22.0 |
| **CZ** | 73.4 | 90.5 | 33.9 | 28.0 |
| **DK** | 80.6 | 85.9 | 78.8 | 63.0 |
| **LV** | 73.8 | 72.9 | 31.9 | 30.0 |
| **LT** | 76.1 | 71.4 | 39.5 | 26.0 |
| **HU** | 67.1 | 77.9 | 32.0 | 42.0 |
| **PL** | 71.7 | 82.6 | 39.2 | 31.0 |
| **RO** | 67.2 | 81.5 | 26.3 | 31.0 |
| **SE** | 82.0 | 88.0 | 23.9 | 29.0 |
| **UK** | 74.3 | 85.4 | 43.7 | 31.0 |
| **EU-27** | 72.2 | 84.8 | 40.2 | 36.1 |
| **EA-17** | 71.5 | 84.8 | 39.7 | 37.1 |

Source: European Commission (2001), "Tax Reforms in EU Member States", *European Economy*, No. 5/2011.

consideration. Productive public expenditures increase net revenue. Taxes are found to have a small positive impact, if any, on net revenue and to increase the informal economy. The impact of regulation on net revenue is mixed. The paper concludes that, to raise net revenue, institutional reforms are needed, aiming at better bureaucratic quality and more democratic accountability with a stepped-up fight against corruption.

## *3 Methodologies and issues*

On a methodological standpoint, Paper 1 carries a thorough and very interesting analysis – albeit still preliminary – based on a micro-simulation model with a very rich theoretical specification. The model is extremely useful to simulate the impact of concrete parametric/systemic policy measures in Italy, as it consists of a structural dynamic life-cycle model well-suited to analyse household labour supply, saving, and consumption behaviour. The model captures several sources of heterogeneity regarding members of the couple (human capital and number of children) and incorporates most of the fiscal rules relevant for determining the net income of economic agents. Model parameters are estimated using cross-sectional and longitudinal data over 2004-10, which replicates the state of the Italian economy. The estimated model is used to simulate a few counterfactual policies and study their effect on labour supply and poverty.

Three issues could be taken into account as a valuable extension of the current paper 1. First, it may be worth taking varying risk aversion parameters into account, as unemployment risks are uneven across skill groups, regions and sectors. Second, some important factors are not explicitly taken into account: i) non-monetary incentives (not) to work, such as the supply of child care services, which is very relevant for Italy, ii) urban congestion, iii) costs of public transport. Third, it may also be interesting to examine the effect of moving toward a purely individual determination/calculation of tax and benefits, which are still partly computed at the level of the household (especially on the benefit side).

Paper 2 is well drafted and very policy relevant. It is based on a novel model with an attempt to validate it empirically despite strong data limitation. The model includes several types of goods. The empirical estimation uses cross-section data analysis (OLS, GMM), which benefits from a high data variability but faces serious robustness issues. The paper establishes a very relevant distinction between undeclared work and tax evasion in the formal sector.

However, Paper 2 faces some methodological limitations, which could be highlighted further as caveats, and may deserve some further sensitivity analysis. The theoretical model implies perfect labour mobility, which is not always seen in real life. The empirical results remain very fragile, as the number of observations is still very limited (around 50 observations) and the econometric specifications used consume many degrees of freedom. This poses serious problems of inference. Checking the empirical distribution of residuals may give an indication of the extent of the problem. Moreover, some pooled results may be regime dependent, as there is likely to be a great deal of non-linearity between advanced, emerging and developing economies. Therefore, one may wonder whether the results hold true for the euro area. It might also be worth using another variable of tax pressures instead of the Top Marginal Personal Income Rates. The statutory rate for corporate income taxes could be a candidate in this respect. Beside the role on the overall tax burden (highlighted in Paper 2), other relevant aspects should not be neglected and, at least, be mentioned in the paper: simplicity and stability of tax systems, the structure of taxation, the breadth of tax bases and existence of loopholes and the efficiency of individual tax design. As a more minor technical comment, standardising the institutional variables (using the standard deviation) will help interpret the size of the econometric coefficient.