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Approaches to State Taxation of the Mining Industry

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States have used a variety of approaches in imposing taxes on the hard-metal mining industry. This Comment examines basic approaches and specific legislation utilized by various states. The influence of these approaches on decision-making by the mining firm is also analyzed. Present New Mexico legislation is presented, with suggestions for approaches designed to better effect public policy goals inherent in the tax structure.

In examining and evaluating approaches to state taxation of the hard metal mining industry, it is important to remember that the problem of taxing the mining industry is actually part of a more fundamental problem—how to tax all economic agents so as to implement a wide range of policy goals. These goals include raising public revenue, imposing equitable tax burdens on the different segments of the economy, maintaining a high level of employment, encouraging economic growth, and providing for public security. These goals, of course, may conflict, and priorities are difficult to set. No longer can taxation be considered "the art of plucking the most feathers from a goose with the least amount of squawking."

In addition to general policy considerations, the mining taxation poses other problems, such as the need for conservation and the determination of public and private rights to natural resources. The federal government is also faced with the need for independence from foreign supplies of natural resources vital to national defense.

Conservation goals have changed in past years. Current thinking is that with the increased rate of technological advance, there is less reason for conserving resources merely for the sake of having more minerals underground at any given date in the future. Current conservation goals seem to concentrate on maximizing levels of recovery. Tax policies which tend to reduce the amount of natural resources which may be economically recoverable adversely affect conservation.

A basic consideration is the public and private interest in natural resources. Most nations separate surface rights from mineral rights, the latter being retained by the nation. Political leaders in the

3. Steele, supra note 1, at 248.
4. Id. at 233.
Western United States have been influenced by the Spanish tradition of *utilidad publica* (public interest or utility). An often unarticulated sentiment is that the resources of the state actually belong to all the people of the state.\(^5\)

Minnesota adopted a "natural heritage" theory in its taxation on iron ore deposits. It was reasoned that iron ore, once removed, cannot be replaced, and those who remove it should pay a relatively high tax.\(^6\)

The right to possession, use, and disposal of mineral deposits, though, is an integral part of the institution of private property in the United States. In all fifty states title to surface land rights also conveys title to mineral rights, unless the mineral rights are specifically reserved.\(^7\) Congress, after many years of debate, decided to open mineral lands like other parts of the public domain to common access.\(^8\)

In order to develop taxation policy for mining operations, taxes must be adapted to the economics of mining.\(^9\) The basis of mining is the ore body, which is defined as a concentration of minerals or metals in or on the earth's crust that can be mined and sold at a profit. The cut-off value of the ore is that level of contained value in the rock at which the cost of winning a saleable product from the rock is equal to the value of the product won.\(^10\)

Characteristics of ore bodies are variable, but are basically one of three types. Bonanza deposits are high grade, high unit value ore bodies, which are selectively mined and have a wide margin of operating profit. Bonanza deposits of hard metal ore bodies have been extremely rare for many years.

Mines with moderate grade and moderate size ore bodies, which are selectively mined were the most common type mines in the past, but this type is also disappearing today. Both of the first two type deposits were mined with relatively high labor expenditures and relatively low capital expenditures.

Most mines today are characterized by low grade ores and large

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amounts of reserves, and are bulk mined. These operations have relatively low labor expenditures, and relatively high capital expenditures. This type deposit produces flat tonnage curves, and operations are sensitive to cost-value changes, rates of recovery, mismanagement, taxation, and assessments.\(^{11}\)

The cost-value structure of mining operations is different from that of many other industries because prices for mineral resources are usually determined in international markets. The ability of mining operators in any one state to influence market prices on these international markets is minimal.\(^{12}\)

Pre-tax costs of production include: discovering, purchasing, acquiring the right to mine, developing and equipping the mine, extracting the ore, and marketing the product.\(^{13}\) Costs of mining the ore body are a function of factors including: size, shape, continuity, position in depth, rock conditions, and the rate of recovery.\(^{14}\)

Three types of special taxes or modifications of taxes imposed on other industries have been imposed on the mining industry. These taxes are the ad valorem property tax, the severance tax, and net proceeds or income type taxes. These taxes have often been extensions of taxes imposed on other types of industries, or have otherwise not taken the economics of mining or public policy into account. States have relied upon one or a combination of two or more of the mining taxes.

Most state constitutions require that property taxes be imposed with uniformity and equality for each class of property, so property taxes are imposed according to the value of the property. These requirements are met to an acceptable degree with farm lands and most other types of property. Valuation can be determined with a fair degree of accuracy by noting sale prices of similar property.

States have imposed property taxes based on the principles that the tax should approximate the benefit of government realized by the owner of the property, and that the owner's payment should be related to the value of the property. The owner of most types of property can also pay property taxes out of income from the land.\(^{15}\)

Property taxes are no longer a large source of revenue at the

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15. Roberts, \textit{supra} note 8, at 5.
state level, but are a primary source at the local level. Valuation of property may be made by local or state assessors.\textsuperscript{16}

Two basic factors determine the amount of property tax. Valuation determines the tax base. In most states, property is valued at some percentage of the full cash value of that property. A rate, usually measured in mills per dollar, is then applied to the valuation.\textsuperscript{17}

In assessing property taxes against mining operations, little problem is encountered in valuing surface improvements, machinery and equipment, and similar property. The difficulty is in valuing mineral deposits.

Two main approaches have been used in valuing mineral deposits. Some states have first valued surface improvements, machinery and equipment, and similar property as other property is valued. The value of the ore body is determined as a function of yearly proceeds from the ore body. Production is usually averaged, and valuation may be gross income, net income, or some other factor based on production.\textsuperscript{18} This approach only includes in valuation minerals which are extracted each year, and does not include in valuation mineral reserves to be extracted in the future.

The second approach is to determine the present value of future earnings of the mining operation.\textsuperscript{19} The Hoskold formula is one attempt to measure this present value. An assumption is made that enough from yearly income of the mine will be accumulated in a sinking fund during the life of the mine to repay the investor his original capital. This yearly deduction will decrease because the sinking fund itself will bear interest. The expected future earnings of the mining operation are then reduced to present value by the formula:\textsuperscript{20}

\[
\text{Present value} = \frac{A}{R^n - 1 + r^t}
\]

\( r = \) practical safe rate on redemption of capital (amount of interest to be earned on sinking fund)

\[16\] Allen, supra note 7, at 574-75.
\[17\] Roberts, supra note 8, at 3.
\[18\] For examples, see ad valorem property taxes of Colorado, Montana, and Wyoming, text at nn. 49, 54, 57 and 61, infra.
\[19\] See Parks, Examination and Valuation of Mineral Property 190-296 (1949), for an explanation of theoretical approaches to determining present value of future net earnings of a mine, and case valuations, which demonstrate the process of determining valuations with uniform and nonuniform annual income.
\[20\] Id. at 194, 195.
\[ r^1 = \text{speculative rate to purchaser on his capital investment} \]
\[ n = \text{years of life of mine} \]
\[ A = \text{annual payments} \]
\[ R = 1 + r \]

The difficulty with the Hoskold formula or its variations is not in computing the formula, but in determining the factors to be used in the formula. No two geologists ever agree to the extent of the ore body, or the number of years needed to mine completely the ore body.\(^{21}\)

No matter which approach is used in assessing property taxes, the property tax will raise the cut-off value of the operation, because the tax will be an additional fixed cost of the mining operation. By raising the cut-off, the level of recovery will be reduced. Lower grade (or higher cost) minerals cannot be economically mined, and will be left in the ground. Metal-bearing material may become waste instead of ore, and in most cases it is not economically feasible to re-enter a mine once operations are shut down. The raising of the cut-off has the most effect on bulk mined, low grade deposits. If the property tax has as a valuation base the presently discounted value of future net receipts from the property, the number of times the net receipts of a given year will be taxed depends on their distance in the future. The present value of the property to the operator will be maximized by shifting the time pattern of resource exploitation to the present. The life span of the natural resources will be reduced, because the rate of recovery will be increased.\(^{22}\) This type of property tax will also have the effect of discouraging exploration for and the development of reserves ahead of mining.\(^{23}\) Of course, this may be desirable to induce utilization of property which would otherwise be kept idle for speculative purposes.\(^{24}\)

Reliance on property taxes on mining operations may not be desirable to the state as a whole because minerals are usually found in sparsely populated areas. Relatively small segments of the state's population may be tremendously benefited by the property tax on mines, since most property taxes are distributed to local government.\(^{25}\) It may be more desirable for the state to distribute more evenly revenues collected from mining operations.

Severance taxes have usually been classified as occupation, license,  

\(^{22}\) Steele, *supra* note 1, at 245.  
\(^{23}\) Lacy, *supra* note 10, at 2-5.  
\(^{24}\) Steele, *supra* note 1, at 245.  
\(^{25}\) Roberts, *supra* note 8, at 11.
privilege, or excise taxes instead of taxes on property. As such, 
severance taxes are not subject to the constitutional requirements of 
uniformity and equality as are property taxes.

Severance taxes are either specific or ad valorem. Specific sever-
ance taxes are based on the weight or volume of the mineral sev-
ered. Ad valorem severance taxes are based on the value of re-
sources recovered. The base for valuation of an ad valorem sever-
ance tax may be gross value, market value, gross yield, gross 
receipts, or net proceeds.

In distinguishing between a property tax and an excise tax, the 
United States Supreme Court, in *Stanton v. Baltic Mining Co.* 
ruled that a tax imposed upon a product of a working corporate mine “is 
not a tax upon property as such because of its ownership, but a true 
excise levied on the results of the business of carrying on mining 
operations;” and it is immaterial that an adequate allowance may 
not be made for the exhaustion of the ore body to result from 
working the mine.

The New Mexico supreme court in *Flynn, Welch & Yates v. 
State Tax Commission* was presented the opportunity to rule on 
the validity of a specific severance tax imposed on one who severed 
oil and gas. The taxpayer argued that the tax was not an excise tax, 
but a property tax and so void because not levied in proportion to 
value. The court held that the name by which the tax is described 
is immaterial, and that its character must be determined by its in-
cidents. In describing the nature of the severance tax, the supreme 
court quoted from *State ex rel. Snidow v. State Board of Equaliza-
tion*:

The state in effect says to producers: Your operations deplete the 
natural resources of the state, and to the extent that you remove 
from the earth the natural wealth which nature has provided it, and 
to that extent impoverish it, you are required to pay a license tax for 
the use and benefit of the state, for the privilege of extracting such 
natural wealth. The tax provided is not, therefore, on metals, min-
erals, or mine products, but rather upon the business of producing 
metals or precious stones, based upon annual production.

A severance tax, in comparison with a property tax, which bases

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27. Allen, supra note 7, at 575.
29. 38 N.M. 131, 28 P.2d 889 (1934).
30. Id. at 133, 28 P.2d at 890.
31. Id. at 134, 28 P.2d at 890.
32. 93 Mont. 19, 17 P.2d 68, 18 P.2d 804 (1932).
33. 38 N.M. at 137, 28 P.2d at 892.
valuation on presently discounted future earnings, will tend to expand the life span of the mine by reducing the rate of recovery of reserves.\textsuperscript{34} The total tax imposed on reserves will be determined by the amount of reserves mined, instead of being determined by both the amount of reserves and the number of years in which the tax is imposed.\textsuperscript{35}

Severance taxes are an additional variable cost to the mine operator, and have the effect of raising the cut-off. This raised cut-off will tend to lower the level of recovery of reserves, and marginal grades of ore may become waste instead of being mined.\textsuperscript{36} The burden of severance taxes will decrease with price increases and increase with price decreases. This effect is accentuated if the tax is a specific severance tax.\textsuperscript{37}

Severance taxes levied on a gross amount received, will discriminate against less profitable mines because the tax will not vary in relation to cost.\textsuperscript{38} Newly developed and marginal mines will operate at a disadvantage.

Severance taxes do not discourage development of reserves, or penalize the operation if curtailed because of a strike or some other reason.\textsuperscript{39} States may credit severance taxes against a tax levied on processors in the state, thus encouraging extractors of minerals to process the minerals in the state.\textsuperscript{40} Other advantages of severance taxes in comparison with property taxes are the relative ease of administration, and better opportunities to share revenue with local units in a way which will best promote the interests of the state.\textsuperscript{41}

A third approach to state taxation of the mining industry is a net proceeds or income tax, imposed in addition to regular corporate income taxes.

States imposing a net proceeds tax usually list specific deductions from revenue which the mining operation may claim. These deductions may include direct expenses of mining, such as; costs of labor, tools, and supplies; office, engineering and clerical expenses and salaries of employees; depreciation of machinery, structures, and

\begin{itemize}
  \item Lockner, \textit{The Economic Effect of the Severance Tax on Decisions of the Mining Firm}, 4 Natural Resources J. 468, 485 (1965).
  \item See McDonald, \textit{The Effects of Severance vs. Property Taxes on Petroleum Conservation}, Proceedings of the Forty-Eighth Annual Conference on Taxation of the National Tax Association 320 (1965), for a theory that severance taxes are not economically neutral with respect to conservation, while it is feasible to make the property tax neutral with respect to conservation.
  \item Lacy, \textit{supra} note 7, at 2-6.
  \item Steele, \textit{supra} note 1, at 246.
  \item \textit{Id.} at 247.
  \item Allen, \textit{supra} note 7, at 578.
  \item Lacy, \textit{supra} note 10, at 2-6.
  \item Allen, \textit{supra} note 7, at 578.
\end{itemize}
improvements; costs of sampling, assaying, reducing, and smelting; and expenses for state and local taxes, insurance, and interest paid.

A net proceeds tax has the least effect of any of the mining taxes on direct or indirect costs until the break-even point is reached. If the mining operator were a monopolist, a net proceeds tax would tend to increase his price. However, the determination of the price for the product of a mining operation is usually far beyond the influence of the operator.

A net proceeds tax, by not raising the cut-off, will tend to raise the level of recovery in comparison with the level of recovery under a property or severance tax.

If a graduated net proceeds tax is imposed, the rate of recovery will tend to be reduced in order to maximize profits. The point of total maximum profit and the current rate of profit will be shifted to lower rates of recovery in order to enter lower tax brackets.

One criticism of the net proceeds tax is that it rewards inefficiency. Even though this is true, no mining operator would deliberately operate a mine inefficiently in order to take advantage of lower taxes, unless a tax is confiscatory.

In order to see what approaches to taxation states have adopted, a comparison is made of taxes imposed on certain minerals mined in New Mexico by other states producing large quantities of these minerals. While New Mexico produces many hard minerals, the five of most importance to the state are uranium, copper, potash, molybdenum, and coal.

<table>
<thead>
<tr>
<th>STATE</th>
<th>TAX</th>
<th>DESCRIPTION</th>
<th>RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah</td>
<td>Mining Severance Tax</td>
<td>Gross value of metal delivered. Deduction for transportation costs.</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Ad Valorem Property Tax</td>
<td>$5.00 per acre. 30% of reasonable cash value for machinery and improvements. Valuation of minerals is two times the net average annual proceeds for the preceding three years.</td>
<td>Regular ad valorem rates</td>
</tr>
<tr>
<td>Wyoming</td>
<td>Severance Tax</td>
<td>Value of gross products fixed by Board of Equalization. Tax payable computed on gross pro-</td>
<td>6⅔%</td>
</tr>
</tbody>
</table>

42. Lacy, supra note 10, at 2-7.
43. Lockner, supra note 13, at 349.
44. Id. at 350.
46. Id. §§ 59-5-57, -58.
<table>
<thead>
<tr>
<th>STATE</th>
<th>TAX</th>
<th>DESCRIPTION</th>
<th>RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gross Products of Mines (Property Tax) 48</td>
<td>Gross products of mines taxable, in addition to surface improvements, in lieu of taxes on land.</td>
<td>Regular ad valorem rates</td>
</tr>
<tr>
<td>2. Molybdenum</td>
<td>Ad Valorem Property Tax 49</td>
<td>Assessment of 1/4 of gross proceeds or net proceeds, whichever is higher. Improvements and machinery taxed at full cash value.</td>
<td>Regular ad valorem rates</td>
</tr>
<tr>
<td>Colorado</td>
<td>Mining Industrial Board Fund 50</td>
<td>In addition, a tax equal to .1% of assessed valuation</td>
<td></td>
</tr>
<tr>
<td>3. Potash</td>
<td>Ad Valorem Property Tax 51</td>
<td>Taxed as other real property</td>
<td>Regular ad valorem rates</td>
</tr>
<tr>
<td>California</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Coal</td>
<td>Coal Operator's License 52</td>
<td>Based on production</td>
<td>$10 to $50</td>
</tr>
<tr>
<td>Colorado</td>
<td>Coal Tonnage Tax 53</td>
<td>Tax per ton</td>
<td>$.007 per ton</td>
</tr>
<tr>
<td></td>
<td>Ad Valorem Property Tax 54</td>
<td>Assessment of 1/4 of gross proceeds or net proceeds, whichever is higher. Improvements and machinery taxed at full cash value.</td>
<td>Regular ad valorem rates</td>
</tr>
<tr>
<td></td>
<td>Mining Industrial Board Fund 55</td>
<td>In addition, a tax equal to .1% of assessed valuation</td>
<td></td>
</tr>
<tr>
<td>5. Copper</td>
<td>Gross Receipts Tax 56</td>
<td>Gross receipts</td>
<td>1.5%</td>
</tr>
<tr>
<td>Arizona</td>
<td>Ad Valorem Property Tax 57</td>
<td>60% valuation of mineral property</td>
<td>100 mills, approx.</td>
</tr>
</tbody>
</table>

48. Id. §§ 39.222 to -.224.
50. Id. § 92-34-1.
53. Id. § 92-11-1 (f).
54. Id. §§ 137-4-3 to -5.
55. Id. § 92-34-1.
New Mexico has adopted a variety of approaches to mining taxation. At the present time, New Mexico taxes mining operations through an ad valorem property tax, two types of severance taxes, and taxes which are applied to other businesses.

Section 1, Article 8 of the New Mexico Constitution requires that taxes upon tangible property shall be in proportion to the value thereof and that taxes shall be equal and uniform upon subjects of taxation of the same class. The statute which carries out the constitutional requirements in mining property taxes is Section 72-6-7, N.M. Stat. Ann. This statute is confusing because it provides two methods of valuing producing mineral properties.

The tax commissioner may determine the ad valorem value by appraisal of the reserves of the mine, in addition to an appraisal of surface improvements. He can also determine ad valorem value by assessing on the basis of average proceeds plus surface improvements.

In practice, the state tax commission has seemed to assess on the basis of the value of production from the property, determined by

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57. Id. § 42-227.
59. Id. §§ 361.225, 362.020.
61. Id. § 84-5408.
63. Id. §§ 72-6-7(10), -7(15).
taking the market value of the product and deducting from it the actual and direct costs of producing, transporting, and selling the product. The mine operators have been given the choice of determining the value of production by using the average value of production for the preceding five years, or merely using last year's value of production, but once the operator elects one of the methods, he cannot change to the other method.  

The percentage of value used to determine the assessed value of the tangible property is 33 1/3%, which is a uniform valuation for all classes of property. The value of production is assessed at 100%. Millage rates vary from county to county, but may not constitutionally exceed twenty mills, except for special assessments.

The Resources Excise Tax is imposed on the privilege of severing and processing most minerals in New Mexico. The tax has three sections, the Resources Tax, Processors Tax, and Service Tax.

The Resources Tax is on the privilege of severing natural resources and is imposed on the gross value of the resource at the time it is severed, without any allowable deductions for production costs. The rates for all natural resources except potash are .75%. The rate for potash is 3%.

The Processors Tax is imposed on the privilege of processing natural resources and is generally based on the gross value of the resource after processing, without allowable deductions. If a resource is processed in New Mexico and the processors tax is paid, the resource is exempt from the Resources Tax. The rate for all natural resources except timber is .75%. For timber the rate is .375%. The Processors Tax greatly encourages the processing of potash in New Mexico.

A Service Tax is imposed on persons severing or processing in New Mexico natural resources owned by another person, and not otherwise taxed by the Resources Tax or the Processors Tax. The same rates are applied.

New Mexico also imposes a Severance Tax on the value of the product at the time it is severed. The taxable value is the gross value of the product, less deductions for hoisting, crushing, and loading. Deductions are limited to 50% of gross value. Rates are:

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64. Id. § 72-6-7(6).
65. New Mexico Mining Association, supra note 12, at 4.
66. N.M. Const. art. VIII, § 2.
68. Id. § 72-16A-25.
69. Id. § 72-16A-24.
70. Id. § 72-16A-25.
71. Id. § 72-18-1 (Repl. 1961).
72. Id. § 72-18-2 (Repl. 1961).
1. potash 2 3/4%
2. copper 3/4%
3. uranium and other material used primarily for its fissionable value 1%
4. timber .125%
5. coal .125%
6. pumice, gypsum, sand, gravel, clay, fluorspar and other nonmetallic minerals .125%
7. gold, silver, lead, zinc, thorium, molybdenum, manganese, rare earths and other metals .125%

The percentage of Severance and Resources Excise Taxes paid to gross value, and revenue to the state for minerals produced in New Mexico is shown in the following table.

NEW MEXICO SEVERANCE AND RESOURCES EXCISE TAX PAID, CALENDAR 1967

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Value</th>
<th>Severance Resources Excise Tax Paid</th>
<th>Total Taxes Paid</th>
<th>Taxes As % of Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>$12,641,000</td>
<td>$9,571</td>
<td>N/A</td>
<td>$9,571</td>
</tr>
<tr>
<td>Copper</td>
<td>57,345,000</td>
<td>147,826</td>
<td>159,942</td>
<td>307,768</td>
</tr>
<tr>
<td>Gypsum</td>
<td>588,000</td>
<td>447</td>
<td>4,646</td>
<td>5,093</td>
</tr>
<tr>
<td>Lead</td>
<td>512,000</td>
<td>269</td>
<td>1,040</td>
<td>1,309</td>
</tr>
<tr>
<td>Manganese</td>
<td>348,000</td>
<td>699</td>
<td>1,503</td>
<td>2,202</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>——1,899</td>
<td>——144,259</td>
<td>——156,158</td>
<td>——</td>
</tr>
<tr>
<td>Perlite</td>
<td>3,424,000</td>
<td>2,038</td>
<td>21,437</td>
<td>23,475</td>
</tr>
<tr>
<td>Potash</td>
<td>91,098,000</td>
<td>498,870</td>
<td>546,217</td>
<td>1,045,087</td>
</tr>
<tr>
<td>Pumice</td>
<td>639,000</td>
<td>411</td>
<td>2,813</td>
<td>3,224</td>
</tr>
<tr>
<td>Salt</td>
<td>1,036,000</td>
<td>5</td>
<td>6,764</td>
<td>6,769</td>
</tr>
<tr>
<td>Sand &amp; Gravel</td>
<td>14,336,000</td>
<td>2,960</td>
<td>66,140</td>
<td>69,100</td>
</tr>
<tr>
<td>Stone</td>
<td>2,403,000</td>
<td>555</td>
<td>1,082</td>
<td>1,637</td>
</tr>
<tr>
<td>Timber</td>
<td>——1,572</td>
<td>68,546</td>
<td>70,118</td>
<td>——</td>
</tr>
<tr>
<td>Uranium</td>
<td>89,615,000</td>
<td>292,543</td>
<td>313,517</td>
<td>606,060</td>
</tr>
<tr>
<td>Zinc</td>
<td>5,919,000</td>
<td>2,416</td>
<td>20,724</td>
<td>23,140</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>——788</td>
<td>57,321</td>
<td>58,109</td>
<td>——</td>
</tr>
</tbody>
</table>

1 Withheld by the Bureau of Mines to avoid disclosing individual company data.
2 Withheld because Bureau of Mines “miscellaneous” and Bureau of Revenue “miscellaneous” are not comparable.


Many possible goals of taxation policy for the mining industry were earlier mentioned. Some of these possible goals include: the need for raising public revenue, imposing equitable tax burdens, maintaining high levels of employment, providing for economic development and public security, and conserving valuable natural resources. While all these goals, and others, must be taken into account in formulating taxation policies, probably economic development is of prime importance to New Mexico at this time.
There are two basic problems in stimulating economic development: sufficient capital to enable greater productivity on the part of labor, resulting in higher real personal incomes, and the efficient use of all available resources. New Mexico is in somewhat the same position as developing nations, and must be highly concerned with the attraction of capital to the state.

In most cases, capital will or will not be formed for the development of mining resources in New Mexico for reasons beyond the control of any taxing policy. A mining operator will primarily be concerned with two things: the price which a certain mineral will bring, and the costs which will be encountered. Taxes will usually be a relatively minor addition to cost. A mining operator will develop mineral resources if he can realize an adequate return after all costs, including taxes. Ordinarily, only in marginal cases will taxes deter or encourage the attraction of capital to develop mineral resources.

One exception to the minor role of taxes in encouraging capital formation is the negative effect of political instability. The mining firm is probably the industry which is most vulnerable to political instability, because of the relatively high amount of capital necessary for operations, and the immobility of the industry once an investment in capital is made. The mining industry must live or die with any changes in taxation, because it cannot pack up its investment and leave.

The fear of political instability is best seen in the classic example of Minnesota's taxation of the taconite industry. For many years, the steel industry was dependent on iron ore extracted from the Mesabi Range in Minnesota. As a result of its near monopoly, Minnesota imposed extremely high mining taxes on the iron ore extracting industry. As new sources of iron ore were discovered after World War II, public revenues in Minnesota skidded.

Taconite, a low grade iron-ore, was discovered, and was taxed at a much lower rate than other iron-ore deposits. Mining firms still were hesitant to make the investments needed to develop a taconite industry, even though they would be taxed at a much lower rate than other iron-ore deposits. After making the large investments necessary, the taconite industry would be a very inviting source of new revenues to make up for dwindling revenues from other mining sources.

Finally in 1964, Minnesota passed a constitutional amendment

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which limited the taxation of the taconite industry for the next twenty-five years. Soon after passage, over 500 million dollars was invested in plant construction for the taconite industry.\textsuperscript{74}

Once a mining operation is established in the state, other goals must be taken into account. The state has a legitimate interest in imposing substantial taxes on profitable mining operations. On the other hand, the state should not force marginal mining operations to close operations by imposing tax burdens which would make an otherwise profitable operation unprofitable. These mines are a source of employment for many state citizens, and provide other economic benefits to the state.

A suggested approach to mining taxation is included, but the determination of specific rates and other details of any legislation is far beyond the scope of this Comment. The details of any legislation should be formulated to meet the goals of whichever approach is decided upon. It is suggested that ad valorem property taxes be imposed only on the surface value of the mining claim and improvements of the mine. This property can be valued like other real property, and revenues distributed as present real property taxes are now distributed.

The state should also impose a graduated net proceeds tax, with deductions from gross proceeds to be enumerated by the state. While it is beyond the scope of this Comment to suggest the specific deductions from gross proceeds, the deductions should include the direct costs of extracting, transporting, reduction and refining, marketing and delivering, and maintenance and repairs. Costs such as insurance, depreciation, and interest might be limited to a percentage of gross yield or limited in some other manner. The state must also decide whether to allow a deduction for depletion.

In determining net proceeds, deductions must of necessity be arbitrary in some cases. This cannot be avoided with any taxing legislation. By allowing mining operations to credit ad valorem property taxes against their net proceeds tax, marginal operations would be further protected against any resulting arbitrary net proceeds tax.

Revenues from a net proceeds tax on mining operations should be distributed so as to best meet over-all state needs. The possible added burden of mining operations on local units of government should, of course, be taken into consideration in the distribution of revenues.

Hopefully any changes to be made in New Mexico mining tax-

\textsuperscript{74} Weaton, \textit{supra} note 6, at 7-1, 7-24, 7-25 (1969).
ation legislation will be designed to achieve goals which are of benefit to New Mexico and its citizens. If these goals are to be met, the Legislature must consider a vast number of factors and balance conflicting interests. The task is not easy, but it is important.

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