The Italian National Energy Strategy: a critical view of the power sector, by C. Bustreo, G. Meneghini, I. Vignotto, G. Zollino

The paper reports a simulation of the Italian electricity bill breakdown by 2020, based on the forecasts and targets set in the National Energy Strategy recently issued. In particular the combined effect of rising RES incentives and system costs induced by the increasing share of unpredictable RES and generation cost of gas fired power plants is carefully analysed, in order to assess under which conditions the Italian electricity price might actually converge to the EU average.

Keywords: Italian power sector, electricity costs, electricity prices

JEL classification: Q47, Q48

The role of the National Energy Strategy in boosting italian economy, by C. A. Bollino

I analyze the new energy strategy approved by the Italian Government, the "National Energy Strategy: for a more competitive and sustainable energy". One of the SEN medium term targets is the equalization of Italian energy prices to the EU average within 2020. I argue that it is true that electricity market prices in Italy are effectively higher than in other EU Member States due to the fact that Italian generation mix is skewed toward expensive sources, like natural gas. However, system charges and taxes affect in a peculiar way households and industry final prices. In particular, I document that Italian industrial prices are higher than corresponding German price. However, Italian household prices are lower than corresponding German price.

I set forth a new plausible proposal not considered in SEN, aimed at spurring competitiveness and growth of the Italian economy, adopting the relative electricity market prices structure similar to that registered in German market in 2012. I propose to shift electricity taxes and general system charges from Italian industry resulting in a 8% reduction of their final price, to Italian households resulting in a 24,5% increase of their final price. keeping the overall system of charges and taxes in monetary equilibrium.

The macroeconomic effect of this policy on the Italian economy (using recently estimated elasticities for the Italian energy sector) will be the sum of the aggregate positive effect on industry and services, of about 2.2%, which constitute four fifths of total Italian value added plus the (smaller) negative effect on households spending of about -0.4%. The final effect can reach an order of magnitude of about 2% contribution to GDP growth.

From a political viewpoint, this would also mean to make clear to the individual citizen that there exists a trade-off between a base scenario of paying less the electric bill and witness economic stagnation and unemployment and a more aggressive policy scenario of paying more the electric bill and witness some higher economic growth and lower unemployment.

Keywords: Italian National Energy Strategy, electricity prices, electricity system charges and taxes, increase competitiveness

JEL classification: D20 E27 Q40 Q48

Environmental taxation in Italian fiscal federalism, by C. Verrigni

In order to achieve environmental objectives, which have become more and more integrated on an international, EU and national basis, member countries have implemented fiscal mechanisms that orient tax professionals to behaviors more compatible with the environment in relation to different levels of government.

In accordance with the principles contained in the Law for the implementation of Italian fiscal federalism (Law 5.5.2009, n. 42), various Regions, in accordance with levels of environmental protection set by the government throughout the country, could set a path for the establishment of regional laws on tax matters related to local authorities in their territory. This would give them some independence to achieve their objectives.

Keywords: Taxes 'for environmental purposes' vs taxes with 'indirect environmental function, Ability to pay, 'Who pollutes pays' principle, Constitutional analysis

JEL classification: K32

Environmental taxation and municipal fiscal federalism: remarks and perspectives on the Italian case study, by A. Zatti, F. Carraro

The debate around green fiscal reform has been going on for more than 20 years in Europe. However, to this day the focus has been mainly (or almost completely) concentrated on national fiscal systems, while the local dimension has been largely ignored. Environmental taxes, or at least some of them – final energy consumption taxes, car registration and circulation taxes, construction fees, park and road pricing, charges on tourism, land use and occupation fees – are strongly interrelated to the territorial context and, accordingly, can represent a promising tool to make citizens

and city users pay for the services they benefit from or for the external effects they generate.

From a multilevel governance perspective, whenever a process of fiscal decentralisation is going on or planned, major attention can be directed to the opportunity to fill in the fiscal gap, at least to some extent, through a major recourse to environmentally related taxes.

The expected results (dividends) would not just be in terms of a less distortionary fiscal system, but also of a more transparent and accountable model of financing for local expenditures and functions.

The paper provides a preliminary assessment on this subject, focusing mainly on the Italian experience. The categorization of environmental taxes and their quantitative analysis show how no specific attention has currently been given to the local dimension and how major research efforts still have to be done to better investigate their potential role in the context of decentralisation processes.

Keywords: Environmental taxes, fiscal decentralization, local environmental fiscal reform

JEL classification: H23, H71, H77

Environmental protection, land-use regulation and local government taxation: theory and evidence on Italian municipalities, by B. Ermini, F. Fiorillo, R. Santolini

Property taxation can be used in a Pigouvian way to raise the costs of environment and decrease land use consumption for the benefit of enviromental protection. However, in presence of a growing shortage of funding over time, local governments can use property taxation in order to 'fill the coffers' rather than to pursue enviromenal safeguard. A negative effect on the budget side could be associated with a weeker control on land use regulation from local governments, since higher enviromental consumption leads to higher tax revenues. In this paper we address this issue developing a theoretical model which shows a positive (negative) relationship between tax revenue and the number of land use permissions when there is complementariety (substitutability) between environmental and human uses of land. We test this relationship on a panel of Italian municipalities from 1999 to 2006. Our results show a positive and significant correlation between property tax revenue and the issuance of land use permits, suggesting the prevalence of the complementariety relationship. This result implies that Italian municipalities are more concerned about funds raising rather than environment preservation.

Keywords: Land use, Land taxation, Building permits, 'Fill the coffers'

JEL classification: H21, R14, R52

Carbon-energy tax and emission permits to fight climate changes, by A. Majocchi

This paper discusses the proposal of European Community to introduce a carbon-energy tax with the aim to curb greenhouse gas emissions. Nevertheless the relative successful of this initiative, the volatility of the prices of permits and firms free allocation of permits may undermine the achievement of the emissions permits goals. Therefore,the problem of global warming should be addressed using both quantity and price economic instruments, i.e. that the emission trading scheme should be complemented by a carbon-energy tax. Moreover, it is necesary to move towards a tax on consumption of carbon rather than on carbon production. Finally, environmental federalism could be seen as the direction for implementing the combined system of tax and permits.

Keywords: Carbon-energy tax, Carbon emission trading, Price volatility,
Climate change

JEL classification: H41; Q53

Environmental tax and regional government consumption expenditure in a fiscal federalism system, by M. Ciaschini, R. Pretaroli, F. Severini, C. Socci

The increasing attention to climate changes have led national Governments to design environmental tax policies able to face environmental problems and their associated economic consequences like as a negative change of GDP. The environmental taxation in particular is considered a powerful instrument of pollution control. More important, it provides public revenue that can be recycled at local level in order to attain the regional double dividend in a fiscal federalism framework. In this respect, we use a Computable General Equilibrium (CGE) model with imperfect labour market, to assess the regional effects of an environmental fiscal reform designed with the aim of reducing the CO2 emissions in a fiscal federalism setting. In particular, we introduce a local green tax on commodities output with a progressive structure. The tax burden depends on the commodity polluting power. According to fiscal federalism principles the tax revenue is collected by the local Government and it is entirely recycled to finance the local consumption expenditure. The application is done on a bi-regional Social Accounting Matrix for Italy and the results highlights the distributional effects of the reform on macroeconomic variables into the bi-regional income circular flow.

Keywords: Environmental taxation, Social Accounting Matrix, CGE analysis.

JEL classification: H23, D58, D57.

Estimating welfare losses and gains in explicit auctions for power trade: an application to the Italian case, by L. De Paoli, E. Fumagalli

Cross-border transmission capacities in Europe have been traditionally allocated via explicit auctions. As these will be replaced by implicit auctions, a relevant question regards the impact of this major transition on expected gains in social welfare.

In this paper we study, first, the equations that describe the welfare loss associated with a suboptimal use of the transmission capacity. Second, by examining how suboptimal flows, and particularly adverse flows, change with the introduction of implicit auctions, we derive an original procedure that improves the accuracy of the welfare loss estimation when available market data are limited. Finally, we apply the proposed procedure to data pertaining to the Italian market and verify that for a net importer, such as Italy, the procedure derived in this work is particularly helpful in providing more accurate estimations of the welfare losses associated with explicit auctions. As implicit auctioning will eliminate these welfare losses, we interpret our results as a measure of the benefits associated with the current transition for the Italian market and use them to derive some more general implications.

Keywords: Electricity trade, Market coupling, social welfare.

JEL classification: Q43, L94, P48.