

Production and numerosity of firms in the era of Covid-19: The case of Marche region

Topic: Computable General Equilibrium Modeling and Social Accounting Matrices II (Chair: Mun S. Ho, Harvard University)

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Covid-19 pandemics is an extraordinary worldwide phenomenon and a public health crisis that strongly affects the economies all over the world. Consequences of this disruptive disease are observed in income and employment decreases and in interruptions in transport services and in manufacturing industry outputs (Nicola et al., 2020). The Italian Government decree (D.P.C.M) issued the 22nd March 2020, entitled "Urgent measures for the containment of the infection by coronavirus on the whole national territory", impose the lockdown on the whole national territory and includes several measures pertaining the block of productive activities for specific economic sectors, labelled as "not essential" (Deriu et al., 2021).

Our aim is the evaluation the consequences of a lockdown of the economy of Marche region with reference to both the product typology and the sectoral income redistribution. Within this framework, reference must be made to the entire income circular flow, disaggregated according to the various operators involved in production, distribution and utilisation of income. For these reasons, the most suitable approach for the evaluation of the economic impact of COVID-19 appears to be the economic computable general equilibrium model (CGE) calibrated on a Social Accounting Matrix (Shoven & Whalley, 1984).

Marche region is one of the most industrialised regions of the whole national territory. It is mainly characterised by small manufacturing-oriented firms (shoes, clothing, furniture), in prevalence local. The region's specialisation in manufacturing sector results in the development of internationally recognised excellent firms, and a regional model of development has been recognised and defined as "Marche Model".

In the last decade, the economy of Marche experienced a downturn, starting from 2008, in connection with the world economic crisis and, later, as an unwanted result of the "fourth Industrial Revolution", where the implementation of new productive technologies to increase productivity and the quality of products results in slowdown of occupation. This new growth setting, therefore, seems not to be coherent with the "Marche Model". This regional productive pattern, in fact, includes low technology production processes and competitive factors not linked to scientific knowledge but more based on learning by doing. Recent economic debate shifts from the traditional Marche Model to a new, more industrialised phase, based on advanced technologies.

At present, the economic situation portrays a productive setting where some critical points emerge. These criticalities have already emerged in the pre-pandemic period and accentuated during the pandemics, particularly with reference to the number of firms that are active in the market, which exhibits a clear tendency to decline in all the activities (Minsky, 1981). The present fall in GDP, however, does not come with a sharp fall in employment and in the numerosity of firms, thanks to the adoption of ordinary and extraordinary automatic stabilizers (block of dismissals, subsidies to firms and basic income).

The general environment, is, then, characterised by the economic transition with the decrease in the productive block and in demand due to pandemics. Within this framework, many industries perform an increase in the number of active firms in the market. At a sectoral level, the most relevant impact with reference to labour income is experienced by trade, textile, and constructions sectors. With reference to disposable income, institutional sectors undergo considerable difficulties; in particular, a contraction in primary income reduces the taxable amount of taxes and transfers between sectors. Given that the impact of lockdown is diversified at sectoral level, the economic policy measures should be oriented to preserve the production of the most severely involved sectors, and to protect

labour incomes and the related gross operating income, through the reduction of the tax wedge or through transfer measures.

References

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