1 FINAL REMARKS

The primary objective of this thesis was to construct a DSGE model for evaluating the influence of monetary policy on regions within the same country that possess distinct productive structures. The impulse response functions revealed discernible differences in the intensity of reactions, attributable to variations in capital elasticity and technological levels among firms in different regions, while the direction of the reactions remained consistent.

From this information, one can infer that a national monetary policy may not uniformly exhibit effectiveness across all regions and may not be universally optimal and will have different impacts on different regions. For one region, the monetary policy decision may be just what it needed, while to the other it may be too harsh or too soft. Regardless of the decision, it is evident that a country with diverse regions should consider that the interest rate, among many available monetary policy mechanisms, is not universally optimal and will have different impacts on different regions.

Consequently, contemplating the implementation of alternative policies in parallel may be necessary to ensure the desired effects are achieved. Alternatively, the formulation of monetary policy should consider regional variables, allowing the intensity of the policy to be weighted according to the characteristics of each region.

Considering the potential benefits of coordinated fiscal and monetary policies, it becomes imperative to explore avenues for collaboration between fiscal and monetary authorities. Given the existence of regional fiscal authorities, one plausible approach is to introduce regional fiscal policies that complement monetary policy measures. In this context, a historical example comes to mind: the issuance of State Bonds by Brazilian regional governments. Such regional mechanisms could be strategically leveraged in coordination with monetary policies to achieve the desired economic effects. But this is another story, for another thesis.

While the model presented here lays the groundwork for understanding the dynamics of regional economies, future studies could further enrich our understanding by incorporating additional elements to this framework, such as: (1) non-Ricardian households, given that a significant portion of the Brazilian population lacks access to credit; (2) habit formation, as this feature provides a more accurate description of household behavior; (3) labor market, as rigidities within it contribute to a better alignment of the model with reality; (4) a fiscal authority, recognizing the significance of government decisions on private agents; (5) adjustment costs on investment, acknowledging that higher investments can increase its overall expense; (6) inclusion of bonds

and other assets, as there are various financial products within the economy; (7) consideration of the foreign market, recognizing the influence of other global economies on internal decisions.

Besides these elements, future implementations should also consider the following limitations:

(1) An important addition to the model will be the inclusion of a credit channel to demonstrate the transmission of monetary policy via credit; (2) The model considers only one representative family in each region, meaning that in this model, as Region 1 has higher productivity than Region 2, it is expected that the production of the former will be greater than that of the latter. In the hypothesis of adding the population element to the model, this would be reflected in production: Region 1, represented by the state of São Paulo, even with higher productivity, would have lower production due to having a smaller population; (3) The model takes more than 40 periods to converge to the steady state, indicating a convergence problem; (4) Despite the initial increase in investment resulting from the monetary policy shock, there is an initial decrease in the capital stock, which should not exist; (5) It is important to emphasize that Consumer Price Level (CPL) and Consumer Price Index (CPI) are distinct concepts: CPL refers to the general level of prices for goods and services in an economy at a particular point in time. It represents the average of prices paid by consumers for a basket of goods and services. The consumer price level is a broad measure of inflation or deflation in an economy, while CPI is a specific index used to measure changes in the price level of a basket of consumer goods and services purchased by households. It is a statistical estimate constructed using the prices of a sample of representative items whose prices are collected periodically. The CPI is calculated by taking the price changes for each item in the predetermined basket of goods and averaging them. ■