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"FEDERAL MINERAL POLICY: THE GENERAL MINING LAW OF 1872": A NOTE

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Property rights arrangements relating to ownership of natural resources have received increasing attention by economists, lawyers, and other social scientists because of their crucial impact on production efficiency and income distribution.[1] Ownership rights to hard rock minerals on public lands in the United States are assigned through the Mining Law of 1872, and in a recent article to this *Journal* Robert C. Anderson was highly critical of that law.[2] His major assertions were that the Act encouraged premature prospecting; that it led to excessive exploration; and that the income distribution resulting from mining on public lands was inequitable, with profits going to mining firms rather than to the Federal Government. Unfortunately, they remain assertions since no data or hypothesis testing was provided. This note does not defend the 1872 Law, but it does take issue with Anderson's critique of it.

First of all, he argues that open exploration leads to premature prospecting on public lands. This is certainly a possibility because exploration has the dual purpose of locating minerals and establishing property rights.[3] With competition for valuable ground mining firms have an incentive to explore early, as soon as the added costs are covered by the expected gains, in order to stake a claim to ore-bearing land. If actual production is delayed, the compounding of those prospecting outlays over time could offset any returns from mining once it occurs. This is a testable hypothesis that requires further analysis before it can be accepted as fact.

Anderson then goes on to argue that the 1872 Law encourages excessive exploration; that is, the "wage" paid the marginal prospector exceeds the value of his contribution to the industry. According

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1. The literature is growing rapidly. *See, e.g.*, the symposium on natural resource property rights in 15 NAT. RES. J. 639-789 (1975), and the articles therein. *See also* Libecap, *Economic Variables and the Development of the Law: The Case of Western Mineral Rights*, (to appear in J. ECON. HIST. June 1978); Anderson & Hill, *The Evolution of Property Rights: A Study of the American West*, 18 J.L. & ECON. 163 (1975).

2. Anderson, *Federal Mineral Policy: The General Mining Law of 1872*, 16 NAT. RES. J. 601 (1976).

3. For a discussion of hardrock mining law, *see* ROCKY MOUNTAIN LAW FOUNDATION, THE AMERICAN LAW OF MINING (1974). *See also* G. LIBECAP, THE EVOLUTION OF PRIVATE MINERAL RIGHTS: NEVADA'S COMSTOCK LODE (1978).

to Anderson, this is because each new prospector depresses "the incomes of earlier entrants to the field, so that in terms of their net contribution to discoveries their effort is unjustified."[4] Unfortunately, he does not develop this argument to show how the depressing effect on intramarginal prospectors takes place. There is, however, a problem in tying this point with the previous one: If rents have already been dissipated by premature prospecting, then they cannot be exhausted by excessive exploration.[5] Anderson is faced with a dilemma as to which effect occurs. Additional analysis, though, can tell us whether or not excessive exploration is likely. A profit maximizing firm will hire factors to search for ore as long as the expected returns equal the marginal costs of the factors. The expected returns are determined by the probability of locating ore and obtaining rights to it and expectations regarding its extent and quality, ore prices, and extraction costs. Anderson seems to mistakenly imply that there is a common property problem with hard rock minerals, where once discovery is made exclusive property rights cannot be assigned, leaving the resource vulnerable to new claimants.[6] Inability to establish property rights, of course, would reduce the returns to prospecting as additional entrants appeared. This, however, does not apply to mineral exploration and mining under the 1872 Law since exclusive ownership rights are assigned. Once valuable ore is located, claims can be filed and a patent obtained.

In his discussion of income distribution and the impact of taxation on mining firms, Anderson uses the common argument that a pure profits tax will have no impact on production. What he overlooks, though, is that such taxation could involve significant social costs. One would not expect mining firms to remain passive in the application of a pure profits tax; indeed, one would expect them to employ costly resources to evade the law, an activity which would lead to the dissipation rather than the redistribution of rents.[7] The question then is, do the benefits of transferring income from firms to the Government justify the costs involved?

Finally, Anderson's assertion that private firm decisions are un-

4. Anderson, *supra* note 2, at 609.

5. My colleague Ronald N. Johnson pointed this out to me.

6. The common property problem is discussed by Gordon, *The Economic Theory of a Common-Property Resource: The Fishery,* 62 J. POLITICAL ECON. 124 (1954). *See also* Cheung, *The Structure of a Contract and the Theory of a Non-exclusive Resource,* 13 J. L. & ECON. 49 (1970).

7. Rent dissipation has been discussed by Cheung, *A Theory of Price Control,* 17 J. L. & ECON. 53 (1974). *See also* A. ALCHAIN & R. KESSEL, COMPETITION, MONOPOLY, AND THE PURSUIT OF PECUNIARY GAIN (1962).

likely to coincide with national policy objectives does not mean those decisions fail to maximize social welfare. There is no necessary reason for national objectives and social welfare to coincide. Policies made on the basis of political expediency may benefit a particular group but not society. Ronald Coase warned of this in the "Problem of Social Cost":

> Of course, it is likely that an extension of Government economic activity will often lead to this protection against action for nuisance being pushed further than is desirable. For one thing, the Government is likely to look with a benevolent eye on enterprises which it is itself promoting. For another, it is possible to describe the committing of a nuisance by public enterprise in a much more pleasant way than when the same thing is done by private enterprise.[8]

In conclusion, as Mr. Anderson has suggested there is a need to examine property rights institutions and the impact of the 1872 Law on hard rock mining. As this Note has indicated, one must be careful in developing the hypotheses to guide that examination, and decisions to change the Law must be made on the basis of research and not untested assertions.

8. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 26-27 (1960).