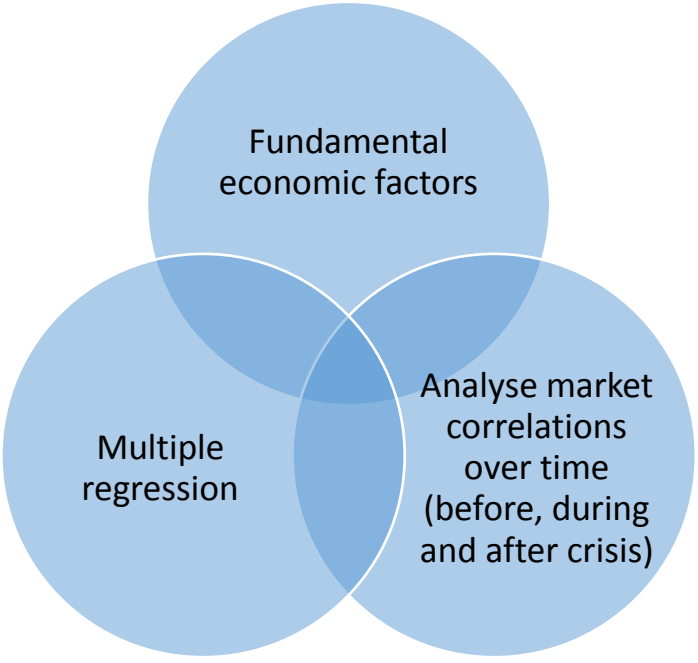


**Internet Appendix A155: Diversification
Illustrative Reverse Engineered Pitch Template Example**

Pitcher's Name	Robin Carrick (UQ Summer Scholar)	FoR category	Finance	Date Completed	15/01/16
(A) Title	Bowman, Robert G., Chan, Kam Fong and Comer, Matthew R. (2010) Diversification, rationality and the Asian economic crisis. Pacific Basin Finance Journal, 18 1: 1-23.				
(B) Basic Research Question	What is the impact of a contagion event on international diversification and the ability of fundamental factors to explain the securities market impacts (i.e. did the markets react rationally)?				
(C) Key paper(s)	Bekaert, G., Harvey, C., Ng, A., 2005. Market integration and contagion. Journal of Business 78, 39–69. Johnson, S., Boone, P., Breach, A., Friedman, E., 2000. Corporate governance in the Asian financial crisis. Journal of Financial Economics 58, 141–186. Roll, R., 1988. The international crash of October 1987. Financial Analysts Journal 44, 19–35.				
(D) Motivation/Puzzle	This research addresses two important issues: the benefits of international diversification and the rationality of equity market reactions to the Asian Crisis in 1997. Research examining the linkages and interdependencies among major world equity markets has provided mixed evidence about the correlations among the markets. Thus, the question of whether the benefits of international diversification are obtainable is inconclusively resolved in the literature, and further evidence addressing this issue is important for both academics and practitioners.				
THREE	Three core aspects of any empirical research project i.e. the “ IDioTs ” guide				
(E) Idea?	<p>Two research hypotheses are investigated; the impact of a contagion event on international diversification and the ability of fundamental factors to explain the securities market impacts.</p> <p>The benefits of international diversification are observed in the correlations across markets. The benefits are on a continuum, rather than binary: either being present or absent. Prior research shows that cross market correlations are sufficiently low that portfolio risks can be appreciably reduced through international diversification. However, research also indicates that the correlations are increasing. Therefore, we intend to investigate the research hypothesis on correlations that relate to diversification benefits. It is anticipated that correlations (diversification benefits) are dramatically increased (reduced) during the crisis, after which correlations are expected to drop.</p> <p>The second hypothesis that will be tested is that the market reaction to the crisis was rational. The study aims to differ from previous work on the Asian Crisis by extending the work of Roll (1988) and scrutinising the ability of five factors to explain the differences in the reactions of major world equity markets to the Asian Crisis.</p>				
(F) Data?	<p>The data used in this study covers 39 countries. Adjusted returns for the leading stock market index for each country were obtained from Datastream. The annual economic data was obtained from several different sources including the IMF International Financial Statistics, the IMF World Economic Outlook May 1998 Statistical Appendix, the Emerging Stock Markets Factbook 1998, the World Bank 1998 World Development Indicators, and the OECD Main Economic Indicators publications.</p> <p>The annual export data used to measure countries' exposures to Asia was obtained from IMF Direction of Trade Statistics Quarterly publications. Information on stock market institutional features was collected from the countries' stock exchange websites and the Federation Internationale des Bourses de Valeurs (FIBV) website. Finally, the corruption perception index was obtained from Transparency International (TI). The corruption perception index is constructed so that low corruption receives a high score. Therefore, a positive relationship between the index and equity returns is expected.</p> <p>A problem in the data set was that there were some missing observations from the economic and stock market institutional data. Cases of missing data were excluded list wise from the tests, allowing the sample sizes to be maintained as large as possible.</p>				
(G) Tools?	<p>The research uses a multiple regression model to compare market correlations before and after the crisis and to examine if the market response was in accordance with five factors; macroeconomic fundamentals, sensitivity to worldwide market movements, trade exposures, institutional features and corporate governance. In the multivariate model, market returns will be the dependent variable and the independent variables will reflect the five fundamental factors listed above.</p> <p>There are 18 explanatory variables that reflect the five fundamental factors; this is quite a high number and some of these variables are highly correlated</p>				

Cued Template taken from Faff, Robert W., Pitching Research (January 11, 2015). Available at SSRN: <http://ssrn.com/abstract=2462059> or <http://dx.doi.org/10.2139/ssrn.2462059>

	<p>with each other. To correct for this, principal component analysis (PCA) is used to reduce the number of overlapping macroeconomic variables to a smaller set of uncorrelated components before conducting the multiple regressions.</p> <p>The results of the PCA are; component 1 is a financial strength variable (FINST) explained by a common factor shared by M2, BOP, CRDT and INF, component 2 is a productivity variable (PROD) explained by a common factor shared by GDP, UEM and MCGDP and the remaining 11 variables are used on their own in the model. So the 18 explanatory variables are condensed down to 13 explanatory variables that are not highly correlated with each other.</p>
TWO	Two key questions
(H) What's New?	
(I) So What?	<p>The question of whether the benefits of international diversification are obtainable is important to academics and practitioners alike due to the importance of diversification in a portfolio. Knowing and quantifying the diversification benefits of international investment will affect investors' behaviour; if the diversification benefit had been found to be lowered then fund managers will potentially change their investing behaviour to put less weighting on international investment.</p>
ONE	One bottom line
(J) Contribution?	<p>The major contribution to the literature on the benefits of international diversification is the evidence compiled on increasing correlations over time. Subsequent to the crisis, we find that correlations decline, but they do not reach the lows prior to the crisis. The replication of Roll's (1988) sample shows that the correlations in 1997 increased substantially from 1987.</p>
3 Key Findings	<ul style="list-style-type: none"> • We show that variables reflecting all five fundamental factors are significantly related to the equity market returns during the crisis period. • The correlations of returns across countries during the Asian Crisis increase dramatically. This indicates that the benefits of international diversification were substantially reduced, but not necessarily eliminated, during the crisis. • Correlations after the crisis are approximately double what they were before the crisis.