THE M. J. BATEMAN MEMORIAL LECTURE

THE FUTURE OF FINANCIAL CENTRES IN A TECHNOLOGY DRIVEN MARKETPLACE

by

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In ten years time, the system of international financial centres as it is now structured will no longer exist because of technology. The focus of my address today is to pinpoint the factors that will lead to this outcome, and to suggest some of the directions of change that these will produce in the next five years. In doing so, the first step is to understand why international financial centres exist at all. Given their enormous importance in the global economy, this may seem to be an unnecessary exercise. But the next development of international centres is based firmly on an evolutionary process, generated by the forces that created them in the first place.

At this point I would like to acknowledge the work of Professor Maurie Daly of Daly Research Systems who was commissioned by Axiss Australia to develop our thoughts on the directions of change in the system of international financial centres. My address today is the output of that work.

Our analysis is not concerned with the technical features of operations within financial centres. There is no mention of alphas or deltas; no discussion of models, Black-Scholes or any other; and there is no mention of log normal random walks. The focus is on the institutional base of the centres, the dynamics of the various markets that coalesce in the centres, the impacts of technology on the centres, the regional forces shaping the location of the centres, and the interaction of the finance system with what is being called "the new economy".

As a first step, it is necessary to put into context how today's financial centres developed. In the 1950s, a small number of British bankers began to lend in US dollars because they were unable to lend in sterling, thus beginning a process of change so great that, in their wildest flights of fancy, they could not have envisaged the outcome. This change by the British banks was the first step in the liberation of international finance from the stout regulatory chains that bound it.
Ironically, the next block of the new edifice that was to be so swiftly built was laid by a number of communist countries. Fearing for the safety of their dollar earnings if they were deposited in the USA, they began to operate in the new offshore dollar market. These Euro-markets, as they were called, grew rapidly, tripling in size in 1959 and then doubling in 1960. The driving force was the huge flow of capital from the USA to fund the US multinationals who had taken over the task of revitalising European industry, from the base that the Marshall Plan had provided. Alarmed at the size of the outflow, and beginning to feel the cost of the Vietnam War, the US government from 1963 to 1965 imposed a series of taxes and other instruments designed to limit capital outflows. This transformed the Euro-markets. Until then, they had been high-interest markets of convenience (because of the risks associated with unprotected fledgling markets). They suddenly became markets of choice. From 1964 to 1978, international bank lending grew at an annual average rate of 25 percent, compared to 5 percent for world trade.

Part of the acceleration of growth in the markets came from the doomed system of fixed exchange rates and the gold base. The free-flowing Euro-dollar markets provided speculators with the means to attack currencies, most famously the pound sterling in 1965. The market moved from being a useful alternative to the regulated national markets, to a force that would ultimately revolutionise how the global financial system would work.

The Euro-markets did not create international banking, but they added a startling new dimension to it. In its modern form, international banking has existed since the eighteenth century, with the transition from merchant capitalism to industrial capitalism. Banks financed trade and foreign governments, and both Britain and France established extensive colonial banking networks. When the USA became a net exporter of capital, from the 1920s, it too established offshore branches.
In 1965, at the start of the Euro-market's real expansion, there were 13 WE banks with 211 offshore branches. In 1968 the number of banks reached 26, with 375 branches. When President Johnson imposed controls on US foreign corporate investment in 1968 it produced an explosion of offshore banking growth in the next few years. The number of banks involved grew to 79, and the number of branches to 536. At the very core of the growth of offshore banking, then as now, was the compulsion to by-pass regulatory structures. By 1973, the major US banks held between 20 and 49 percent of their deposits abroad.

The international banks that entered the new international markets in the 1960s and 1970s clustered their main activities in a limited number of centres. Their history of banking, and the capabilities of the bankers that were bred by that, defined these centres. They also relied on good infrastructure, and the support of first-class legal, accounting and other business services. They grew where benign regulatory systems were in place, and they were naturally attracted by lower taxes.

The key to the development of network of international financial centres, rather than just a series of strong centres, was technology. The growth of the network depended on the means to link the network being available. A series of revolutionary breakthroughs in communications and computing technologies provided this. These developments gave birth to truly global financial markets.

There followed a symbiotic relationship between finance industries and technology that is central to developments today. The finance industry provided the most fertile ground for the application of the new technologies, and the technologies lifted international finance into a new realm. A small regional bank with six million customers, with the assistance of the new technologies, might handle 70 electronic transactions per customer per month. Each transaction would involve crediting, debiting and updating accounts, so that with 210 million transactions per month, the data-base of this small bank would have to be updated about eighty times per second on average, and 1,160 times per second in peak hours. Translating this
example to a regional bank, then to a national bank, and then to a global bank, the fundamental importance of technology becomes apparent.

With the OPEC price hikes, the nature of international banking changed. Instead of being an opportunistic system providing trade-off benefits to its customers in different parts of the world, but always with a primary focus on its profits, international banking became a vital necessity for the world economy. The international finance centres gained 29 percent of the total allocated OPEC surplus. The system suddenly had to recycle vast amounts of money, and do that very quickly. Financial centres had to be interactive in this process. Located strategically around the world, they needed to operate 24-hour markets, and the new technologies allowed them to do just that.

US banks became central to the process. The USA was the world's largest economy and the US dollar the world's reserve and principal trading currency. The US banks also had a huge advantage because of the premier place of US technology. The shape of international finance, and the operations of the centres that directed it, were formed largely around a US vision.

There was an explosion of international banking between 1975 and 1981. Gross business grew by 171 percent. This induced a rush of banks from many countries to join the pioneering US and European banks in the global market. The size of financial centres swelled as each bank tried to get a share of the business of international deposit taking, syndicated lending, and foreign exchange dealing. The number of banks located within a finance centre was used as a simple index of its strength.

By the 1980s the system of international finance centres was well in place. By then, the finance industry, at the international level, had moved from being facilitator of international commerce to the most dynamic force within it. The various debt crises that occurred in that decade boosted the banks' power. Although
there were banking losses suffered, the international banks became critical to the resolution of the debt crises.

In resolving some of the debt problems, the banks showed great ingenuity, and there, and in many other fields, innovative new products emerged that greatly expanded the scope, reach and sophistication of the financial markets. In many areas, with the new financial products, a critical mass of participants were needed to make a market. And in all cases very advanced human skills were required, to make the markets work. Such critical masses produced a cascading advance in the number of financial products, and their capacity to handle the needs of world commerce. All of these things reinforced the need for finance centres, and magnified their strength. The 1990s represented the high-point of the system of international finance centres, the full-flowering of an evolutionary process that had taken more than thirty years.

The success of the international financial system sowed the seeds of the forces which will change its nature over the next decade. Tad Rybczynski was one of the first to recognise this. In a path-breaking paper in 1988, he linked the stages of economic growth to the evolution of the finance industry.¹ First, there was the bank-orientated phase. Companies received the bulk of their external financing in the form of bank loans. Next, came the market-orientated phase. Companies obtained the bulk of their external financing from the capital and credit markets, and a sizeable proportion of funds are channelled through non-bank institutions (through pension funds and the like).

Technology, internationalisation and deregulation had by the end of the 1980s ushered in a new phase of economic growth, Rybczynski argued. This stage is supported by the securitised financial system. In Rybczynski’s own words:

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In addition to wide and deep primary and secondary capital and credit markets, which cover the bulk of flows of new and old savings, the two main and new elements of the securitised system are the market for corporate control, and the market for venture capital and associated markets. The market for corporate control is concerned with the phasing-out and changing of past savings embodied in physical assets. The venture capital and associated market (leveraged buy-outs) are concerned with the transfer of new savings to new firms and new industries with different risk characteristics which replace those being phased out.

What Rybczynski was presciently referring to was the birth of what is now called the new economy, or the information economy, or the knowledge economy, and the role of the financial industry in defining it, and in itself being redefined in the process.

This, broadly, is the theme underlying the thrust of the work done by Professor Daly and Axiss. There will be an accelerated change in the nature and functions of international finance centres over the next decade. This will be brought about in part by changing structural features, internal to the finance industry itself. More significantly, the change will be driven externally by the characteristics, and uncertainties, of the new economy.

The focal centres of the new economy will not be the international finance centres. Instead change will emanate from what might be called knowledge centres.

In these centres, the interactive structures of the new industries (such as the array of digital industries, bio-technology, and new materials) will be worked out. These centres will also pioneer the applications of the technologies in areas like electronic commerce, electronic education, interactive media, and tele-medicine. Such centres will be linked into a network of centres spanning the globe, just as finance centres have been. In the case of knowledge centres, the linking elements will be flows of information, joint research and development, and the movement of talented people.
The changes that are just starting to have an impact are society-transforming changes. The old order, in which the finance industry achieved a commanding position in structuring the fabric of a global economy, is quickly passing. The new order obviously will need a strong financial base, but its very nature challenges many of the tenets upon which the modern financial services industry is built. It is very difficult to evaluate assets or determine risk when, in time periods as short as months, the technology that promised wealth and growth in a certain area is replaced by something new that confounds the direction of growth that the replaced technology had flagged.

The finance industry has to redefine its place within the new economy, and it has to withstand an assault on its primary territory from non-financial institutions -- an assault that has been building for many years. Ironically, the success of the finance sector in creating a deregulated world of finance has bred the challenge that now comes from outside the sector.

It is, of course, perfectly possible that finance centres might evolve into knowledge centres, but there is no certainty that being a finance centre will ensure that this will happen. Singapore is the first financial centre to develop its growth strategy on transforming itself from being a financial centre into becoming a knowledge centre. There are numerous hurdles that Singapore would have to overcome if it is to achieve its vision, but it does have currently a first mover advantage.

The finance industry, in a restructured form, will be a significant element of the makeup of knowledge centres. In the process of change, some features that have been important in attracting investment and firms to financial centres will become less important. Tax incentives are one of these. Knowledge centres will be built around the fast-moving interactions of creative minds, rather than the inducements of cost-cutting incentives. Life style and city ambience will also be something that
is discounted in terms of the locational attractions of knowledge centres. Anyone who has visited Silicon Valley will appreciate this point.

How the system of international financial centres might develop over the next five or so years will depend on the course of four channels:

- Disintermediation
- Globalisation
- Technological change
- Global Regulation.

Each of these topics are in themselves the basis of extensive research and review by my group and Professor Daly. Regrettably there is insufficient time in this address to consider in detail the output of that research. Suffice to say is that whereas financial centres arose to do a necessary function of creating more effective means of accumulating and applying capital to boost economic development, there is no need for them to continue in such a distinctive form in the future. Globalisation, deregulation and disintermediation will rob financial centres of their distinctive position within the global economy.

What will emerge are knowledge centres. Cities that become accumulating points for the inputs of the knowledge economy and provide support systems to bolster the growth of the knowledge industries, will replace finance centres as the structural bases of the global economies. Many existing finance centres could evolve into knowledge centres. Each major city of Australia could evolve into a knowledge centre.