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Development and Operation of the Minerals Resource Rent Tax

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Raising Questions about Minerals Rent Taxation

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Summary

It was revealed earlier this year that the Minerals Resource Rent Tax (MRRT) collected far less revenue than expected. While specific design features of the MRRT have been blamed for the massive shortfall, I believe that flaws in the underlying theory of rent are the reasons why the MRRT is unlikely to achieve its purported objectives.

The theory of rent may be a useful intellectual device to illustrate the idea of super profits – excess profits derived from sheer manipulation or exploitation rather than contribution – but in practice it is extremely challenging, or even impossible, to quantify them. The difficulty of identifying rents clearly and separating them from returns to other factors of production has been recognized even by early proponents of rent taxation.

Perhaps it is regrettable that the merit of rent taxation has been accepted as self-evident by many participants in the mining tax debate. It appears that, before committing massive resources towards the implementation of a new tax, it would have been sensible to canvass a wide range of views on the subject of rents. Particularly, Frank Knight's rejection of Henry George's arguments for land rent tax could have provided a meaningful contribution. This paper will review opinions from classical and neoclassical economists and discuss their relevance to the mining industry.

The Theory of Rent

The theory of rent was developed by the classical economists of the 18th century who believed that the most efficient form of taxation is the taxation of land rents. Adam Smith proposed the taxation of "ground-rents", the return above "building-rents" which constituted profits from capital spent on constructing and maintaining buildings. Smith thought that the taxation of "ground-rents" would only affect the owner "who acts always as a monopolist and exacts the greatest rent which can be got for the use of this ground". Smith acknowledged that he had been unaware of any country in Europe that taxed ground-rents as a separate category. Importantly, he admitted that the reason may have been the difficulty in determining what part of the rent does in fact constitute such "ground-rent" but asserted that the differentiation was possible.

David Ricardo, another classical economist, believed that rents originated from the "original and indestructible powers of the soil" and were determined by the differences in yield among productive and less productive land.

Alfred Marshall, the eminent economist of the 19th century, struggled with the problem of distinguishing between what was derived from effort and what is purely a "gift of nature;" something that is not earned. He stressed that the ability of the person cultivating the land was the major determinant of rents. Indeed, if Marshall were alive today he might agree that the tenements held by FMG may never have yielded any returns at all under different owners. Presumably, the previous owners sold those tenements because no superior returns were expected from them. In contrast, FMG management applied the relevant management and technical skills in order to transform desert rock, deemed by others as worthless, into a valuable product.

Opponents of this argument might say that widgets have no value until they are placed in a machine but should be payed for. The same should apply to resources. However, land is not a widget! Land cannot be charged into a blast furnace. Land and natural resources are brought into economic use by their improvement.

The difficulty of separating a special unearned surplus or rent also bothered the economist Frank Fetter. Fetter, a former President of the American Economic Association, complained about the difficulty of dealing with rents in a practical way based on real conditions: "the distinction between land and the products of labour is a loose one, impossible to make in practice**.** It is said that the distinction is of no importance to the practical business man."

Fetter does not agree with the Ricardian view that land produces rent because it is always in limited supply. Fetter explains: "Later, however, it is shown that inventions that will turn the soil deeper, discoveries and new means of transportation that will bring into competition great areas of new land, and improvements that make available the resources before unused are constantly changing the limits of the supply of natural resources, in the economic sense of the word supply." One can of course easily imagine parallels with the reality of mining today. Rock can be turned into something valuable by the application of new exploration technology and new sources of infrastructure funding. For example recently available Chinese expertise, demand, and investment are making previously uneconomic magnetite deposits valuable today.

The assumption of limited supply as a cornerstone of Ricardian rent was criticized strongly by Frank Knight at the University of Chicago:" The definition given for land to make it fit the description of a fixed supply – is indeed drastic in its limitation. Later, this dogma of unconditional fixity of supply was made the basis for the single tax propaganda….it is utterly fallacious. It should be self-evident that when the discovery, appropriation, and development of new natural resources is an open, competitive game, there is unlikely to be any difference between the returns from resources put to this use and those put to any other."

Carl Menger, founder of the Austrian School, showed that goods derived their value from their ability to satisfy human needs and therefore value did not depend on the amount of labour required or any intrinsic worth. In his most important work *Principles of Economics* Menger constructs a complete theory of price based on choice and actions of consumers. He starts with the basis of all economic activity, the satisfying of human wants through useful things which are called goods.

Consumer goods derive their value from specific bits of satisfaction derived by consumers and capital goods – services and equipment used to make consumer goods – derive their value in turn from consumer goods. The value of capital goods also depends on the availability of complementary goods.

Menger cites the example of the American Civil War which stopped the supply of cotton to English cotton mills and in turn caused English cotton workers to lose their goods character as the complementary good, cotton, was unavailable. Another example cited is Hungary where labour shortages often caused grain to spoil in the fields. The crops lost their goods character because the complementary good, labour, was unavailable. According to Menger, the fact that goods have no value in themselves is often overlooked:

> "The error that goods of higher order possess goods character by themselves, and without regard to the availability of complementary goods, arises most easily in countries where, owing to active commerce and a highly developed economy, almost every product comes into existence under the tacit, and as a rule quite unconscious, supposition of the producer that other person, linked to them by trade, will provide the complementary good at the right time."

Accordingly, in a developed economy such as Australia's today, many may not be aware that mineral resources could lose their goods character – and consequently their usefulness and ultimately, their value – if complementary goods such as technical skills and infrastructure building capabilities were unavailable.

Menger declared that land and resources should not be treated different than any other economic good and because the value all economic goods depends on the extent they satisfy concrete portions of customer needs.

Menger observed that those economists who correctly found that the value of land could not be traced to labour or capital, then wrongly gave land a special treatment. Menger countered:

> "But the methodological blunder involved in this procedure is easily recognized. That a large and important group of phenomena cannot be fitted into the general laws of science dealing with these phenomena is telling evidence of the need for reforming the science. It does not, however, constitute an argument that would justify the most questionable methodological procedure of separating a group of phenomena from all other objects of observation exactly similar in general nature, and elaborating special highest principles for each of the two groups."

Thus according to Menger, a new theory of value was necessary that was true for all economic goods and explained prices for all goods. Hence land, like all other things, should derive value purely from its future services.

Menger showed that land and by implication, mineral resources, derive value from the same drivers as other factors, which is the degree of usefulness to consumers. Value is not derived from anything inherent in resources but is based on the constantly changing judgements of economizing people. Menger said goods can gain or lose their economic character over time which can have implications for judging the future supply of natural resources. Minerals may be limited in supply and are fixed

in a situation today but new technologies can lead to new discoveries. Similarly, new sources of capital can transform stranded - and therefore currently unprofitable - deposits into new supply. Equally, Australian mineral resources could lose their value if new discoveries elsewhere in the world yielded products with a greater value in use for consumers.

Practical Considerations

The eminent John Tilton, Professor Emeritus – Colorado School of Mines, said that the attempt to tax pure rents is misguided if a country wants to maintain a viable mining industry in the long run because it is precisely the hope for pure rents that drives both exploration and the research that creates new technologies. Tilton warns that such short-sighted public policy could cause adverse effects not only on mining output but also government revenue and could take years to become apparent.

The issue that should be explored further is at what stage taxation starts to become a disincentive to entrepreneurship and affect future exploration. Exploration success can be compared to an invention.   The inventor who invests time and capital to come up with something of great value would presumably expect great profits. Governments have been granting patents for centuries in order to provide incentives for efficient research and development. Patents are given to protect innovation because any expropriation of the rewards from such innovation would hinder scientific progress. Similarly, taking away expected rewards for exploration would equally stifle the quest to find new deposits; it would send the signal that society is not willing to pay for innovation and effort.

The real practical problem is how to define what this so-called surplus is which you could theoretically tax at a rate of up to 100 per cent without any consequences.   What part of a miner's return is purely a gift of nature and completely divorced from effort? If you include an entrepreneur's foresight in deciding which tenements to buy, the management skill involved in hiring the right technical talent to direct exploration at the right targets within a tenement portfolio, then it becomes challenging indeed to argue if there is any portion of total return that should be attributed to this nebulous concept called "unearned income".

Turning away from the old rent concept, it is worth considering other explanations for superior returns such as the creation of competitive advantage.   Firms are supposed to strive for uniqueness in their operations to gain advantage over competitors. Harvard's Michael Porter identified cost leadership, differentiation, and focus as potential strategies for achieving an edge. Companies should enter desirable industries and through innovation achieve a degree of monopoly power. And what are patents but temporary monopolies granted by governments? Warren Buffett said in a letter to his shareholders that one of his goals was to "widening the "moats" around our operating businesses that give them durable competitive advantage." One such moat could be the invention of superior technologies but it could also be the entering of businesses with high barriers to entry.

Instead of focusing on rents as unearned "cream" that can simply be skimmed off after the fact, it is more useful to consider the environment – the cow pasture so to speak - that made our success possible.   The early ground work was done by entrepreneurs such as Lang Hancock who forged the initial relationships with Japan that created the demand which in turn provided the stimulus for

exploration. The long-term sales contracts, construction financing, and equity investment from Japan during the 1960s created the fertile ground on which our iron ore industry could grow. In the 1970s and 1980s Chinese sales contracts and investment provided further necessary support. Capital from the United States and the United Kingdom was also a key factor for our success. It was the stability of government and fiscal regime combined with geographical factors that attracted the vital support in terms of market and capital. Clarity and transparency of systems that allowed money to be raised and for licenses to be granted were important as well. The rise of the JORC code in the 1970s as a standard of resource definition was absolutely critical for establishing a common understanding of confidence levels in resources and reserves. Australia played a pioneering role in the development of JORC and provided a necessary foundation for attracting global capital to the Australian resources sector.

Recall Menger's explanation that the economic character of a good depends on the availability of complementary goods. Hence, mineral resources can only retain their economic character as part of a finely-tuned system that also includes a complex array of supporting industries, and importantly, stable and transparent government policy.

Conclusion

Australia is an advanced economy, with high levels of knowledge amongst government and the population. Hence it is not surprising that we now turn our attention to adjusting the superior economic entity that has been created. But rather like tuning an advanced sports car, adjustments need to be done very carefully or performance will be worse.

It seems to me that this review of historical and contemporary views on rents has shown that even if rents exist, measuring pure rents is in practice extremely difficult. Moreover, the economic rents that are usually associated with deposits are really not rents at all because if you were to tax them you would remove incentives to explore and to develop new technologies to exploit hitherto uneconomic resources.

While many questions have been raised in regard to rent taxation, no evidence has been presented proving beyond doubt that the MRRT will achieve a better outcome for the nation than the existing company tax.

For citations and a more detailed discussion of this topic please see my previous Senate submission: "Submission to the Senate Select Committee on the Scrutiny of New Taxes," *Rents – Taxation Nirvana or a Methodological Blunder?*, 1 May, 2011.

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