

INTISARI

Kajian Literatur Teori Permainan Kuantum Marinatto-Weber pada Model Permainan Ekonomi Moneter Barro-Gordon dalam Pembuatan Kebijakan Inflasi

Oleh

Kukuh Genial Putra

15/378013/PA/16488

Kebijakan moneter diberlakukan dalam upaya memenuhi tujuan makroekonomi, yaitu menjaga stabilitas ekonomi, salah satunya berkaitan dengan inflasi dan pengangguran. Pada pola kebijakan diskresi, otoritas moneter diperbolehkan menetapkan laju inflasi dengan benefit yang didapat termasuk pada pengembangan aktivitas ekonomi. Model ekonomi moneter Barro-Gordon menjelaskan hubungan antara otoritas moneter dan publik dalam pembuatan kebijakan inflasi melalui pendekatan teori permainan. Model inilah yang kemudian dicoba uraikan melalui pendekatan teori permainan kuantum. Marinatto-Weber menjelaskan permainan *battle of sexes* melalui pendekatan mekanika kuantum dengan menghadirkan strategi kuantum dalam permainan. Pendekatan matriks densitas dalam permainan menghasilkan strategi kuantum terbelit sekaligus menjelaskan fenomena keterbelitan kuantum. Teori permainan kuantum Marinatto-Weber dicoba-terapkan pada model ekonomi moneter Barro-Gordon. Hasil akhir penerapan teori permainan kuantum sesuai dengan hasil akhir model permainan ekonomi moneter versi klasik. Teori permainan kuantum menjelaskan lebih dalam upaya para pemain mengatur strategi permainan.

Kata kunci: teori permainan kuantum, ekonomi moneter

ABSTRACT

Literature Study on Marinatto-Weber Quantum Game Theory of Barro-Gordon Monetary Economics Game Model in Decision Making of Inflation

By

Kukuh Genial Putra

15/378013/PA/16488

Monetary policy is implemented in an effort to satisfy macroeconomics objectives, i.e. maintaining economics stability, one of which is related to inflation and unemployment. In the discretionary policy, the monetary authority is allowed to set the inflation with benefits obtained including economics activity development. Barro-Gordon monetary economics model explains the relationship between monetary authority and public in policy-making of inflation through a game theory approach. This model was then tried out through a quantum game theory approach. Marinatto-Weber explained the battle of sexes game through quantum mechanics approach by presenting quantum strategies in the game. Density matrix approach in the game produced an entangled quantum strategy at once explaining the phenomenon of quantum entanglement. The Marinatto-Weber quantum game theory was applied in the Barro-Gordon monetary economics model. The final result of applying the quantum game theory was in line with the final result of the classical version of the monetary economic game model. Quantum game theory explained more closely the players' efforts in managing game strategies.

Keywords: quantum game theory, monetary economics