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March 5, 2019

Ms. Teresa Sanjurjo, Director
Fundacion Principe Asturias
Premios Princesa de Asturias
Jurado Ciencias Sociales
Juan Benito Arguelles 2
33004 Ovieta
Principado de Asturias
Espana

Dear Ms. Sanjurjo:

Dr. Carlos M. Jarque of Mexico has been nominated by the International Statistical Institute and the Forum for Sustainable Development for the 2019 Princess of Asturias Award in the Social Sciences. I am very pleased to support this nomination in view of Dr. Jarque's outstanding research in statistics and econometrics and his exceptional record as a leader of Mexican and international institutions in economics and social statistics. He is most cited of Mexican economists with more than 100 published articles and 44 contributions to books.

I have known Dr. Jarque since 1984, when he was appointed as a Visiting Scholar in the Department of Economics at Harvard University after completing his doctorate in economics at the Australian National University. During his visit to Harvard he taught a graduate course in econometrics and presented a seminar on his research in statistics and econometrics. At Harvard he began his highly successful career in econometric and statistical research, leading to the development and implementation of economic policies and statistical programs in Mexico and around the world.

Jarque is well known for his work in model specification tests, including the Jarque-Bera test statistic, for his methods on optimum stratification, and for his research on consumption and saving patterns using limited dependent variable models. His quarterly econometric model with rational expectations has provided the basis for efficiently forecasting economic cycles in Mexico. His work on cluster analysis is widely used in the elaboration of atlases of well-being and economic development. Jarque's econometric tests for normality, homoscedasticity, serial independence and specification of models are widely used and incorporated into many statistical

packages. These methods permit better studies of causality in economics and other social sciences.

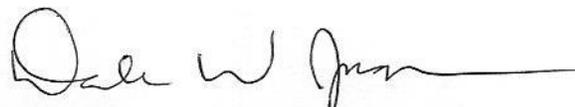
Jarque served for more than ten years as President of the National Institute of Statistics, Geography and Informatics (INEGI), an autonomous government agency charged with development of the official statistics of Mexico. During his tenure he directed a vast program to modernize that national statistics of Mexico, making INEGI an international leader in the development of information to support economic and social policies. He coordinated eight national censuses and directed the development of short-term statistics on the Mexican economy. He directed the Land Titling Program of Mexico, elaborating a detailed cadaster, establishing property rights at the parcel level covering half the territory of Mexico.

Jarque became Director of the International Statistical Institute in The Netherlands and was appointed as President of the United Nations Statistical Commission, an organization responsible for the statistical activities of the United Nations. He was the Secretary of the National Development Plan of Mexico and became Secretary of the Inter-American Development Bank, the regional development bank of Latin America with responsibility for funding of investment in Latin America and the Caribbean. He then served as the IDB Representative in Europe and Advisor to the President of the Bank. Most recently, he served as a high-level executive of America Movil, the largest private company in Latin America, and as CEO of the FCC Group, a major company in construction and management of infrastructure projects.

Carlos M. Jarque has received the Honoris Causa Doctorate from Anahuac University in Mexico, the Adolphe Quetelet Medal from the World Academy of Statisticians, the Henri Willem Methorst Medal, and the Benito Juárez Medal given by the President of Mexico. He has also received the Mahalanobis Prize for world distinction in the field of statistics, the Prize "Ricardo Flores Magón" for support to Freedom of the Press and of Expression, and the Prize 2017 Master of GOLD of the Royal Forum of Top Business Executives with President of Honor King D. Juan Carlos I of Spain.

Jarque is a highly appropriate choice as the winner of the 2019 Princess of Asturias Award in the Social Sciences. I am honored by the opportunity to support him for this prestigious award. His outstanding research has had a long-lasting impact in statistics and economics. His leadership has transformed the official statistics of Mexico and he has served as a leader of international institutions to develop official statistics in Latin America and around the world. Finally, he has been a successful business executive and Europe and Latin America.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Dale W. Jorgenson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dale W. Jorgenson