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## Comparing Royalties: NSR vs. NPI

By  
Christopher G. Baldwin

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## **COMPARING ROYALTIES:** **NSR vs. NPI**

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Each type of royalty creates different advantages and disadvantages for the royalty owner and the operator. It is particularly interesting to compare and contrast a net smelter returns royalty (NSR) with a net profits interest (NPI).

In purely economic terms, the choice between an NSR or an NPI could be made by a coin toss if the factors that went into the calculation of both could be predicted with absolute certainty. The inclusions and deductions that go into the calculation of an NSR and an NPI on a particular ore body, and the timing of receipts and expenditures, can be modeled and rates assigned to each such that their present values are the same. The result of this sort of exercise is that typically the rate of an NSR would be in a range starting at 2% and the rate of an NPI would be in a range that might start around 10%.

### **Leverage**

However, these predictions are only that and are inherently uncertain. An advantage which the NPI has over an NSR is that it provides much greater leverage, where there is an unpredicted price increase or cost decrease. As illustration, suppose a mine sells gold for \$370 per ounce; its cash costs are \$200 per ounce and its total production costs are \$300 per ounce. Very roughly, the holder of a 2% NSR would receive \$3.40 per ounce and the holder of a 10% NPI would receive \$7 per ounce. Predictions have been made<sup>1</sup> that the price of gold will increase to \$800 per ounce, which would be a 116% price increase. In our scenario the NSR holder then receives \$12 per ounce - a 252% increase - but the NPI holder receives \$50 per ounce - a 614% increase.

Operators sometimes try to restrict the benefit that this leverage gives the royalty owner by negotiating for a cap on the royalty or a rate which declines as the price of gold increases or a right to buy the royalty out for a fixed, agreed amount.

### **Timing of Payments**

The holder of an NSR begins to receive payments as soon as mine product is shipped to the smelter, while the holder of an NPI must wait until the operator has recouped its pre-production expenditures and its capital investment. This exposes the NPI to the risk that recoupment will take

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<sup>1</sup> By Rod McEwen, President, Goldcorp Inc. as reported by the National Post newspaper on January 30, 2003.



longer than predicted. This could result from increased costs of borrowing, increased operating costs such as costs of labour, fuel or electricity, a fall in commodity prices and so on. To combat this, in negotiating the terms of an NPI, the royalty owner will often demand that advance royalty payments be made to him until the operator has achieved capital pay-back (perhaps with the payments beginning on commercial production) and that minimum payments be made to him thereafter.

### **Effect on Operator's Decision to Develop**

The NSR represents a cost that the operator must bear even if the operation is not profitable, whereas the NPI ought to be a less painful burden in that the amount paid varies with the mine's profitability and is not payable at all unless and until the mine is profitable. A possible consequence of this is that the existence of an NSR may make a project economically unfeasible such that it is never developed.

### **Liquidity**

There are fewer factors that go into the calculation of an NSR which are subject to change, with the result that its value can be estimated at any time with a greater degree of certainty than an NPI. This may give the NSR holder an advantage he or she would not have as the holder of an NPI, should a decision be made to sell the royalty.

### **Large or Small Administrative Burden**

The royalty holder will be entitled to receive, and will normally have the right to audit, all the information needed to verify that the royalty has been calculated correctly. The holder of an NPI will have the right to all information needed to calculate the profit generated by the mine, while the NSR holder's claim to information will be quite limited. The NPI therefore represents a greater administrative burden than an NSR and also requires the disclosure of information which the operator might prefer to keep to itself.

### **Potential for "Manipulation" by the Operator**

Because more factors go into the calculation of an NPI than an NSR, there has always been a general perception that the NPI is more susceptible to manipulation by the operator. Cynical observers have suggested that the "NPI royalty" should be more accurately described as the "no payment intended" royalty.<sup>2</sup> Recent accounting scandals will have done nothing to reduce this apprehension.

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<sup>2</sup> Craig Haase and Peter Babin, "Mining Royalties from the Royalty Owner's Perspective – Forming Symbiosis with the Operator", 42 Rocky Mtn. Min. L. Inst. 21-1.



One example may be offered to show that distrust of the NPI is not without some justification.

In *Utah International Inc. v. Milbourne* (1977), 1 B.L.R. 223 (B.C.C.A) the royalty owner saw his expectation of profit disappear through the magic of compounding imputed interest. The head note to this case provides the following account:

The defendant had explored certain mining properties and in January 1966 he entered into an agreement with the plaintiffs whereby they would develop the properties. The defendant was entitled to receive certain advances until the mine was put into production after which he was to receive 10 percent of the “net profits” until the plaintiffs had been repaid all their “pre-production expenses” out of the remaining 90 percent of such “net profits”. Thereafter the defendant was entitled to receive 25 percent. A disagreement arose as to whether the plaintiffs could claim for (i) interest on funds invested by them in the mine as a cost in the calculation of pre-production expenses and operating expenses and (ii) depreciation (including amortization) of pre-production expenses in the calculation of operating expenses. The agreement contained definitions of “pre-production expenses” and “operating expenses” which included a wide variety of direct and indirect costs but did not expressly include as a cost the interest claimed. On the first issue the trial Judge found that there was a cost to the plaintiffs attached to all moneys and that the word “cost” as used in the agreement was broad enough to cover interest actually borrowed by them or obtained in part from other funds generated by the plaintiffs. On the second issue the trial Judge found that on a construction of the agreement the plaintiffs were entitled to claim depreciation of pre-production expenses in the calculation of operating expenses (which were defined to be expenses incurred after commencement of production) even though the actual outlay for such pre-production expenses was made prior to commencement of production. The defendant appealed. The appeal was dismissed.

### **Best of Both Worlds**

Royalty owners sometimes try for the best of both worlds by negotiating for the right to switch from an NSR to an NPI, or vice versa, at rates which are agreed to be equivalent, as defined milestones are met (completion of feasibility study, permitting, commencement of construction, commencement of commercial production).

### **And the Winner Is:**

The choice between an NSR and an NPI should be made on a case by case basis, taking into account the particular circumstances. As seen from the above, there are a multitude of factors which are relevant, with perhaps the most important being those on which an economic model for the ore-body would be based.

From the royalty holder’s perspective, a relatively clear case for an NPI might be a situation where the ore-body is large, high-grade and simple; interest rates are expected to decrease; commodity



prices are expected to increase (and the operator does not hedge aggressively); labour conditions and fuel prices are stable; inflation is modest (or, at least, predictions are not for high inflation coupled with static commodity prices); no significant capital expenditure will be required after initial

construction; and the operator has the financial capability and technical expertise to develop the mine quickly and operate it efficiently. On the other hand, the royalty owner might more clearly prefer an NSR where these factors are reversed.

If, however, only some of these factors were reversed (suppose the ore-body is complex, low-grade and small but all other factors remain the same) the royalty owner may well be unsure as to what is the better choice. Clearly there is no pat answer which is more preferable, the NSR or the NPI, from either the perspective of the royalty owner or the operator.

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**Vancouver**

1600 Cathedral Place  
925 West Georgia Street  
Vancouver, British Columbia  
Canada V6C 3L2  
Telephone 604.685.3456  
Facsimile 604.669.1620

**Calgary**

3700, 205-5<sup>th</sup> Avenue SW  
Bow Valley Square 2  
Calgary, Alberta  
Canada T2P 2V7  
Telephone 403.269.6900  
Facsimile 403.269.9494

**Yellowknife**

P.O. Box 818  
4908 – 49<sup>th</sup> Street  
Yellowknife  
Northwest Territories  
Canada X1A 2N6  
Telephone 867.669.5500  
Toll Free 1.888.465.7608  
Facsimile 867.920.2206

[genmail@lawsonlundell.com](mailto:genmail@lawsonlundell.com)  
[www.lawsonlundell.com](http://www.lawsonlundell.com)

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