Foreign investment in the Australian property market since 1980.

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The level of foreign investment in the Australian property market has increased nearly one hundred fold since 1980, rising from \$269 million in 1980 to over \$25.7 billion in 2004. But the increase cannot be attributed to any one factor or any one investor country. Whilst Japan more or less dominated foreign investment into the Australian property sector in the 1980s, there have been several other countries with large investment since the 1990s.

Using statistics from the Foreign Investment Review Board (FIRB), this paper will analyse the foreign investment pattern into the Australian property market over the past 25 years, identifying the changing pattern of investor country. The paper will also identify the major reasons for its changing pattern and discuss whether such factors will have influence on the level of any future investment into Australia.

INTRODUCTION

The pattern of foreign investment flowing into Australia has changed dramatically over the past twenty five years, both in the industry sector recipient and the investing country. Australia has long been the recipient of foreign investment, traditionally from U K and later from USA. But, by the late 1980s, Japan emerged as a leading foreign investor, particularly in the real estate sector [Karantonis, 1990].

The amount of inward foreign direct investment (FDI) into Australia, increase from one per cent of GDP in 1976/77 to an average two percent of GDP from 193/84 to 1992/93 [Howe, 1994]. Indeed, by 1990, Australia was ranked 7th as a destination for FDI in the world [Yang et al, 2000].

Manufacturing and Mining were the major recipients of FDI before the 1980s. with services and later real estate emerging as the new industry sectors to attract FDI from the 1980s onwards [Howe, 1994]. The shift to foreign real estate has been part of a shift of diversification, as pointed out by Baum [1995], who cites the pursuit of high return and low risk as the underlying factors for international property investment. This is further evident by Worzala [1994] in a survey of institutional investors, which found diversification, yields and low risk as the three main reasons. [1999] adds that the emergence of Property Trusts has eased the cost of information search and thereby should facilitate further foreign investment in property. Addae-Dapaah and Kion [1996] conducted a study using a range of countries, which included Australia and found that the potential gain from international real estate diversification is substantial. They concluded that investors "should consider purchasing foreign stocks to improve their portfolio efficiency". Hoesli et al [2004] conclude that when adding international real estate investment in a mixed asset portfolio, there is a risk reduction of between 10% and 20%.

However, foreign investment comes with a cost of two additional variables that need to be assessed by property analyst, namely political and exchange rate risks. Chau [1997] found that "risk premium" still existed in Hong Kong investment after the 1997 repossession of Hong Kong by China. On the other hand, exchange rates have both positive and negative effects on foreign investment. Pagliari et al [1997] found that currency volatility had an impact on USA investor returns in UK and Australia; positive for UK investment and negative for Australia.

At the turn of the century, total foreign investment in all sectors in Australia reached \$613b [ABS, 2000]. Australia perceived as a politically *safe haven* and ranked as having the highest transparency in its real estate markets, in the JLL Index [2004], has had the level of "expected" foreign investment in the Australian real estate increase form \$269 million in 1980 to over \$25.7 billion in 2004 [FIRB]. The move towards a more open economy and the deregulation of its financial markets in the1980s has helped accommodate such investment. However, over the period from 1980 to 2004, there has been a shift in the investment pattern of the foreign investors. Using statistics

from the Foreign Investment Review Board (FIRB), this paper analyses the level of foreign investment in the Australian property market and identifies the changing trend of such investment over the past quarter of a century.

A. FOREIGN INVESTMENT IN AUSTRALIA

The Australian government established the FIRB to administer foreign investment into Australia in 1976. Several changes have taken place since then and generally speaking, foreign investment policy has continued to be more liberated in the real estate sector. Continuing its aim of *opening* the economy, Australia deregulated its financial sector; floating the \$AUD and allowing capital to freely flow in and out the economy in 1983 and opening the banking sector to foreign banks two years later.

Other than the restriction on "used" or "second hand" residential property, Australia has an "open door" policy on foreign investment in real estate investment. Certain rules apply whereby investors must report investment in Australia [for details see FIRB, 2005]. Figures used in this paper are shown as "expected" from the statistics reported to FIRB.

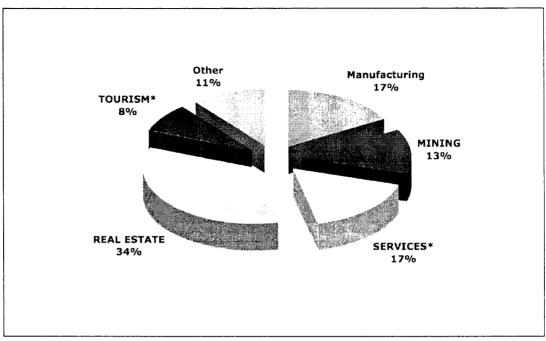
According to FIRB statistics [FIRB, various], there has been some \$1,000 billion of foreign investment (all sectors) into Australia increasing from \$6.6 billion in 1981 to nearly \$98.9 billion in 2004, after peaking at \$117.9 billion in 2002. Real estate accounting for only 8.4% of total in 1981 became the leading sector in 1988 (39%) and until 1995 continued to attract most of the investment. Although no longer the leading sector, the real estate sector received its largest investment with \$25.7b in 2004 [FIRB, 2005].

Figures 1 and 2 show the percentage of investment received by Australia's leading industry sectors since 1981. Figure 1 shows the period 1981 – 1990 and Figure 2 shows the period 1991-2004.

In the period 1981-1990, there was \$133.6billion of foreign investment earmarked for Australia. From Figure 1, it can be noted that real estate was the leading sector with 34% and the closely related Tourism (which was included in "services" until 1987) receiving 8%. The traditional investment sectors of manufacturing and mining received 17% and 13% respectively.

Investment from the 1991 period onwards escalated to nearly \$870 billion. From Figure 2, we can calculate that all sectors for the period increased substantially. However the relative share of the sectors has changed. Services with 29% has now become the leading sector, followed by Manufacturing (23%) and Real Estate (20%). Although Real Estate's relative share has fallen from 34% to 20%, its contribution increased to \$173 billion.

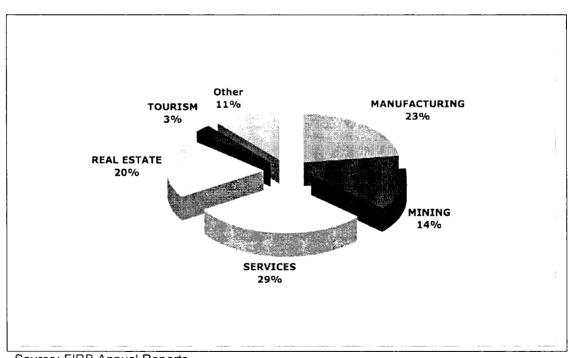
Figure 1
"Expected" Foreign Investment (\$133.6b)
Industry Sector 1981-1990



Source: FIRB Annual Reports

* Tourism was included in services until 1987

Figure 2
"Expected" Foreign Investment (\$869.6b)
Industry Sector 1991-2004



Source: FIRB Annual Reports

B. REAL ESTATE

Examining foreign real estate investment into Australia, we see some \$200 billion was earmarked for sector since 1980. Up to 1998, the level of foreign investment closely followed the Australian property cycle [Karantonis, 1996], peaking in 1989 with \$14.7 billion, falling in 1991 to \$5.6 billion and recovering in 1994, reaching a peak of \$16.2 b in 1998. Since then a new peak of \$25.7 billion was reached in 2004 [FIRB, various years].

Following Australia's deregulation, the rapid rise of foreign investment in the Australian real estate sector in the 1980s - early 1990s period, was largely due to the growth of the Asian region's investment (\$62.6b). Since 1980, Asia's share accounted for 28.5% of total real estate investment, with Japan the main Asian investor with 10.4% [FIRB, various years].

However, whilst the foreign real estate investment continued to grow, the composition of investor has changed. When the figures are analysed over two periods, namely, 1981-1992 and 1993-2004, the *expected* investment country source was significantly different.

Figure 3 shows the foreign investment flow into Australian real estate from 1980 to 1992. As can be seen, Japan and "rest of Asia" contributed 44% directly, but one needs to also consider "off the plan" (new residential investment) and "Joint Ventures", which are two uncategorised sources. Industry sources suggest that the majority of these investments came from the Asian region in both "off the plan" (\$11.9 billion) and "Joint Ventures" (\$14.1billion) categories. The former predominantly from the ASEAN countries and the latter from Japan. Hence, both the Japanese and Asian share is further enhanced when one calculates these two categories.

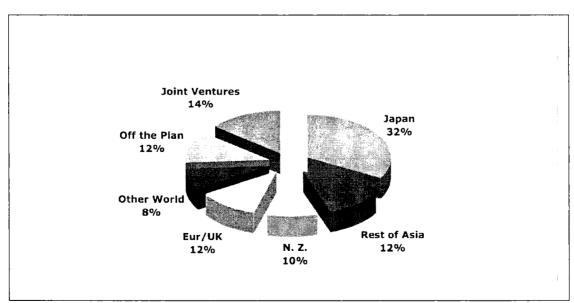


Figure 3"Expected" Foreign R/E Invest: 1980-1992 (\$57.6b)

Source: FIRB Annual Reports

Examining to the second period, 1993 to 2004, we can see from Figure 4, that Asia increased its investment in monetary terms to \$37 billion, but its relative share fell to 22%. Once again, the "off the plan" and "joint ventures" need to be distributed, however over this period, industry sources indicate that the Asian sector was not as dominant as in the previous period. The big gains have come from UK/Europe with \$22.9 billion (14%) and USA with \$14.8 billion or 9%, who although both being Australia's traditional investors, had not been "major investors" in its real estate sector.

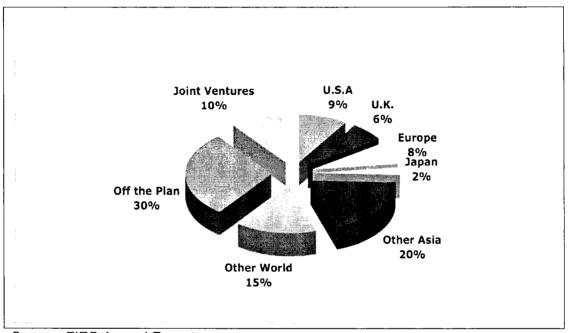


Figure 4 Foreign R/E Invest: 1993-2004 (\$161.8b)

Source: FIRB Annual Reports

Reasons for the changing pattern of investment source

As noted above, the 1980s was the beginning of deregulation and the opening of the Australian economy. There are several endogenous and exogenous reasons for this change. The endogenous reasons are the factors within Australia and include the financial deregulation, the changes to the FIRB requirements, the Australian property cycle and the movement of the \$AUD (exchange rate). These endogenous factors would thus determine the overall investment and timing from other countries, but would not necessarily influence the changing composition of country investment. On the other hand, the exogenous factors are the factors external to the Australian economy and are the ones that are more likely to determine the changing pattern of investment. These exogenous factors include:

- a) the rise and fall of the Japanese economy,
- b) the newly industrialised economies (NIEs),
- c) the Sydney Olympic Games, and
- d) the Asian "crisis".

a) The rise and fall of the Japanese economy

Japan became the leading foreign investor in Australian real estate in 1986 and reached its peak in the five-year period 1986–1990, with over \$15.3 billion invested.

Japan's expansionary investment was the result of its continued economic expansion, which witnessed its emergence as a major world economy. In the 1980s Japan had consistent positive current account balances, receiving in excess of \$US420 billion surplus [JETRO, 1990]. These surpluses had the effect of increasing the level of the Yen and at about the same time, the \$AUD was independently falling. In fact, from 1983 to 1988, the \$AUD and the Yen simultaneously moved in opposite directions causing the Yen's buying power to more than doubled over the \$AUD. This Yen "buying power" was closely correlated with Japan's increase in real estate investment in Australia [Karantonis, 1990].

For the first time in over 30 years, Japan's economy had a major downturn in the early 1990s causing property prices to "tumble" by falls of 40-60% in Tokyo, Osaka and Nagaya [JREI], as depicted in Figure 5.

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Figure 5: Index of Japan Urban Land Prices 6 Major Cities - (1970-99)

Source: Japan Real Estate Institute [JREI]

The drastic fall in property prices caused many Japanese companies to sell off their holdings in Australia (and in other parts of the world) to repatriate their finances back home to overcome the "debt overhang" [Denesh and Pugh, 1997]. This resulted in a dramatic fall of Japanese investment in Australian property from its peak 5-year period investment of \$15.3b (1986-1990) to \$3.9b for the twelve year period, 1993-2004 [FIRB, various years].

b) Asian Newly Industrialised Economies (NIEs)

Newly Industrialised Economies (NIEs) are characterised by rapid growth in GDP, in industrial production and in manufacturing exports [Salvatore, 1995]. Several Asian economies fall into the NIEs category, including Hong Kong, Singapore, Taiwan, Indonesia and to a lesser extent, Malaysia. Hence as these countries begin to receive positive capital flows, they are in a position to invest abroad.

These NIEs plus other Asian countries were beginning to emerge in the 1980s, with \$6.6b (11.6%) investment for the period 1980 – 1992. Since 1993, other Asia investment (excluding Japan) increased to \$31.2 billion (19.3%). This was mainly due to the strong growth from Singapore, Malaysia and Hong Kong. In addition, as discussed above, these countries contributed substantially to the uncategorized "off the plan".

As noted in (d) below, the Asian Crisis had a major impact on several of these countries, however, investment from the region has continued overall. Indeed, Singapore has been the leading foreign real estate investor in Australia in three of the past five years [FIRB, various].

Figure 6
Expected Foreign Investment in Australia's Real Estate Market
1988 – 1997 (\$m)

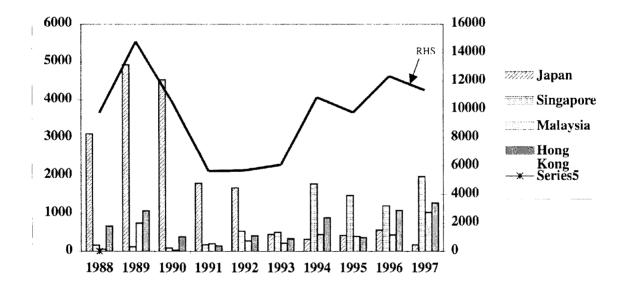


Figure 6 shows total foreign investment and the level of selected Asian countries investment in Australian real estate from 1988 up until the Asian Crisis (1997). Total Asian investment reached nearly 40% of the total and as can be seen from Figure 6 was due mainly to Japan for the first part of the period (1988-1992) and later several of the ASEAN countries; Singapore, Hong Kong and Malaysia. From 1994, Singapore became the leading Asian

investor with \$6.5b (14.5% of total), followed by Hong Kong, \$3.6b (8.1%) and Malaysia, \$2.3b (5.2%).

c) Sydney Olympic Games

The announcement of Sydney as the host city for the 2000 Olympics on 23 September 1993 led to euphoria in Sydney with unprecedented property development and rapid price increases in the city's inner suburbs. A study [Karantonis and Oluwoye, 1998] found that the mean annual growth rate of house and home unit (condominium) prices in the suburbs surrounding the Olympic site were significantly higher for the period following the announcement of the Olympics.

Although the largest overall foreign investor in Australia, USA had only invested a total of \$1.8 billion up to the time of the announcement. Since the Olympics announcement, USA became very much attracted to Australian real estate, becoming the leading "individual country" investor for the period 1994-2004, investing \$14.8b (9.15%).

The main real estate asset class to feel the buoyancy of the Olympic euphoria was the "off the plan" new residential investment which attracted \$21.3B in the five year "post" announcement period(1994-9) compared to \$8.4b for the five year period "before" the announcement (1988-93). Most of this investment was concentrated in Sydney's inner city (including the Darling Harbour/Pyrmont area).

d) Asian Crisis

The financial collapse of several Asian currencies occurred in mid 1997 causing widespread concern on world markets. Lipsky [1998] points out that in less than one year, Asia was transformed from being the world's fastest growing region into the slowest growing region

Whilst the "other Asia" category increased its investment in Australian real estate, the Asian Crisis had an impact on its investment in the late 1990s and thereby affecting its relative share of foreign investment in the Australian property market. The fledging Asian economies were more in need of capital inflow rather than being in a position to invest abroad. However, investment from the Asian region, continued from Singapore, who were only indirectly affected by the Asian Crisis and to a lesser extent from Malaysia. Hong Kong investment, which was strong until 1997, has fallen away significantly [FIRB, various].

The initial impact of the *crisis* for Australia was the fall of the \$AUD against the \$US, falling from \$AUD/\$US 0.7455 (30 June1997) to, at that time, an all time low of 0.5493, but increasing against the fledging Asian currencies [RBA, 1998]. In the property sector, the relative CBDs of Sydney and Melbourne felt part of the brunt of the *crisis* and many of the "listed property trusts" come under intense pressure [AFR, 1998]. The hotel sector was the worst affected area, with a drop in Asian tourists. Occupancy rates for Australia wide fell

from 60.3% to 58% and in Sydney, from 79.1% to 71.9% [Department of Tourism, 2000].

However, the Australian economy and the property market were in a "strong" position having maintained continuous growth from 1994. Other than the fall in the exchange rate, both the economy and the property market continued their upward trend.

C. TOURISM

The Tourism category includes, management, acquisition of existing business, land acquisition and development. As tourism is closely related to the real estate market, one would expect to see a similar cyclical pattern of investment. Figure 7 shows foreign Tourism investment form 1988 to 2004 and as noted above, up to 1988, tourism was included in "services". However, it is interesting to note from Figure 7, that there is no consistent pattern of investment, with several "ups and downs" and peaking in 1989.

A major shift of investor country occurred when analysing the "before and after" Olympic announcement. Japan dominated foreign investment in the Australian tourism sector up to the announcement of the Sydney Olympics. During the period 1988-1993, Japan significant invested in Australian Tourism with some \$9.6billion and dominating foreign investment in the sector contributing over 60% of total investment. During this period Japan also had extensive joint ventures with Australian corporations and would be the main contributor to the "uncategorised" joint venture sector (\$1.2b). Since 1993, the pattern of Japanese investment was consistent with its real estate investment as discussed above, whereby except for 2003, Japanese investment in the sector was non existent, due to its economic downturn.

The "Rest of Asia" contributed \$5.8b (27.6%%), mainly through Singapore and Hong Kong in the "pre" period and increased to \$7.8 billion in the "post" period, but its relative share fell to 21.2%. A notable "non investor" in the "pre" period was USA.

In comparison to the pre Olympic period, total investment in the post Olympic period has been \$21.2 billion, but this period is for the eleven year, compared to \$15.6 billion in the pre Olympic period for a six year period. In other words, average investment for the pre period is higher, due mainly to Japanese investment. Thus the main reason for a lower "post" average, is the result of the fall of Japanese investment from \$9.6 (61.6%) pre Olympics to \$1.7 billion (8.1%) post Olympics.

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Figure 7 "Expected Foreign Tourism Investment (1988-2004) (\$b)

Source: FIRB Annual Reports

However, there have been other interesting changes in tourism investment, which included:

- a) with the attraction of the Olympics, USA emerged as a new tourism investor. USA invested \$4.5b (21.4% share) compared to no investment in the pre Olympic period,
- b) Europe also emerging as a more serious investor, with nearly \$5 billion (23.4%), compared to \$754 million (4.8%) pre Olympics,
- c) Rest of Asia increased its share from 12.5% to 27.6% due mainly to an increase from Singapore, investing \$3.8b (18%), and
- d) China (PRC), although a relatively small investor, also became a "new" investor in Australian property investment, adding \$48m in tourism investment to its \$957 million in real estate investment.

The Future

This paper has shown the level and growth of foreign investment in Australia's real estate and tourism markets and has presented the changing pattern of such investment. The increase in investment has been similar to that occurring in many other parts of the world, due to deregulation and the move to more globalised investment markets.

As discussed in this paper, foreign investment patterns in Australia's real estate has more or less followed the Australian property cycle whilst the tourism market had no constant pattern of investment, but both have been *spurred* on by the granting of the Sydney Olympics. It is also evident that the composition of investor pattern has changed, firstly from Japan to "other Asia"

and of recent years USA, who were a minor real estate and non-tourism investor (pre 1994), and now emerged as a leading investor in both sectors.

Foreign investment continued to rise in 2004, whether that pattern of growth continues, will depend on the Australian real estate market. On the investor country side, Japan and many of the Asian economies affected by the Asian Crisis are beginning to show signs of moving into the recovery phase of the cycle. In time, these countries should return to investing abroad. Whether they recapture their relative position, is also dependant on the investment attitude form the relatively newer investors, USA and Europe.

REFERENCES

(ABS) Australian Bureau of Statistics (2000) "Balance of Payments & International Investment Position" Cat5362.0, Canberra.

AFR (1998a) Australian Financial Review, 20/28 August 1998, Sydney.

Addae-Dapaah K and Kion C B (1996) "International Diversification of Property Stock - A Singaporean Investor's Viewpoint" Real Estate Finance, Fall, pp54-66.

Baum (1995) "Can Foreign Real Estate Investment Be Successful?", Real Estate Finance, Vol 12, pp 81-89.

Chau K W (1997) "Political Uncertainty and the Real Estate Risk Premiums in Hong Kong", Journal of Real Estate Research, Vol 13, No 3, pp 297-315.

Denesh A and Pugh C (1997) "Economic Development and the 1989–95 Property Cycle in Japan International and National Expectations" RICS Res Paper Series Vol 2 No 6.

Department of Tourism (2000)"Tourism Facts", Various months/years, Canberra.

(FIRB) Foreign Investment Review Board (1981-2005) "Annual Reports" Various Years, AGPS Canberra.

Hoesli M, Lekander J and Witkiewicz W (2004) "International Evidence on Real Estate as a Portfolio Diversifier, Journal of Real Estate Research, Vol 26, No 2.

Howe J (1994)"Internationalisation, Trade and Foreign direct Investment" in International Integration of the Australian Economy, Conference Proceedings, p111-155, Reserve Bank of Australia, Sydney

(JREI) Japan Real Estate Institute: http://www.reinet.or.jp/e/

JETRO (1990), "Business Facts and Figures", Japan.

(JLL) Jones Lang LaSalle (2004) "Global Real Estate Transparency Index 2004", LaSalle Management, Chicago

Karantonis A (1996) "The Globalisation of the Australian Property Market", The Valuer and Land Economist, Vol 34 No 4.

Karantonis A (1990) "Yen Power in the Australian Real Estate Market" CIB 90 Conference, Sydney.

Karantonis A & Oluwoye J (1998) "The Olympic Site and its Impact on Residential Property in Homebush" Australian Land Economics Review, Vol 4 No 2.

Lipsky J (1998) Asian Crisis: A Market Perspective, Finance & Development, Vol 35 No 2, June, IMF.

McAllister P (1999) "Globalization, Integration and Commercial Property: Evidence from the UK", Journal of Property Investment & Finance, Vol 17, No 1, pp 8-26.

Pagliari, J L (Jnr), Webb J, Canter T & Lieblich F (1997) "A Fundamental Comparison of International Real Estate Returns", Journal of Real Estate Research, Vol 13, No 3, pp. 317-347.

(RBA) Reserve Bank of Australia (1998) "Bulletin", various months, Sydney.

Salvatore D (1995) "International Economics", Prentice hall, New Jersey.

Worzala E (1994) "Overseas Property Investments: How Are They Perceived by the Institutional Investor?" Journal of Property Valuation & Investment Vol 12,No 3,pp 31-47.

Yang J, Groeewold N and Tcha M (2000) "The Determinants of Foreign Direct Investment in Australia", The Economic record, Vol 76, No 232, Australia, pp45-54.

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ABSTRACTS

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FOREWORD

Welcome to the 31st Annual AUBEA Conference held at UTS 12-14 July 2006. AUBEA

is not only the biggest and most important Australian conference in its field but is now

well established as an important international conference attracting offers of papers from

North and South America, Europe, Africa and Asia: a total of twelve different countries

as well as all Australasian university schools of building,.

The papers included in this volume of proceedings have gone through a rigorous

reviewing process. Initially all abstracts were reviewed by a panel of experts in the areas

covered by the conference. The full papers, based on accepted abstracts, were then

independently peer reviewed by a minimum of two Australian and/or international

experts and where substantial rewriting was required, these changes were again reviewed.

As a result of this process, the revisions required were frequently very significant and at

the same time the rejection rate was quite high.

The result, we think, is a set of stimulating, thought provoking and significant papers that

we hope you will enjoy for their contribution to our discipline.

Göran Runeson and Rick Best

July 2006