GROOMING TOMORROW’S FINANCIAL EXPERTS
The Centre for Asset Management Research & Investments (CAMRI), a world-class centre for research, education and practice of asset management, promotes best practices in Asian fund management by using state of the art facilities and hands-on experiential learning.

The Centre for Asset Management Research & Investments (CAMRI) was established in 2010 at NUS Business School to improve the performance of stakeholders in Asian asset management through high-quality investment management education, applied research and practice. CAMRI achieves this by engaging in extensive quantitative, behavioural and fundamental analysis to develop high standards in all facets of asset management. It is anchored in Asia with close links to the leading global asset managers and institutions. Areas of research and education at CAMRI include:

- Portfolio management and selection across the asset class spectrum, including commodities and derivatives
- Financial market design, liquidity and trading strategies
- Market efficiency, asset pricing and behavioural finance
- Life-cycle savings and investing in Asia

CAMRI develops students who are well-trained, high-performing asset managers and research analysts with a strong sense of integrity, ethical awareness and fiduciary responsibility. With asset management’s growing importance in Asia, CAMRI is uniquely positioned to bridge the gap between theory and practice. As CAMRI prepares highly-skilled students to meet the demands of this growing industry, it also fosters close relationships between NUS Business School and the financial community.

In summary, CAMRI’s core missions encompass experiential, relevant, and applicable research, impactful education, and meaningful outreach with industry practitioners.
EXPERIENTIAL, RELEVANT, AND APPLICABLE RESEARCH

STUDENT CONSULTING PRACTICUM PROJECTS
Under the supervision of CAMRI finance faculty, student Consulting Practicum (CP) projects provide a platform for student teams to conduct well-defined research projects that are sponsored and supervised by financial industry participants. Student CP projects offer NUS Business School students meaningful hands-on experiences with practical relevance. These projects allow students to apply concepts and theories to real situations, strengthen links with industry and broaden their course offerings in terms of pedagogical approaches.

Here are a few representative examples of recent student CP projects completed at CAMRI:

SOVEREIGN WEALTH FUNDS & OTHER GOVERNMENT BODIES
Deriving long term strategic asset allocation assumptions by creating a reasonable financial model that generates a set of long-term expected real return assumptions for various liquid and illiquid global asset classes. The expected real returns and associated inputs incorporate both quantitative and user views with a long-term planning horizon.

ASSET MANAGEMENT FIRMS
An Australian asset management firm-originated student CP project involved performance attribution analysis with regards to investments in the Small cap and Micro cap primary and secondary markets, analysis of transaction and liquidity costs and their impacts on alpha generation, as well as development of a systematic data screening process for the Australian Micro cap sector. This approach was then extended to the Small cap and Micro cap sectors across Asia (ex-Japan).

This CP project analysed several methodologies that can be applied in the portfolio asset allocation context. The various problems associated with the traditional but highly popular Markowitz mean-variance optimisation were analysed and alternative methods such as the Black-Litterman model, Stambaugh methodology, and multi-factor models were proposed and analysed by the students. They also addressed several facets of the asset allocation problem, such as data gaps and the sensitivity of optimisation to returns predictions.

A CP project conducted for a large US-based asset manager investigated the role of key macroeconomic indicators, such as industrial production, money supply, inflation, interest rates, and valuation ratios (e.g. price-to-book, dividend yield), in predicting future returns on the MSCI Emerging Market country indices. The student team used various sophisticated econometric techniques, such as the pooled least squares panel data regression and panel autoregressive models, to predict the EM index returns.

The main objective of a project conducted for a large hedge fund was to present a detailed analysis of the Asian bond markets (China and ex-China) and to identify strategic opportunities for development of an Asia-focused Fixed Income product. This idea was further divided into two parts: a potential China fixed income product, which dealt with the Chinese bond markets, and a second fixed income product, which would focus on other Asian countries.

We sent our staff to the CAMRI Portfolio Management training programme, which was highly interactive, where the professors were very experienced, and had a good combination of academic and industry backgrounds. They were also very helpful in order to ensure our staff understood the topics and exercises given. It certainly helped sharpen their knowledge in analysing companies on a fundamental and quantitative basis, as well as to manage and monitor investment portfolios.”

MOHAMAD NASIR ABDUL LATIF, CIO AND DEPUTY CEO, MALAYSIAN EMPLOYEES PROVIDENT FUND (EPF)

CAMRI LIFE-CYCLE SAVINGS & INVESTING IN ASIA RESEARCH
We started this research series in July 2011 with the aim of identifying and proposing logical, scientific and rational solutions to the retirement savings and investment problems that many Asian nations face. We believe that innovative and thoughtful applied research, presented in a form that is accessible to the lay person & policy makers, can make a difference to the lives of many in the region. To this end, the student-built CAMRI Real Retirement Income Fund Calculator, complete with a user-friendly Online Guide, hypothetically calculates the requisite monthly household contributions necessary so as to provide for a dignified standard of living upon retirement via inflation-indexed life annuities guaranteed by the government. This calculator is based on original research conducted by CAMRI faculty and students. A detailed description of this research can be found in the Working Paper written in November 2011 by our former MBA students involved in the project.

SMART FINANCE BLOG
Our CAMRI faculty aims to unravel the complexity of how small investors & households make financial decisions using behavioural finance & investment science, by offering clarity, comment, analysis and advice for consumers and policy-makers alike (in collaboration with Think Business at NUS Business School).
ACADEMIC NEWSLETTERS & CASE STUDIES

CAMRI Academic Perspectives is a periodic compendium of academic research summaries & views, while our CAMRI Global Perspectives is a monthly digest of financial market outlook, research & macroeconomic views. CAMRI has also started featuring case studies that focus entirely on Asia. All of these articles and cases are written by CAMRI faculty.

The programme was an enriching experience of advanced facilities and sophisticated teaching by excellent professors at CAMRI. The curriculum was well-designed and substantial. We learned the application of Excel and Bloomberg in analysing portfolios, and had a deep and comprehensive understanding of the financial industry in Singapore.”

(EXCERPTED FROM VARIOUS CHINA SUMMER INSTITUTE AT NUS BUSINESS SCHOOL PARTICIPANTS’ FEEDBACK, JULY 2013)

MEANINGFUL OUTREACH WITH INDUSTRY PRACTITIONERS

PUBLIC TALKS AND FORUMS AND EXECUTIVE ROUNDTABLE LUNCHEON SERIES

CAMRI regularly organises asset management-related public talks and applied research forums, which feature NUS faculty and world-renowned scholars and industry experts visiting CAMRI and NUS Business School. The topics covered include regulatory and asset management issues in institutional and personal investments, issues in corporate governance and fiduciary responsibility, executive compensation, as well as portfolio design and management.

EXECUTIVE EDUCATION AT CAMRI

This is an 8-day, state-of-the-art Advances in Applied Portfolio Management Training Programme at CAMRI, developed by academic professionals for investment professionals, conducted at the world’s most advanced financial training lab. The hands-on courses taught in the CAMRI Investment Management & Trading Lab include Quantitative Techniques, Fundamental Investing in Asia, Valuation, Risk & Portfolio Management, Fixed Income & Currencies, and the Global Macroeconomy.

CAMRI INVESTMENT MANAGEMENT & TRADING LAB

Our Investment Management & Trading Lab is the focal point of CAMRI’s teaching, training and educational activities. In line with our mission of conducting research and education in Asian fund management, it focuses heavily on financial applications and databases, particularly Asian securities. To enhance the portfolio management experience of students, the lab has 32 workstations equipped with Bloomberg, MSCI BARRA portfolio and risk management applications, live financial data and ticker feeds, as well as various other investment management software applications. The combined market value of the hardware and software in the CAMRI Lab is US$2.5 million dollars. These enable our lab users, including our students in the Student Managed Fund Track, to gain first-hand experience with the same sophisticated tools used daily by investment professionals, giving them a competitive advantage when they embark on their future careers in the finance industry.

IMPACTFUL EDUCATION

The Student Managed Fund (SMF), launched using seed capital from a supportive private donor, provides hands-on, team-based and experiential learning to prepare graduating students for the demands of the investments, financial and wealth management industry. The SMF is a low-risk, conservative equity fund that aims to hedge against adverse market movements, i.e., it is close to “market neutral”, while minimising downside risk. With the guidance of CAMRI faculty and experienced investment professionals, students get practical training and experience in fund management by managing real money.

By the end of this course participants are, amongst other things, expected to research, write, and publish equity & fixed income investment reports, build simple multifactor models for screening and alpha generation purposes, perform live & backtested portfolio investment strategies to develop the participants’ equity research, stock-picking and credit skills, and perform portfolio optimisation and risk management analysis.

RESEARCH INITIATIVES AND FOCUS AREAS

CAMRI’s research enhances the understanding of the management, regulation and performance of investment funds and their impact on financial markets. Emphasis is placed on examining the issues that Asia’s asset management industry faces, some of which are motivated and sponsored by the industry. These include financial capital market issues, investment strategies for traditional and alternative investment managers, portfolio measurement and risk management, M&A in the asset management industry, and legal, compliance, regulatory and corporate governance issues. Specific topics for research and study evolve with CAMRI’s applied research programme. Currently, these include life-cycle savings and investing, specifically as they relate to retirement-planning and inflation-hedging, Asian portfolio management and hedge fund downside risks & performance, financial market liquidity and stock selection.

CORPORATE GOVERNANCE AND ADMINISTRATION

In line with best practices of corporate governance, there is a Board of Directors and Advisory Council comprising of leading financial practitioners from Singapore and abroad to provide advice and support to CAMRI.