

Re-evaluation of the Environmental Kuznets Curve in China

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Along with the economic growth, China also suffers from environmental degradation problems. In this paper, using the framework of He and Wang (2012), the relationship between environmental degradation and economic development has been re-evaluated based on the theory of Environmental Kuznets Curve. By using panel OLS estimation, it is shown that industrial SO₂ emission is the only case that fits the EKC theory, while the industrial wasted water discharged and industrial soot emission cannot support this theory. Further, industrial SO₂ emission per unit of GDP is also the only one that has a negative linear relationship with GDP. With a sub-sample estimation, it is shown that the technology effect in northern China has a significant impact on the national EKC pattern of industrial SO₂ emission. These results show that unified Environmental Kuznets Curve cannot be found in China, while the diversity of relationship should be more preferable. The real environmental problem might be more complicated than the ideal EKC analysis.