Natural Resources and Economic Growth: From Dependence to Diversification

Thorvaldur Gylfason[1]

[1] This chapter, under a slightly different heading, was presented at an international workshop on "Sustainable Economic Liberalization and Integration Policy: Options for Eastern Europe and Russia," organized by European Institute for International Economic Relations (EIIW), University of Wuppertal, Germany, and held in Brussels on April 24-26, 2004.

1 Introduction

This chapter reviews some aspects of the experience of natural-resource-rich countries around the world since the 1960s. The discussion will emphasize five main channels through which natural resource intensity appears to have inhibited economic growth across countries. By natural resource intensity is meant the extent to which a country depends on its natural resources. Resource abundance *per se* need not do any harm: many countries have abundant natural resources and have managed to outgrow their dependence on them by diversifying their economic activity. An important challenge to policy makers in many developing countries with abundant natural resources is to find ways to reduce their dependence on these resources, through successful diversification of economic activity. The chapter offers some suggestions along these lines. As we proceed, an attempt will be made to provide a glimpse of some of the empirical results that have emerged in recent years from studies of the cross-country relationships between natural resource dependence and economic growth and various key determinants of growth across the world. Even if the evidence reviewed below is exclusively cross-sectional, it reflects a general pattern that accords well with a number of historical case studies of individual resource-rich countries.[2] This broad review is followed by a brief discussion of the disappointing economic growth record of the OPEC countries, and then by a brief discussion also of the lessons that may be drawn from Norway's singularly successful management of its oil wealth.

2 Five Channels: Theory and Evidence

The structure of recent models of the relationship between natural resource intensity and economic growth is nearly always the same. An abundance of or heavy dependence on natural resources is taken to influence some variable or mechanism "X" which impedes growth. An important challenge for economic growth theorists and empirical workers in the field is to identify and map these intermediate variables and mechanisms. This chapter is an attempt in this direction.

To date, five main channels of transmission from natural resource abundance to slow economic growth have been suggested in the literature.[3] As we shall see, these channels can be described in terms of crowding out: a heavy dependence on natural capital, it will be argued, tends to crowd out other types of capital and thereby inhibit economic growth. Let us now consider the five channels one by one.

[2] For a number of such case studies, see Auty (2001).

[3] This discussion draws on and extends Gylfason and Zoega (2001).