

On the 13th of December 1999, the members of the Gledden Tour embarked on a journey into unknown territory - the big, bad world of investment banking and specifically, the offices of Warburg Dillon Read in London.



A Brief History of Warburg Dillon Read

In June 1998, the Union Bank of Switzerland merged with Swiss Bank Corporation to create the new UBS AG, one of the top global investment firms in the world. The investment banking businesses of both banks came together to form Warburg Dillon Read.

Warburg Dillon Read is therefore the product of two banking cultures, each with a long history, and each one the product itself of a series of strategic acquisitions.

Warburg Dillon Read is among the world's largest and most successful investment banks, providing investment-banking services to corporate, institutional and sovereign clients across the globe. Its offices in central London is the stage for a multitude of financial activity, and along with 550 other banks, revolves around the daily hype of the London Stock Exchange. The London Stock Exchange has a market capitalisation of over 4.1 trillion pounds and US\$640 billion is traded daily in foreign exchange.



The Visit

The visit was courtesy of Dr Eu-Jin Ang, a former graduate of UWA and now an Associate Director in the Quantitative Finance Group at Warburg Dillon Read, London. Dr Ang, himself a former Gledden Tour member in 1992, completed his undergraduate degrees in Science (Pure Mathematics) and Electrical Engineering at UWA, before undertaking his PhD at Imperial College, University of London.



So what were a bunch of smart, innovative and practical engineers doing in this lavish office where the words hedging, warrants and merger form more of the vocabulary than traditional engineering terms? This was the question Dr Ang tried to answer, and to prove that he hadn't in fact "sold

his soul to the devil," as he himself put it. The first step in his strategy was a luring temptation of chocolates, biscuits and beverages – a little treat to open our minds and keep us smiling.

Dr Ang proceeded to give us a brief introduction to financial markets and the concepts of net present value, risk versus return and derivatives. An explanation of the foundations of capital markets and their purpose in the world provided us with good background to the services that Warburg Dillon Read provide to their clients.

The Quantitative Finance Group, within which Dr Ang is an Associate Director, is a provider of interest rate risk management advisory services to corporates and sovereigns. It advises governments, treasuries and central banks of many countries including Australia, France, Ireland and the Netherlands to name a few. A sample of deals with an engineering flavour that the Group has worked on include:

- the 5 billion pound English Channel Tunnel Rail Link;
- the recent Volvo/Ford merger; and
- financing of Gripen fighter jets in the US.

The Group gives advice to its clients on how to manage its future cash flows, these being highly sensitive to changes in interest rates. In order to “hedge” these cash flows against interest rates, the Group designs swap portfolios for its clients that are insensitive to interest rate movements. The Group also advises on debt management, in particular what currencies to borrow in, the duration of the borrowing period and optimal borrowing schedules so that the cost and risk of borrowing is reduced for its clients.

The work involved in providing such a service heavily involves mathematics, optimisation and programming being put to use in a financial context (hence the term financial engineering), such that cost efficient and effective solutions are provided for clients, according to their individual risks and company structures. The people employed to do such work, such as Dr Ang, come from a highly educated mix, which includes PhDs, MScs and Professors from the fields of mathematics, engineering and physics.

After Dr Ang’s presentation, we were treated to more refreshments while being shown a recruitment video by human resources, just in case there were budding financial engineers among this Gledden Tour.



The trading floor at WDR

This was followed by a tour of the WDR office, the most exciting part being the trading floor. With the computerisation of capital markets in the 1990s however, it wasn’t quite the mad-house that trading floors are portrayed as. Instead the action now revolves around computer screens, with traders constantly on

the telephone while scanning the 5 screens in front of them. On the trading floor, all varieties of financial instruments are traded, including shares, bonds, warrants, swaps and foreign currencies. Furthermore there is a commodity trading floor where more “tangible” items are traded such as gold.

Finally, we were treated to an informal lunch where we got the opportunity to chat with Dr Ang and a handful of his colleagues, and to find out more about their experiences and their path to WDR in London.



Acknowledgements

While the majority of us will remain within more traditional engineering careers, this visit was beneficial and enjoyable to all of us. We were given a good background to the financial world, which we will learn and deal with progressively more through our engineering careers. Furthermore, we learned from Dr Ang and his experiences as a student, graduate and post-graduate at a time where many of us will be deciding between work or further study, as well as a choice of different fields. Moreover, it made us take a step back from our studies to see that within our degree, we not only have education in our field of engineering, but along the way have developed excellent skills in problem solving, computer literacy and adaptability that are highly sought after by employers in many different industries.

We would like to thank Dr Ang and Warburg Dillon Read for their generous hospitality and effort in hosting this Gladden Tour visit.