

## **ABSTRACT**

# **DYNAMIC MODELLING OF DISTRIBUTED LAG USING KOYCK METHOD AND ALMON METHOD**

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The distributed lag Model is a dynamic model due to the effect of a one-unit change in the value of the distributed independent variable (X) over a period of time. Distributed lag Model there are 2 types, namely: infinite lag model and finite lag model. Infinite lag modeling using koyck method and finite lag modeling using Almon method. This distributed lag Model is used to visualize the impact caused by the independent variable on the dependent variable. This study aims to apply a dynamic model of distributed lag by using the koyck transformation method and Almon transformation method to assess the effect of the rupiah exchange rate on the value of garment exports PT. Shinwon went abroad and determined the best model in Dynamic Modeling of distributed lag using the koyck transformation method and the Almon transformation method. The results showed that dynamic modeling of distributed lag with Almon transformation method is better than koyck transformation.

**Keywords:** Distributed lag model, Koyck method, Almon method, Indonesian exchange rate, export.

## **ABSTRAK**

### **PEMODELAN DINAMIS *DISTRIBUTED LAG* DENGAN MENGGUNAKAN METODE KOYCK DAN METODE ALMON**

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*Distributed lag model* atau model lag terdistribusi termasuk model dinamis sebab pengaruh perubahan satu unit dalam nilai variabel bebas (X) terdistribusi selama periode waktu. Model lag terdistribusi ada 2 jenis, yaitu: model *infinite lag* dan model *finite lag*. Pemodelan *infinite lag* memakai metode Koyck dan pemodelan *finite lag* menggunakan metode Almon. Model lag terdistribusi digunakan untuk memvisualkan dampak yang dilakukan oleh variabel bebas terhadap variabel tak bebas. Penelitian ini bertujuan mengaplikasikan model dinamis *distributed lag* melalui pemakaian metode transformasi Koyck dan metode transformasi Almon untuk mengkaji pengaruh kurs rupiah Indonesia terhadap nilai ekspor garmen PT. Shinwon ke mancanegara dan menentukan model terbaik dalam pemodelan dinamis *distributed lag* dengan memakai metode transformasi Koyck dan metode transformasi Almon. Hasil penelitian menunjukkan bahwa pemodelan dinamis *distributed lag* dengan memakai metode transformasi Almon lebih baik disbanding transformasi Koyck.

**Kata Kunci:** Model lag terdistribusi, Metode Koyck, Metode Almon, Kurs Indonesia, Ekspor