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The effect of gasoline consumption tax on consumption and carbon emissions during a period of low oil prices



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#### The effect of gasoline consumption tax on consumption and carbon

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Abstract: Since June 2014, international crude oil prices have fallen sharply; because of the new refined oil pricing mechanism, China's domestic refined oil prices fell with the international oil prices. During the period from November 28 2014, to January 12 2015, the China's domestic refined oil consumption tax had been increased for three times. Then the lowest price of refined oil was set to protect refined oil prices from further declining. Through financial means used to control the prices of refined oil, can the goals of oil consumption reduction and harmful emissions mitigation be realised? Is it reasonable to use such a way adjusting refined oil consumption tax? In this paper, we construct an econometric model, investigate the elasticity of China's gasoline demand, and then make a further research on the effect of carbon dioxide (CO<sub>2</sub>) emission reduction. We also study the rationality of the way adjusting the consumption tax. We propose some policy suggestions based on the research in the context of the frequent fluctuations in international oil prices and the rising dependence on international crude oil in China. According to our study, compared with the developed countries (e.g., the United States), China's gasoline demand elasticity is not high; however, a certain extent, tax adjustment can still guide consumers towards saving energy, so as to achieve the purpose of

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