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Seminario Aleatorio

Sesión 351

The Illusion of the Illusion of Sparsity

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Abstract

The emergence of Big Data raises the question of how to model statistical series when there is a large number of possible regressors. This article addresses the issue by comparing the possibility of using dense or sparse models in a Bayesian approach, allowing for variable selection and shrinkage. We discuss the results reached by Giannone, Lenza, and Primiceri (2018) through a “Spike-and-Slab” prior, which suggest an “illusion of sparsity” in economic datasets, as no clear patterns of sparsity could be found. We make a further revision of the posterior distributions of the model, and propose three experiments to evaluate the robustness of the adopted prior distribution. We find that the model indirectly induces variable selection and shrinkage, what suggests that the “illusion of sparsity” is, itself, an illusion.

Viernes 28 de agosto de 2020, 12:50 hrs.

<https://itam.zoom.us/j/96704751339?pwd=ZUhZOHgydjN5UHk4bkhaOWZZR3JQUT09>

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El Seminario Aleatorio está destinado tanto a profesores como a estudiantes, por lo que el Departamento de Estadística agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.