



## IAN RUNGE

*Mining Engineer / Economist / Business Strategist*

Australian

*Postal Address:*

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### *Current Position:*

Independent Company Director / Business Strategist

Founder and Non-Executive Director, RungePincockMinarco Limited (formerly: Runge Ltd)

### *Short Description for an Introduction:*

*Ian Runge* is a mining engineer and economist and the founder of *RungePincockMinarco Limited* – one of the worlds largest mining technology services companies – a company he started in 1977. *RungePincockMinarco Limited* undertakes mine planning and develops computer software which is used in hundreds of mines throughout the world. In addition to his role founding the company *Ian Runge* was the original author of the primary software products still in use today that have become industry standard programs for mine economics, scheduling, budgeting, and equipment selection. *RungePincockMinarco Limited* now has 18 offices in 12 countries.

*Ian Runge's* real passion is economics, and most of his papers and conference presentations have a significant economic theme. He has written and had published two books on the subject. His best known book, published by the Society of Mining Engineers in Denver, is titled *Mining Economics and Strategy*. The second book, published by *Edward Elgar* in the UK in 2000 is entitled *Capital and Uncertainty*, and is an economics reference book concerning how large economic decisions – such as the decision to start-up a mine - are made. *Ian Runge* is also the author of the section: *Economic Principles for Decision Making* in the recently published “SME Mining Engineering Handbook.”

### *Professional Background and Experience:*

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|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1993 – PRESENT<br><i>(non-Exec)</i> | RungePincockMinarco Limited (ASX Listed Mining Technology Services Company) – variously: Founder, Chairman, non-Executive Director assisting the transition of the company from small private company status to listed public company (listed on the ASX in May, 2008).                                                                                                                                                               |
| 1997 – 2005                         | Author, Independent consultant in business strategy focusing on capital intensive enterprise. Various non-executive directorships.                                                                                                                                                                                                                                                                                                    |
| 1993 – 1996                         | George Mason Univ., Virginia, USA – Ph.D. (Economics)                                                                                                                                                                                                                                                                                                                                                                                 |
| 1977 – 1992                         | Founder, Director and CEO, <i>Runge Limited</i> . Engaged in mine planning, financial analysis, professional development, and software for major mines throughout the world.                                                                                                                                                                                                                                                          |
| 1974 – 1978                         | Employed as a mining engineer engaged in operating and supervisory roles, and in planning of mines, feasibility studies, and financial evaluation of mines and mining projects for: <ul style="list-style-type: none"><li>• Miller Mining, Yorkshire, U.K. 1978</li><li>• Shell International Petroleum Mij, The Hague, Netherlands 1976-78</li><li>• Utah Development Company, Saraji Mine, Dysart, Qld, Australia 1974-76</li></ul> |

*Formal Educational and Operational Qualifications:*

- Bachelor of Engineering (Hons, Mining, Univ. of Queensland) 1974
- Master of Engineering; (Univ. of Queensland) 1997
- Master of Arts, George Mason Univ., Virginia, USA, 1995
- Ph.D. (Economics), George Mason Univ., Virginia, USA, 1997
- Plant Operator (Earthmoving Machinery, Qld.), 1976
- Pilot (Instrument rated, multi-engine, turbine), 1985, 1987, 1989, 2006

*Professional Associations and Affiliations:*

- Fellow, Australasian Institute of Mining and Metallurgy
- Fellow, Australian Institute of Company Directors

*Other Directorships and Senior Appointments:*

- Director and Chairman (previous), *The Brisbane Institute* (think-tank) ; ▪ Board Member, Advisory Board (current), *Queensland Leaders*; ▪ Board Member (previous), *Kings College Foundation*; ▪ Adjunct Professor (previous), *Dept of Engineering, University of Queensland*; ▪ Director and Chairman (previous), *TBM Owners and Pilots Association*, ▪ Director (previous), *Brisbane Boys College Foundation*; ▪ Development Chairperson (previous), *St. Andrews Hospital*, Brisbane; ▪ Director (previous), *Presbyterian and Methodist Schools Assn.*; ▪ Director (previous), *YesResources.Com Ltd* (Internet start-up Company); ▪ Chairman (previous) *Australasian Institute of Mining and Metallurgy*, Sth Qld Branch; ▪ President (previous) *Indooroopilly Toastmasters*.

*Publications and Presentations:*

PAPERS (3 EXAMPLES OF APPROXIMATELY 30 PAPERS SINCE 1978)	<ul style="list-style-type: none"><li>• Runge, I. C., (1996) <i>Entrepreneurial Choice and Uncertainty</i> presented at the Annual Meeting, Southern Economic Association, Washington, D.C., Nov., 1996</li><li>• Runge, I. C., (1995) <i>Economics, Technological Change, and the Knowledge Problem</i> APCOM XXV, Proceedings, Application of Computers and Operations Research in the Minerals Industries (Melbourne: Australasian Institute of Mining and Metallurgy)</li><li>• Runge, I. C., (1990) <i>Assessing Risk and Capital Investment Criteria in Mining Projects</i> Proceedings, Mincost '90, (Sydney: Australasian Institute of Mining and Metallurgy)</li></ul>
BOOKS	<ul style="list-style-type: none"><li>• Runge, I. C., (1998) <i>Mining Economics and Strategy</i> Denver: Society of Mining, Metallurgy and Exploration.</li><li>• Runge, I. C., (2000) <i>Capital and Uncertainty</i> Cheltenham, U.K.: Edward Elgar</li></ul>
RECENT NOTEWORTHY PRESENTATIONS	<ul style="list-style-type: none"><li>• <i>Is the Boom already becoming a Bust, and Are we Prepared ?</i> Brisbane, Qld (2012) Public Lecture, the University of Queensland Dept of Economics.</li><li>• <i>Mining Project Risk: After 238 years we still don't understand it!</i> Toronto, Canada (2014) Keynote Address to Management and Economics Society Conference.</li></ul>

*Other:*

- *Family:* Married (wife: Sue, married 41 years) with four adult sons (ages: 36, 35, 32, 30)
- *Interests/Hobbies:* Music (Piano), Travel, Walking, Skiing, Woodworking, Flying (TBM700 Turboprop)