# Discussion on: "Taxation and Labor force Participation the case of Italy" by Fabrizio Colonna and Alessandra Marcassa

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"Family Inequality", Bank of Italy, June 25, 2012

- Very interesting paper with very important policy implications for Italy
- The Italian labor market is in fact characterized by very low female participation rates, especially in low income deciles (with strong association with the low fertility rates and the high poverty rates of families with children).
- the argument here is that the italian tax system, even if based on individuals, generate negative incentives to female labor force participation, due to the combined effect of mean-tested transfers and child benefits, which increase the second earner tax rates.

- Using EU-SILC data, they estimate a labor supply model, which
  includes the characteristics of the Italian tax system and use the
  estimated parameters to measure the behavioral effects of alternative
  (revenue neutral) tax systems, (joint taxation, working tax credit and
  gender based taxation).
- they show that while the joint tax system implies a drop in married women's labor supply, the working tax credit and the gender based system boost the participation.
- the impact of the working tax credit is higher for unskilled and low educated women (who are less likely to be employed)

- These results are coherent with papers from different strands of literature, comparing labor supply across Europe as well as taxation systems:
- In Italy, labor supply of lower educated women is much lower than in other countries and more responsive to policies than higher educated women (Aaberge et al 1999, 2005, Del Boca et al (2009)
- Some comments on theoretical and empirical aspects of the paper:

- First, in their model, only women's labor supply decisions are considered and men's labor supply and incomes are given (coherent with the *traditional family* model). This assumption, still widely used in the literature, in this case is too restrictive
- a)on average male elasticities are much lower than female elasticities but potentially not negligible. In fact, male participation rates has declined markedly and are more likely to be employed in part time/temporary jobs. Therefore male elasticities may increase in the future.
- b)considering only women would not allow us to consider cross-elasticities which may be important.
- c)while it could be acceptable as an approximation to the current scenario, it is less acceptable when simulating reforms that might significantly change the incentives for both partners.

- Second, the choice set of the labor supply decision contains only three alternatives: Non participation, Part-time, Full-time.
- This assumption, quite common in the literature, but seems to be too limited here.
- While the three-alternative specification might be a reasonable approximation for the current scenario, not necessarily for the simulations.of new scenarios and new incentives induced by structural reforms (e.g. Aaberge, et al, 2009).
- Too few alternatives in the choice set might lead to over- or underestimation of behavioural responses.
- More complete choice set makes the response function more continuous.

- Moreover, labor supply decisions and wages functions are estimated separately which is inefficient, at best.
- Better to estimating separate wage functions by hours level and that the wage functions be estimated simultaneously with the decision rules (characterized by parameters from the utility function)
- The authors' concern with unobserved heterogeneity is understandable.
- Here they should introduce a conditional random effects structure, so that we have the distribution  $F(\mu|X)$ , where a parametric assumption is required. The parameters of this distribution would be estimated simultaneously with the other parameters of the problem.

- Third, more important, only one wage function is estimated
- However, empirical evidence and several studies have shown that the wage rates for part time and full time are different
- See recent working paper by Flabbi and Mabli (2012) in which a search model is estimated for husbands and wives
  - under the assumption that wages and hours are offered together
  - under the assumption that wages are offered and the individual can choose hours level
- in Shephard (2012) a search model is estimated for husbands and wives simulating the impacts of tax reforms (WTC).

- In their current setup, any woman in the labor market receives a given wage with probability 1 and only one wage, in the period considered, and can choose hours (part time, full time o nothing). If the woman rejects the offer, she is considered to be "unemployed".
- but this is quite a strong assumption, since she could be unemployed because did not receive any offer
- the distinction between unemployment and out of the labor force is not clear in what is really a static model.
- The assumption made here is a very crucial assumption, which can make a large difference in estimated responses to changes in tax policies.

- Finally, It is not clear: what exactly is done in order to keep constant the tax revenue as whether behavioural responses (to that tax) taken into account?
- In any case with this procedure the structure of the tax-transfer system is modified: for example, if it a lump sum, the WTC becomes a WTC + lump-sum tax.
- The proper procedure would require to calibrate (during the simulation) one or more parameters of the tax-transfer rule in order to guarantee a constant (net) tax revenue.

- Some interesting comparisons should be made with similar studies who recently have done a similar exercise using different data sets (Bank of Italy data). Figari (2011) and De Luca et al (2012) which consider the impact of alternative tax system such as WTC on both husbands and wives.
- In their work. the alternative systems are simulated under tax revenue neutrality using the resources collected through the abolition of tax credits for dependent spouses (Figari 2011) and the abolition of family allowances for dependent employees (De Luca et al (2012)

- De Luca et al (2012) draws upon the multisectoral discrete choice model of Dagsvik and Strom (2006) which account for non linear and non convex budget sets, and hourly wage rate differentials among jobs in different sectors
- hence labor supply effects may be generally higher than those obtained in standard labor supply models which ignore sector specific attributes of jobs available in the labor market.
- Both studies show that WTC reforms have sizeable labor supply and redistributive effects.

- Consistently with previous findings on elasticities of Italian married couples (Aaberge et al. 1999, 2004), they find that estimated elasticities are considerably higher for wives than for husbands and are mainly driven by changes at the extensive margin.
- and for poor couples, they find considerably higher own elasticities of both participation probability and hours of work of both partners.
- Cross elasticities are considerably smaller in absolute value than own elasticities but not negligible.

# Concluding remarks

- Interesting paper important for policy implications.
- WTC taxation reform may have important implications for employment and economic growth since women's participation increase would imply delegating caring activities outside the home and creating new job opportunities
- must be complemented by an extension of caring services for both children and elderly, in order to allow women to take paid work outside home if they wish to do so.
- Demand side incentives should be also considered.