## The Curse of Natural Resources

A DEVELOPMENTAL ANALYSIS IN A
COMPARATIVE CONTEXT



## Contents

1	Inti Not	oducti e	on	1 6		
2	Theoretical and Empirical Background					
	2.1	-				
	2.2			10		
		2.2.1	Factors Underlying the Relationship Between			
			Resources and Economic Growth	12		
		2.2.2	Does Resource Type Matter?	15		
	2.3	Institu	utional Approach to the Resource Curse Hypothesis	23		
		2.3.1	Institutions and Economic Development	24		
		2.3.2	Institutions and Natural Resources	27		
		2.3.3	Examples of Theoretical and Empirical Work			
			on the Institutional Channel to the Resource Curse	28		
	Note	es		31		
3	Nat	ural Re	esources and Human Development	33		
	3.1		ng the Path from Natural Resources to Human			
		Develo	opment	34		
	3.2		Tuman Development Index and Some Stylized Facts	37		
	3.3		and Methodology	40		
			sis and Results	47		
	3.5	Concl	uding Remarks	57		
	Note	es	-	59		

4	Natural Resources and Sustainability			61
	4.1		etical Framework for Sustainability	6 l
		4.1.1	Natural Resource Rents and Hartwick's Rule	62
		4.1.2	Net National Product and Genuine Saving:	
			A Formal Model Incorporating Four Types	
			of Capital	66
	4.2	rical Analysis: A Panel Data Approach to		
		ine Saving	77	
		4.2.1	Advantages and Shortcomings of Genuine Saving	
			as a Welfare Indicator	80
		4.2.2	The Resource Curse Hypothesis and Sustainable	
			Savings	81
		4.2.3	A Preliminary Assessment of World Genuine Savings	84
		4.2.4	Data and Methodology	88
		4.2.5	Analysis and Results	106
		4.2.6	Discussion	116
	Notes			119
5	Two	o-Coun	atry Comparison: Norway versus Sweden	121
	5.1	· • • • • • • • • • • • • • • • • • • •		
	and Welfare			122
			Wealth Estimates for Norway and Sweden	123
		5.1.2	Building Genuine Savings Step-by-Step for Norway	
			versus Sweden	127
		5.1.3	Concluding Remarks	140
	5.2		Would Norway Develop Without Oil? A Comparison	
	with Sweden			141
		5.2.1	A Historical Look at Norwegian and Swedish	
			Development Through the Nineteenth	
			and Twentieth Centuries	143
		5.2.2	Analysis of Differences in GDP Per Capita and	
			Productivity: A Difference-in-Differences Approach	152
	Notes			158
6	Con	clusion	1	159
-	~~		_	159

Appendix A. Calculation of the Hybrid HDI	165
Appendix B. Summary Statistics for "HybridHDI" Using the Observations in the Sample	167
Appendix C. Countries in the HDI Sample	169
Appendix D. Regional Categories	171
Appendix E. Pooled OLS Regression Outputs (Dependent Variable: HybridHDI)	173
Appendix F. Fixed Effects Panel Regression Outputs (Dependent Variable: HybridHDI)	181
Appendix G. Correlation Coefficients for HDI Analysis	187
Appendix H. Panel Unit Root Tests for HDI Analysis	189
Appendix I. Panel Unit Root Tests for GS Analysis 1-All Panel Data, 1970–2008 2-Oil Producer Countries, 1995–2007 3-Oil Producer OECD Countries 1995–2007	193 193 196 198
Appendix J. Correlation Coefficients for GS Analysis	201
Appendix K. Pooled OLS Regression Outputs (Dependent Variable: ANS RATE)	203

## xii CONTENTS

Appendix L. FE Regression Outputs	
(Dependent Variable: ANS RATE)	211
A.L.1. Whole Data Set	211
A.L.2. Oil Producers	216
A.L.3. Oil Producing OECD Countries	220
References	223
Index	239