# DEPLETION AND THE LONG-RUN AVAILABILITY OF MINERAL COMMODITIES

by

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# **CONTENTS**

#### **Preface**

- 1 Introduction
- 2 Evolving Concerns
- 3 Imperfect Measures
- 4 The Benevolent Past
- **5** The Uncertain Future
- 6 The Environment and Social Costs
- 7 Findings and Implications

Appendix. Trends in Real Prices for Selected Mineral Commodities, 1870 to 1997 (by Peter Howie)

# **FIGURES**

2.1	Market Price and Optimal Output for Mineral Commodity Producers
3.1	Reserves, Resources, and the Resource Base
3.2	Market Price, Production Costs, User Costs, and Ricardian Rent
4.1	Real Prices for All Resources and for the Agriculture, Minerals, and Forest Sectors
4.2	Hypothesized Trends in User Costs, Production Costs, and Prices for Mineral Commodities
4.3	Real Copper Prices in 1997 Dollars per Pound from 1870 to 1997 with Occurrences of Cartels, Wars, Major Depressions, and Other Market Distortions
4.4	Real Price of Petroleum Deflated by (a) the PPI, (b) the PPI Minus 0.75 Percent per Year, and (c) the PPI Minus 1.25 Percent per Year, 1870-1997 in 1870 Dollars per Barrel
5.1	Illustrative Cumulative Supply Curves
5.2	Two Possible Relationships Between Ore Grade and the Metal, Mineral, or Energy Content of the Resource Base
5.3	Energy Required per Pound of Copper From Sulfide Ore and Common Silicate Rock
5.4	World Population, 1000 – 2000
5.5	Intensity of Use Curves
6.1	The Optimal Use of Environmental Resources
6.2	Lead Flows in the United States, 1970 and 1993-94
6.3	Production and Air Emission for the Canadian Aluminum Industry, 1973-1995
6.4	Percentage of Arsenic and Sulfur Dioxide Emissions Captured and Cumulative Investment in Pollution Abatement at the Chuquicamata Smelter, 1980-1999

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## **TABLES**

- 3.1 Life Expectancies of World Reserves, Selected Mineral Commodities
- 3.2 Life Expectancies of Resource Base, Selected Mineral Commodities
- 4.1 Indices of Labor and Capital Inputs per Unit of Output for the U.S. Extractive Industries as a Whole, for Agriculture, for Minerals, and for Forestry, 1870-1957

#### **PREFACE**

Since the early 1970s the long-run availability of nonrenewable mineral resources has intrigued me. In part, this interest simply reflects the importance of mineral resources to human welfare. Without adequate supplies of oil, natural gas, coal, steel, aluminum, zinc, and phosphate rock, modern civilization as we know it is difficult to imagine.

Resource availability is widely considered one of the major challenges facing humanity along with nuclear war, population growth, and environmental preservation. Of course, all of these vital issues shaping the long-run future of the human race and the rest of the world as well are not independent.

In addition, I find the topic fascinating because the debate between those who are concerned about the depletion of mineral resources, often referred to as the pessimists, and those who are unconcerned, the optimists, seems as lively and contentious today as it was three decades ago. I marvel at how this can be—how can intelligent and informed people remain so divided on such an important issue after decades of discussions and research?

Over the years I have tried in my own small way to contribute to this discussion, beginning with a short book, *The Future of Nonfuel Minerals*, which the Brookings Institution published in 1975. Other publications I have since added to the burgeoning literature in this field are noted in the references. This study draws heavily from my earlier efforts, and in this sense is not entirely an original contribution. That in any case is not its purpose.

Rather it is an attempt to provide a concise and short primer on the long-run availability of mineral resources for the non-specialist. The goal is to offer an overview of the important issues along with the necessary conceptual tools for the reader to come to his or her own conclusions regarding the seriousness of the depletion threat and the appropriate policy response. I, of course, have my own opinions, which must inevitably and insidiously influence the presentation, though I have tried to be objective in discussing the controversial issues.

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