The objective of this paper is to examine the role of external debt in a country's economic growth. With 31 developing countries divided into four regions, this paper employs the recent technique of spatial econometrics to incorporate the neighbouring effect in the debt-growth model. The empirical results reveal that the East Asia and Pacific, Latin America and Caribbean and the Sub-Saharan Africa regions provide convincing evidence to support a negative relationship between the external debt and economic growth. In addition, there is evidence to support the existence of spillover growth among neighbouring countries. This suggests that the role of spatial correlation is important and should be considered for any analysis of the growth model. © 2011 Springer-Verlag.