

## **Abstract (summary):**

During the 90's, a series of international financial crises caught many financial institutions and governments flatfooted and somewhat defenseless against speculative attacks. Many institutions were surprised by these crises and even their magnitudes. This has left many economist and financial experts searching for better early warning systems. This dissertation looks at the various early warning systems economists and financial experts are developing and their effectiveness. In particular, this dissertation looks at the IMF early warning signaling approach and discusses some of the difficulties with this approach. A key problem with this approach is the lack of correlations between the signals. This dissertation then looks at the Monte Carlo Simulation Value at Risk approach to fiscal sustainability to assess this tools ability to provide advance warning of potential crisis. This approach is applied to the fiscal sector of Thailand to assess the effectiveness of the model. In reviewing the approach, what was discovered was that, although, this approach takes into account the correlations between the various risk factors; it does not fully take into account the structural difference in applying such an approach to the fiscal sector of a country as compared to a financial institution's portfolio of investments. The approach also does not fully account for the monetary and fiscal policies of a country. Finally, this dissertation looks at the various risk management issues surrounding the Value at Risk approach and the implications that these issues have upon fiscal sustainability and financial crisis.