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Extending Becker's Time Allocation Theory to Model Continuous Time Blocks: Evidence from Daylight Saving T

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Abstract:

Most activities in life require a certain amount of continuous time. Yet, in the traditional economic model of time allocation, time block is not taken into account. Hence, the same amount of utility is derived from an activity regardless of whether it is performed continuously over one time block or divided into n separated periods. This paper presents an extension of Becker's theory to model preferences over continuous time blocks. To examine whether the predictions of the model are supported by data, we exploit the extension of the 2007 U.S. Daylight Saving Time (DST) regulation which lengthens evening daylight while shortening the time block of morning daylight. Using the American Time Use Survey, we find that outdoor recreational activities significantly increase under DST, while indoor TV watching decreases. This translates into an approximate 10% increase in burnt calories. This paper concludes with policy recommendations concerning the future status of DST.

Text: See [Discussion Paper No. 6787](#)



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