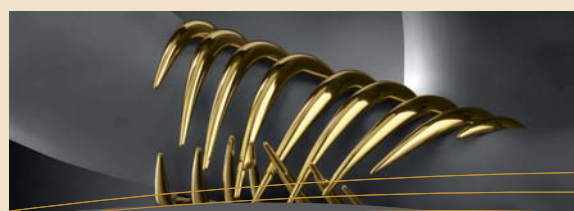


APPENDIX A

Section	Institution	Name	Position
Overview	Nine Dots	Melissa Poole	General Manager
Overview	Jewellery Council	Lourens Mare	Chief Executive Officer
Overview	Jewellery Council	Lorna Delport	Chief Operating Officer
Overview	Chamber of Mines	Roger Baxter	Chief Economist
Overview	Department of Minerals and Energy	Sindiswa Gaven	Director: Beneficiation Economics
Overview	Department of Trade and Industry	Hilda de Jager	Assistant Director: Metals Customised Sector Programme
Overview	South African Police Services	Ben Fourie	Superintendent
Overview	Gold Fields Mineral Services	Paul Walker	Chief Executive Officer
Overview	Goldsmith Jewellery Supplies	Julian Edelstein	Managing Director
Overview	Unioro	Tony Daymond	Managing Director
Overview	Anglogold Ashanti	Joanne Jones	Marketing
Overview	Efune International	Simon Efune	Chief Executive Officer
Overview	GFMS	Paul Walker	Chief Executive Officer
Overview	Virtual Metals	Jessica Cross	Chief Executive Officer
Refining	Rand Refinery	Alan Muir	Managing Director
Refining	Rand Refinery	Johan Botha	Relationship and Product Head Global Markets
Refining	Musuku Beneficiation Systems	Michael Wightman	Manager
Recycling	Perkins Metal Recovery	Ian Perkins	Director
Recycling	Cape Precious Metals	Sharon Eades	Managing Director
Recycling	Metal Concentrators	Bernard Stern	Director
Recycling	First Assay	Cheryl Burger	Managing Director
Recycling	Finegold Laboratory Services	Graham Lennox	Managing Director
Recycling	First Refiners	Dean Hardie	Proprietor
Manufacturing	OroAfrica	Gary Nathan	Merchandising Director
Manufacturing	OroAfrica	Steven Nathan	Chief Executive Officer
Manufacturing	Silmar	David Mearkin	Managing Director
Manufacturing	Alan Mair Manufacturing Jewellers	Alan Mair	Chief Executive Officer
Manufacturing	Daberon	David Ungar	Managing Director
Manufacturing	Orofino Gioielli	Pierluigi Mazzocco	Managing Director
Manufacturing	Goldmaster Jewellery	Graham Miller	Managing Director

Manufacturing	Sid Forman	David Forman	Managing Director
Manufacturing	Silplats	Johan Smit	Chief Executive Officer
Manufacturing	Creative Gold	Winston Akum	Sales Director
Manufacturing	Studio C Manufacturing Jewellers	Chris van Rensburg	Proprietor
Manufacturing	Andreas Salver Jewellery	Andreas Salver	Managing Director
Manufacturing	Pneuma Jewellers CC	Michael Pneuma	Member (Owner)
Manufacturing	B Miller and Company	Mark Miller	Managing Director
Manufacturing	Natal Wholesale Jewellers	Hilton Rabinowitz	Managing Director
Manufacturing	Charles Greig	Svetla Stephens	Manager
Manufacturing	Global Gold	Company representative	Company representative
Manufacturing Retailer	Galaxy	Richard Butterfield	Chief Executive Officer
Manufacturing Retailer	Galaxy	Gavin Blignaut	Merchandise and Manufacturing Director
Retailing	American Swiss	Merridy Edgson	Merchandise Director
Retailing	Sterns	Merridy Edgson	Merchandise Director
Retailing	Foschini	Shirley Brink	Senior Buying Manager
Retailing	Game and Dion	Dean Hofhuis	Merchandise Buyer
Retailing	Truworths	Nicole Strydom	Fine Jewellery Buyer
Retailing	Tourvest	Maurice Hartshorne	Chief Executive Officer
Retailing	Makro	Michelle Webber	Buyer
Wholesaling	Gemini Gold	Gary Kruger	Managing Director
Wholesaling	Charmaine's Range	Tim Watson	Chief Executive Officer
Wholesaling	OroAfrica	Gary Nathan	Merchandising Director
Wholesaling	Panda Manufacturing	Tim Watson	Chief Executive Officer
Wholesaling	Ungar Brothers	David Ungar	Managing Director
Coins	Gold Reef City Mint	Glenn Schoeman	Managing Director
Coins	South African Mint	Natanya van Niekerk	Manager
Coins	Universal Mint	Lambert van der Nest	Managing Director
Industrial end-uses	Mintek	Jason McPherson	Engineer - Advanced Materials Division
Investment	ABSA Exchange Traded Fund	Vladimir Nedeljkovic	Debt Capital Markets
Dental end-uses	Schoenitz Dental	Company representative	Company representative
Dental end-uses	Rosebank Dental	Company representative	Company representative
Dental end-uses	PTH Creative Ceramics	Company representative	Company representative



APPENDIX B: METHODOLOGY

Generally: Owing to a shortage of aggregated data and the diverse and fragmented nature of the downstream industries, the researchers were obliged to gather data by means of research interviews with a range of participants. More than 60 interviews were conducted (see Appendix A). These were supplemented with desktop research as well as the gathering and testing of views and estimates, where useful, of senior industry players and the Jewellery Council of South Africa.

Gold mining: Data for the gold mining industry was collected by desktop study relying particularly on information provided by the Chamber of Mines and the annual reports of the large mining houses. A face-to-face interview was also held with the Chief Economist of the Chamber of Mines, and numerous telephonic interactions were conducted with the Chamber's statistician.

Refining: Data was gathered in face-to-face interviews with senior executives of Rand Refinery and telephone interviews with a senior executive of Musuku Beneficiation Systems.

Recyclers: Face-to-face interviews were conducted with the owners of the five most prominent secondary recyclers who, according to an average of industry views, account for about 85% of the recycled gold measured by volume. 15% thus was added to the gathered data of volume of gold used and numbers employed to account for recyclers not interviewed.

Jewellery manufacturing: The jewellery manufacturing market is made up of hundreds of small enterprises which makes gathering data challenging. The authors considered a comprehensive industry survey but were advised that the response rate would be low and results so jumbled as to negate the value of the exercise. Also, manufacturers are generally loath to pass on information without a face-to-face reassurance of confidentiality. The authors were thus obliged to collect data in interviews, preceded by an e-mailed questionnaire to raise questions in advance.

One problem was the size of the industry, which is estimated at 500 manufacturers. Industry experts were consulted to select the firms using the largest volumes of fine gold. According to an average taken from 15 industry sources, the selected sample covers a representative sample of gold usage of 84% of the fine gold used in manufacturing. Thus, another 16% was added to collected data to extrapolate fine gold usage for the entire industry. Resultant figures were then tested with the Jewellery Council and other industry players for viability. Interviews were also carried out with four smaller producers to gain a feel for how they operate and how much gold they use.



Employment data was also obtained during interviews. Many of the manufacturers who were not interviewed are small family operations or one-man businesses. We assumed, therefore, that the non-interviewed enterprises employ on average 3.5 people per enterprise. Thus 1,750 persons were added to the collected employment data.

Jewellery retailing: Data collation was also difficult for a number of reasons. Firstly, the sector is competitive and retailers are protective over data regarding sales, mark-ups and sources of gold jewellery. Secondly, where a retail jewellery company is part of a larger commercial entity, jewellery sales data is often collated by the larger entity and the statistics specific to the jewellery component of the overall business are not always available. Thirdly, calculating volumes of fine gold used in retail is difficult because the retail industry does not think and plan and talk in volume of fine gold, but in number of units sold and sales figures. Finally, when gold reaches the retail market it has become mixed with other precious metals and stones in finished pieces of jewellery. Splitting out the volume of gold used in any one piece and calculating the value of the “gold sales” alone was an impossible task for nearly all the retailers.

The methodology involved sending a questionnaire to senior representatives of the 12 biggest retailers being Sterns, American Swiss, Game, Dion, Galaxy & Co, Tourvest, Browns, Arthur Kaplan Jewellers, Natal Wholesale Jewellers (NWJ), Edgars Consolidated Stores, Truworths and Foschini. Then the representative (either CEO or chief jewellery buyer) was interviewed in person. Edgars Consolidated Stores, Browns and Arthur Kaplan Jewellers declined to provide any data, so data collected in 2004 was replicated in the 2006 review for these retailers. A view was formed based on industry views that the 12 top retailers account for 84% of sales in the market.

In calculating number of stores and numbers employed in retail, primary data was gathered from the 12 major players. An assumption, based on industry views, was made that there are another 700 independent retail outlets countrywide, with an average of 3 staff per outlet. 2,100 persons were added to the employment data that had been gathered from the 12 biggest retailers.

Wholesalers: Face-to-face interviews were conducted with five jewellery wholesalers, a category of market participant not considered in the 2005 handbook. Retailers were also quizzed on the extent to which wholesalers were used in supply.

Coins, industrial end-uses and Investment: Face-to-face interviews were conducted with four coin producers and questionnaires completed. Face-to-face interviews were conducted with ABSA, and telephone interviews with the JSE about investment products. Telephone interviews were conducted with three dental laboratories and Mintek.



