Workshop "Inequality and Structural Reforms: Methodological Concerns"
Tuesday 16 May 2017
Summary of discussions

On 16 May 2017 the Directorate General of Economic and Financial Affairs (DG ECFIN) of the European Commission organised a half day workshop entitled "Inequality and Structural Reforms: Methodological Concerns". The workshop was conceived as an expert meeting reflecting the state of art literature regarding the theoretical and empirical methodologies analysing the effect of structural reforms (i.e. labour market, product market and tax reforms) on income inequality.

Mary Veronica Tovšak Pleterski, the Director of the "Investment, growth and structural reforms" Directorate, introduced the workshop by explaining the political relevance of inequality in the European Commission's agenda. She stressed the workshop's aim to improve analytical tools to assess the impact of structural reforms on income inequality. She pointed to three main issues as regards the literature on the topic. First, the literature analysing the impact of structural reforms on income inequality is rather limited and the majority of papers are of an empirical nature. Second, the link between structural reforms and inequality is complex, and involves multiple causality channels such as the one that goes through labour market performance and economic growth. Third, there is no consensus in the literature; in some cases results are complementary but in others they are contradictory.

The workshop was organised in two sessions: the first session (chaired by *Jan in't Veld* of DG ECFIN) focussed on the analysis of labour and product market reforms; the second session (chaired by *Salvador Barrios* of the Commission's Joint Research Centre) on the analysis of tax reforms.

Session I – Analysis of labour and product market reforms

In the first session, speakers – presenting recent work on the topic – put forward different methodologies to analyse the impact of labour and product market reforms on income inequality. This resulted in rather different conclusions which allowed for a vivid and interesting general discussion.

Professor Jean Olivier Hairault (Paris School of Economics) presented a general equilibrium model to analyse the employment-equality trade-off in a context of technological change and increased job polarisation between routine, abstract and manual jobs. To understand the effect of structural reforms on employment, as well as on wage and income inequality, it is important to take into account the interaction between technological progress and labour market and product market institutions. The comparison of the employment share by type of job over time shows that the large employment gains of the US and Germany came along with high wage inequalities, while the contrary was true for France. Hairault therefore suggested to accompany the job polarisation with policy measures targeted to low-skilled workers and with reforms that further liberalise the services sector.

Professor Giovanni Dosi (Sant'Anna School of Advanced Studies) challenged what he defined as the 'IMF-OECD orthodoxy' according to which structural reforms, intended to make the labour market more flexible, are the panacea for increasing employment. Following an agent-based model, he compares the effects of a Fordist regime with different kinds of competitive regimes. The empirical results obtained with Montecarlo simulations, suggest that, inter alia, in shifting from a Fordist regime to competitive regime, unemployment increases. The intuition behind these results is that by increasing liberalisation, the Keynesian coordination failures are exacerbated and long-term divergence in real wages are determined. Labour market flexibility (reduction of collective bargaining, minimum wages and employment protection) therefore fosters rigidity.

Dr Orsetta Causa and *Dr Mikkel Hermansen (OECD)* presented a combined macro-micro approach for evaluating the distributional impact of various kinds of policy reforms. The macro part of the model is distribution-neutral, i.e. it evaluates the effect of structural reforms on labour productivity and labour utilisation. The micro part of the model is distribution-sensitive, i.e. it evaluates the effect of structural reform on the entire income distribution. They estimated this model with a System-generalised mean method (GMM) estimator across the full range of degree of aversion to inequality and found that the inclusiveness of a pro-growth reform depends on the degree of inequality aversion. This suggests that structural reforms are generally good for the middle class and that growth-equity trade-offs appear when the reform is focussed on the poorest section of the population.

Dr Zsolt Darvas (Bruegel) introduced the general discussion by underlining the heterogeneity of results obtained through the different approaches. He highlighted this diversity by showing how lowering unemployment benefits was evaluated by the three different speakers, ranging from the most employment-enhancing policy with limited inequality costs (in the presentation by Hairault) to the worst possible policy in terms of employment and inequality (in the presentation by Dosi). He also discussed issues that may not have been considered enough, such as the importance of the economic cycle, policy synergies and the sequencing of reforms.

Session II – Analysis of tax reforms

The second session focussed on econometric methodologies to assess the distributional impact of tax reforms. Pros and cons of using specific indicators belonging to panel data techniques have been highlighted from a methodological perspective and new methodologies were proposed as applied to this field of study.

Professor Andreas Peichl (ZEW) described the pros and cons of different econometric methodologies, in particular panel data techniques, to estimate the impact of tax policy on income inequality. The use of a fixed-effects estimator presents several issues and in particular those of endogeneity and reverse causality. A way to handle these issues is to use a GMM estimator, although requiring very rich datasets. Using this estimation technique, he analysed the impact of different types of redistributive policies (government spending, social expenditure and progressive taxation) on income inequality for OECD countries for the period 1981–2005. He found that government spending significantly reduces inequality, while the impact of progressive taxation is smaller (and often insignificant). This implies that indirect behavioural effects play a more important role for progressive taxation.

Professor Daniel Waldenström (Paris School of Economics) presented the relatively new synthetic control method (SCM) to measure the effect of tax progressivity on top income earners. The SCM uses a control group to capture what would have happened in the absence of a tax reform and constructs this control group as a weighted average of non-treated countries that are similar to the treated one in terms of tax structure, level and trend of income shares, etc. He found that decreasing progressivity has significant positive effects on top income shares and that the effects are larger for the highest top groups. The impact of tax avoidance, however, is difficult to measure.

Dr Elvire Guillaud (Paris School of Economics) introduced the general discussion by discussing the extent to which the results of the empirical literature are driven by the choice of counterfactual. She suggested that a meta-analysis based on the different methodologies/results, which is common in other fields of research, would be useful here. As regards synergies and complementarities across different policies, she pointed to some consensus, e.g. on the supremacy of the primary distribution to explain post-tax income distribution. Furthermore, she highlighted that when using survey data there is an incompatibility between high tax rates and high progressivity.