**When discussing the problems related to economic development, the theoretical discussions of macroeconomic theory have distinct perceptions of the economic reality. Some of these perceptions can be described by mathematical models in order to understand how macroeconomic and microeconomic variables are related and can describe a path of growth and distribution.**

 **In the thesis The Neokaleckian Model of Growth and Distribution: Simulations to the Brazilian economy, I used an adjusted heterodox model described by Cimoli, Lima and Porcile (2013)[[1]](#footnote-1) calibrated and simulated to the Brazilian economy in 2011. This model is a Post-Keynesian Neokaleckian model that divides the society in two social classes (workers and capitalists).**

 **In this model, the demand side plays a fundamental role, with consumption and investment being central to the discussion, these being variables influenced by the income distribution between classes. This model also considers the problem of external constrains, that have central impacts especially in underdeveloped countries, idea based on the Thirwall´s law. On the other hand, the supply side also has its importance to growth, as the industrial and technological structure interfere on how growth affect the balance of payments and on the external constrains. The firms in this model, as described Joseph Steindl, operates with idle capacity levels.**

 **When calibrated to brazil for 2011, the model shows the importance of demand in the determination of income distribution and growth. This model is used for the short run, when there can be a situation of temporary deficits in the balance of payments and the adjustment is done in the capacity utilization level.**

 **The results show that Brazilian economy presents a strong wage-led behavior for the short run. Wages that determines consumption have a strong impact on growth and income distribution, as can be seen on the following tables.**

**Table 1. Wage (*W*) increases impact over Prices (*P*), Capacity utilization level (*u*) and Growth (*Y*)**

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**Increase in Wages also increases the price level, the capacity utilization level and growth.**

**Table 2. Wage (*W*) increases impact over Consumption (C), Investment (I), Exports (X) and Imports (M)**

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**The consumption growths with the increase in the share of the workers, increasing imports and decreasing exports. The final result is an increasing in the final product, with a relevant increase in the deficit of external balance.**

**Table 3. Wage (*W*) increases impact over the Share of Workers (**), External Sector (**) and Capitalists (**)**

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 **The share of workers increase with wages, but the share of capitalists remain at the same level, as it depends only of the markup level.**

 **The emergence of a new middle class in Brazil has been an element that have strongly stimulated demand in the last 10 years. As part of this demand is supplied by domestic goods, this results in increases in the capacity utilization level and stimulates investment. On the other hand, part of this movement of elevating demand results in increases in imports, that generates deficits in the external balance. The more developed and diversified is the production structure, less important are the effects of the raise of the balance of payments deficit.**

 **Price modifications that occurs because of the alteration of costs also reflect in the real exchange rate. The results show a reduction of the demand because of exchange rate devaluations[[2]](#footnote-2), affecting real wages and consumption. On the other hand, the devaluation has positive effects, stimulating the export drive, as defended by Bresser-Pereira and having impacts on the production structure.**

 **The simulation operated for different macroeconomic variables and the results showed fundamentally the importance to Brazilian economy to an increase in the Demand to growth and distribution. On the other hand, if the productive structure is not developed and diversified in the economic system, there will be progressively more deficit impacts in the external sector account. This model could be sustained because of a situation of increase in the prices of the commodities that Brazil export and raise in capital account investments.**

 **In the end, the income distribution also represents a relevant dimension. The conflicting claims will determine the share of each class in the final output. A better distribution for workers results in a raise of output and generate gains for the economic system, as demand is a central factor for stimulate growth and increase in the income per capital, especially if the economy has a productive structure that can absorb the increase in demand.**

1. The Production Structure, Exchange Rate Preferences and the Short Run – Medium Run Macrodynamics. Available at http://www.fea.usp.br/feaecon/RePEc/documentos/Cimoli\_Lima\_Porcile12WP.pdf [↑](#footnote-ref-1)
2. [↑](#footnote-ref-2)