Hedge Funds: 1997 Asian Financial Crisis, Response and Regulatory Measures in South Korea

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**Introduction:**

The principal focus of this paper is on the role of hedge funds in the 1997 Asian financial crisis, and the reforms and regulations adopted by South Korea after the crisis. Apart from this it also discusses some aspects of the role played by world bodies like the IMF in bailing South Korea out of the crisis. The paper will begin with an analysis of events leading to the Asian financial crisis. From there, it will discuss the basic fundamentals of hedge funds, strategies employed by hedge funds and then their role in the crisis. It will then analyze some of the regulatory measures adopted by the South Korean Government in regulating the financial markets.

The analysis of hedge funds with respect to the Asian financial crisis is important because some scholars still believe that hedge funds were primarily responsible for the crisis, while other ascribe different reasons for the crisis. Even more than 10 years after the crisis, the real causes are still disputed. After crisis two major international studies
were conducted to ascertain the role of hedge funds in crisis. The first was the IMF study “Hedge Funds and the Financial Markets dynamics” led by Barry Eichengreen and Donald Methieson and published in May 1998. According to this, hedge funds were small entities of a very large system and it is misguided to blame them. Another major international report was written by FSF Working group on Highly Leveraged Institutions and published in 2000. According to this, hedge funds and proprietary trading desks have the potential to destabilize financial markets. The idea that hedge funds played major role was also supported by political figures. Dr Mahathir, the then Malaysian Prime Minister, in one of the statements published in the Wall Street Journal on September 23, 1997 remarked.

“Whole region can be bankrupted by just a few people whose only objective is to enrich themselves and their rich clients....”

However, Dr Mahathir has not supported his argument with any substantial evidence. Thereafter several studies were conducted by world bodies like IMF but there is no consensus on the real causes till date. According to IMF, South East Asian economies were experiencing a huge inflow of money and from 1990 to 1995, financial intermediaries invested somewhere around $20 billion in these economies and in 1996 this amount had dramatically increased to $45 billion per annum. Then with the
collapse of Thai Baht and Malaysian Ringitt, there was a sudden outflow of $58 billion which created a chain reaction and currencies of other nations also started falling. But the question is if this was not sufficient to trigger crisis why these South East Asian economies which were experiencing high growth before 1997 faced economic crisis only after depression in their currencies.

All the studies undertaken for assessing the role of hedge funds in Asian crisis used empirical and statistical evidences. However, this research paper is written from a different perspective as it assessed the reforms undertaken and regulations enacted by the countries hit by Asian crisis. If any country has enacted any law with respect to the regulation of hedge funds then it is clear evidence that hedge funds played role in Asian Financial crisis. Assessing reforms of all South Asian economies is too broad and research may not be able to provide clear picture of causes and especially the role of hedge funds. It may be more productive to choose a country and analyze all the causes and reforms relative to that country. South Korea had phenomenal growth in the three decades preceding the crisis and was a preferred destination for international investors, whether hedge funds played any role in crisis could be seen by analyzing the reforms adopted by South Korea.
About the Sources:

Entire research on the paper was done by me only and sources include material from westlaw, lexis-nexis, internet, books and electronic resource of Northwestern libraries. All the sources will be cited in the footnotes.
Asian Financial Crisis:

The Asian financial crisis was one of the worst financial crises in Asia and has raised concerns not only for the future of region’s economy but also of the world’s economy as a whole. Though Asian crisis was centered only in South Asia but its impact was so deep that its reverberations were felt in the whole world. Asian financial crisis became a moot point and in recent subprime crisis policy makers tried to take lessons from it. In one of the articles recently published, it was quoted “The catchphrases may be different, but there are many similarities between the 1997 Asian financial crisis and today’s”1.

Asian financial crisis was triggered in July 1997 with the collapse of Thai Baht, which was directly the result of a decision by the Thai Government to float the Baht2. At that time, the baht was pegged to the dollar and current account3 deficit of Thailand increased demand for dollar. As a result of which Thai government had to use its foreign exchange reserves to buy Thai baht. The cost of defending baht was around $5 billion but Thai central bank had locked its foreign reserves in forward

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1 Asia: A perspective on Sub Prime crisis, Khor Hoe Ee and Kee Rui Xiong; http://www.imf.org/external/pubs/ft/fandd/2008/06/khor.htm
2 The Asian Financial Crisis and its Implications for Vietnam’s Financial System- Doan Phuong Lan, ISEAS Visiting Research Fellow.
3 Current account is the difference in nation’s total export of goods, services and transfers and its total import of them.
contracts so it had only $1.14 reserves to defend baht\(^4\). As a result of which Thai government had to take the decision to float baht against dollar which resulted in the collapse of baht. With the devaluation of Baht, currencies of other neighboring countries also started falling and within weeks entire South Asian region came into the grip of crisis. The countries most affected in the crisis were Indonesia, Thailand, South Korea, Malaysia, Singapore, Hong Kong and Taiwan. According to CRS Report for Congress, 1997-1998, two rounds of currency depreciation were responsible for the crises. First round started with the sudden fall in the Thai baht, Malaysian ringgit, Philippines peso, Indonesian rupiah. When these currencies stabilized, a second round began with the fall in the Taiwan Dollar, South Korean won, Singapore dollar and Hong Kong dollar. These currencies lost substantial value relative to the United States dollar. In order to prevent currency depreciation, South Asian economies took sudden measures of selling foreign exchange reserves and raising interest rates which in turn further slowed economic growth.\(^5\) The impact of crisis was so deep that some economies like Thailand, Indonesia, Malaysia, South Korea and Philippines experienced negative growth rates between July, 1997 and July, 1998.

Growth in Real GDP (%) in crisis-affected countries

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<tr>
<td>Thailand</td>
<td>5.5</td>
<td>−0.4</td>
<td>−8.0</td>
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<tr>
<td>Indonesia</td>
<td>7.8</td>
<td>4.9</td>
<td>−13.7</td>
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<td>Malaysia</td>
<td>8.6</td>
<td>7.7</td>
<td>−6.2</td>
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<td>South Korea</td>
<td>7.1</td>
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<td>Philippines</td>
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There has been continuous debate on the reasons for financial crisis and different scholars have different views on it. One view suggests inherent weakness in the domestic structural factors of the economies was responsible for the crisis. This includes weak banking system, lack of adequate laws and regulations, and also the absence of strong supervision and enforcement of prudential regulation. Another view suggests that short term capital flows were more responsible for it. South Asian economies were the preferred destination for global investors because of high interest rates and therefore attractive to investors considering higher rates of return. There was a large influx of money and soaring asset prices. The

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6 The Asian Financial Crisis and its Implications for Vietnam’s Financial System- Doan Phuong Lan, ISEAS Visiting Research Fellow.

7 Id. at 3

8 Id.; See Hedge Funds in Emerging Markets, Gordon De Brouwer

9 Id.
South Asian economies were inflated with this short term capital which was expensive and conditioned on quick profits\textsuperscript{10}.

There was never a consensus on the causes but it seems that there is no one reason and all the factors resulting in crisis overlap. The financial crisis has not only economic but also political ramifications. President Suharto of Indonesia was forced to resign and world bodies like the IMF had to step-in and design bailout packages for crisis ridden countries.

**Hedge Funds:**

**Origin and strategies:**

The first hedge fund was started by Alfred Winslow Jones in 1949. The fund was organized as a limited partnership and used private placement rules to avoid registration\textsuperscript{11}. Modern hedge funds basically resembles this, however, the working of modern hedge funds has become more sophisticated than before. At that time hedge funds normally invested in common stocks and used moderate leverage to carry out long and short positions\textsuperscript{12}. Today, the traditional meaning of hedging i.e. to hedge a particular investment to reduce risk against losses has no particular significance. Hedge fund activities nowadays, are very complex and apart from traditional long and short positions, they use a

\textsuperscript{10} Id.
\textsuperscript{11} Hedge Fund Course (Electronic Resource)/ Stuart A McCrary; Northwestern Library; Also see Hedge Funds in Emerging Markets, Gordon De Brouwer; www.sec.gov
\textsuperscript{12} Id.
number of sophisticated strategies like equity hedging and arbitrage, fixed income hedging and arbitrage, currency hedging and arbitrage, index arbitrage, interest rate arbitrage, merger arbitrage, convertible bond and warrant hedging, statistical long/short equity strategies, event driven, distressed issuer investing etc. These hedge fund styles increase rather than reduce risk, with the expectation of increasing return.

Hedge funds use various strategies; therefore, market participants like to define them by the strategies hedge funds employ. However, whatever the strategy is, the goal of hedge fund is to maximize absolute returns in all market conditions. This is a point of difference between hedge funds and more regulated investment vehicles, such as mutual funds and pension funds, which assess their performance according to market

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13 OFI Tremont Core Strategies Hedge Fund; Course Documents
14 Expectation of returns varies across the different hedge fund strategies. E.g. During the period of January 1994 to September 2000, Convertible arbitrage and Long/Short Equity had the annualized Sharpe ratio of 1.07 and 0.36 respectively. http://www.edge-fund.com/AsnessKrailLiew2001.pdf. Sharpe ratio is the reward to risk ratio and is the measure of return premium per unit of risk.

15 Hedge Funds in Emerging Markets, Gordon De Brouwer. According to Goldman Sachs and FRM, “The term ‘hedge fund’ is historically rooted and has evolved over time to include a multitude of skill based investment strategies with a broad range of risk and return objectives. The common element among these strategies is the use of investment and risk management skills to seek positive returns regardless of market direction.”

Hedging your bets: A heads up on the hedge funds and funds of hedge funds; http://www.sec.gov/answers/hedge.htm
benchmarks. Hedge funds never aim at market benchmark rates of return rather they focus on positive returns in any market.\textsuperscript{16}

**Definition:**

Apart from the ultimate goal of positive returns, there are no particular characteristics that can help in defining what is and what is not a hedge fund. However, Stuart McCarry, a Principal with Chicago Partners LLC, defines Hedge funds as

A hedge fund is a loosely regulated investment company that charges investment fees and usually seeks to generate returns that are not highly correlated to returns on stocks and bonds.

According to SEC,

Hedge funds are basically the private investment pools for wealthy, financially sophisticated investors. Hedge fund managers typically seek absolute positive investment performance. This means that hedge funds target a specific range of performance, and attempt to produce targeted returns irrespective of the underlying trends of the stock market.

\textsuperscript{16} Id. at 18.
Working of hedge funds:

Hedge funds are loosely regulated in the sense that they are usually open to limited, wealthy, financially sophisticated individuals and thus do not require registration with regulating authorities like SEC. Because hedge funds are not registered with regulating authorities, they do not provide investor protection as in the case of other investment products like mutual funds. However hedge funds are subject to anti fraud provisions of securities laws. Hedge funds are structured as limited partnerships and limited liability companies; they trade in financial instruments and are not open to general public and thus exempt from several disclosure requirements. High net worth individuals or organizations investing in hedge funds are sophisticated enough to protect themselves. Another characteristic of hedge funds is that they are different from

17 Hedging your bets: A heads up on the hedge funds and funds of hedge funds;  
http://www.sec.gov/answers/hedge.htm;  

18 Mutual funds are pooled investment vehicles. US mutual funds are registered with SEC and are incorporated under state law as corporations or business trusts. They are also subject to federal legislative restrictions on their activities and organizations; Hedge Funds in Emerging Markets, Gordon De Brouwer at page 11-12.

dealers or brokers. They trade on their own account rather than on behalf of other entities and they also do not carry the business of public securities like dealers, which deal directly with public and quote market prices.

Hedge funds typically operate with leverage which is expressed in terms of ratio of assets to capital. E.g. a ratio of 3 suggests that fund has two dollars of debt and one dollar of capital. Since assets, capital and debt are balance sheet terms, leverage is defined in On Balance Sheet terms. However, leverage can also occur through off balance sheet transactions such as short position, repurchase agreements and derivative contracts. E.g. In short position, a fund borrows the asset and then sells it. It does not have an asset and liability on balance sheet but it has position which is off balance sheet. This is also called economic leverage. Economic leverage is typical phenomenon of hedge funds operations. A fund may have little or no balance sheet leverage but can have substantial economic leverage. The amount of economic leverage of a fund depends on several factors like willingness of financial

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20 Hedge Funds in Emerging Markets, Gordon De Brouwer; Also see The Asian Financial Crisis and its Implications for Vietnam’s Financial System- Doan Phuong Lan, ISEAS Visiting Research Fellow; Hedge Fund Course (Electronic Resource)/ Stuart A McCrary; Northwestern Library; www.sec.gov.; New development strategies, Akira Kohsaka
21 Id. at 14
22 Id. at 10
23 Id.
24 Id.
intermediaries to provide credit on off balance sheet transactions, the cost of leveraging and risk appetite of fund.\textsuperscript{25}

Leverage is important to understand because it is associated with risk.\textsuperscript{26} On balance sheet leverage enhances assets and economic leverage enhances position and exposure in the market. It can make markets more vulnerable to price movements when positions shift. These vulnerabilities have great potential to create instability in the whole financial system. Thus, hedge fund using a leverage of 10 suggests heavy debt which can create havoc in price movements and thus exposing hedge funds to unlimited risks.\textsuperscript{27} Because hedge funds charge high incentive fee from their clients therefore, in order to maximize returns, they sometimes use excessive leverage.\textsuperscript{28} The estimates of hedge fund leverage vary in different funds. The Presidents Working Group on Financial Markets (1999) and other private data providers suggest that hedge funds should normally operate with on balance sheet leverage of less than two.\textsuperscript{29} However, leverage ratio depends on the market conditions and sometimes funds have leverage ratio as high as 71, like in 1997.\textsuperscript{30}

\textsuperscript{25} Id.
\textsuperscript{26} Id.
\textsuperscript{27} Id.
\textsuperscript{28} Excessive leverage means when fund use excess of debt and very little equity in investments. E.g. In 1997 Asian Financial Crisis, hedge funds have leverage ratio as high as 71.
\textsuperscript{29} Hedge Funds in Emerging Markets, Gordon De Brouwer at page 11
\textsuperscript{30} Id.
As discussed above, analysts use different ways to categorize hedge fund strategies. E.g. Van Hedge identifies 18 hedge fund styles, Goldman Sachs and FRM identifies four and Kodres identifies two. According to Kodres, there are basically two types of hedge funds. First is Macro hedge fund which tends to make profit through discrepancies in macroeconomic policies of a country. Another type of hedge fund use arbitrage type strategy.

**Macro Hedge funds:**

For the purposes of analyzing role of hedge funds in Asian financial crisis, it is necessary to understand the working of macro hedge funds. Macro hedge funds structure their position in the market by assessing country’s macro economy, financial market and policy making process and also the impact of international conditions on that country. If they think that because of these factors there is likely movement in financial markets, they bet on any financial asset like exchange rate, stock prices, bond yields etc. E.g. if they think that a

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31 Id. at 19
32 Id. at 21
33 Discussion of macro hedge funds is relevant because in fixed exchange regimes like Thailand in 1997, macro funds have more incentive to operate. In fixed exchange regimes the problem of how changes in positions affect price may be less serious for a macro fund. If the authorities fix the exchange rate, establishing or closing out a short does not affect the price. Moreover, when a currency is fixed and the monetary authority does not ration the amount of currency that it will provide at that parity, then macro hedge funds is guaranteed unlimited liquidity. If the current parity is unsustainable, then, so long as there is no problem in obtaining local currency funds, there is no major risk of loss for the speculator. Hedge Funds in Emerging Markets, Gordon De Brouwer at page 22
34 Id. at page 21
country’s technology sector is booming and will have impact on economy, they will buy technology stocks i.e go “long” on technology stocks. However, if they think that rise in stocks is excessive and market will drive the prices down they will “short” their position. Thus, they continuously watch market and decide their strategy.

Analysis of market participants is also crucial for the success of hedge fund because “even if the economic conditions suggest a misalignment with fundamental, financial markets need to be liquid enough for a position to be established”\textsuperscript{35}. For hedge funds to make profit, it is necessary that market should be extremely liquid especially in the case of long/short strategy.\textsuperscript{36} By monitoring the movement of participants, hedge fund can decide whether to go long or short. Liquidity is elastic and varies within a day, week or month\textsuperscript{37} and therefore, fund matches its position according to liquidity.

Macro hedge funds also carry high leverage ratio. According to Chadha and Jensen (1998), on balance sheet leverage seems to be highest for macro funds and is greater than 3 and market data shows that on balance sheet leverage for macro funds is

\textsuperscript{35} Id.
\textsuperscript{36} Liquidity refers to the willingness of participants to enter the market and buy or sell.
\textsuperscript{37} Hedge Funds in Emerging Markets, Gordon De Brouwer at page 21.
somewhere between 4 to 10.\textsuperscript{38} One of the reasons for high leverage could be that reputation of macro funds is such that lenders often do not demand collateral from such funds and they can establish their positions without using their funds.

**Role of hedge funds in Asian financial crisis:**

Policy makers, practitioners and academicians hold diverse views about the role of hedge funds in Asian financial crisis. Some suggest that hedge funds and proprietary trading desks of banks were responsible for the crisis while others suggest that hedge funds play no independent role in this. While there is diversity of views, the advocates of the role of hedge funds in crisis are mostly located in Asia and Europe whereas most of the hedge funds and proprietary trading desks are located in US.\textsuperscript{39} After 1997, the controversy about hedge funds and Asian crisis led to two major international studies. These studies were conducted to ascertain the role of hedge funds in the Asian financial crisis. The first was the IMF study "\textit{Hedge Funds and the Financial Markets dynamics}" led by Barry Eichengreen and Donald Methieson and published in May 1998. The study examined many aspects of hedge funds including their role in financial crisis. According to this, hedge funds were small entities of a

\textsuperscript{38} Id. at 25
\textsuperscript{39} Id. at 41.
very large system and it is misguided to blame them. With respect to Asian financial crisis, it came out with two conclusions.\footnote{Id. at 41, 42}

1. While hedge funds are large in absolute terms, they are dwarfed by other institutional investors (banks, pension funds, mutual funds), some of whom engage in many of the same activities as hedge funds. This point against the conclusion that hedge funds play a singular role in precipitating crisis.

2. Hedge funds did have large positions against the Thai Baht in the summer of 1997, but so did other investors, and most hedge funds were relatively late to take that position. That is, they were at the rear end, not the front of financial “herd”. And there is scant evidence that hedge funds had equally large positions against other Asian currencies.

Another major international report was written by FSF Working group on Highly Leveraged Institutions and published in 2000.\footnote{Id. at 42; The full report is on www.fsforum.org} This report specifically focused on the issues raised by the near collapse of Long Term Capital Management and instabilities in the Asian markets and emerging markets in 1998. This report
was in sharp contrast to IMF report mentioned above and holds that by virtue of large concentrated positions and highly aggressive trading strategies, hedge funds and proprietary trading desks have the potential to destabilize financial markets that already have vulnerabilities. This report stated that

“Even in the absence of HLI activity, there would certainly have been considerable market pressure in these economies because of vulnerabilities in their economic structures or financial structures or financial systems or the size of external shocks they faced. In unsettled and fragile conditions, large and concentrated HLI positions have the potential materially to influence market dynamics”.

The report points out the fact that HLI’s can destabilize the market not just because of their size and concentration of positions but also the psychological effect and perceptions it creates on other market participants who imitate the positions of these institutions.

The report also analyzes the key elements of activities of HLI’s in Asian financial crisis in 1997. Before 1997, hedge

\[42 \text{Id.}\]
funds had substantial presence in East Asia. In mid 1990’s, hedge funds had huge short positions for Japanese yen which was also called yen carry trade. Yen Carry Trade seems to be complex but the mechanism was simple. It works on the principal of borrowing at very low interest rates in yen and investing the proceeds in higher yielding assets like US Treasury bonds or emerging markets assets to earn a spread\(^{43}\). By 1998, the yen carry trade tally reached to $200-300 billion, with more than half of it held by hedge funds. Positions of individual hedge funds had reached around $20-25 billion\(^{44}\). At different points of time during the decade of 1990’s, these macro hedge funds had different long and short positions.

HLI and hedge funds were only two of the many other players like institutional investors, exporters, importers, multinationals, local banks and central banks active in Asian market in 1990’s (FSF Working Group on HLI’S 2000). But in most of the cases, HLI’s and macro hedge funds were the key players and their positions vary by market, economy and returns. The FSF Working Group on HLI’s (2000) cited that short positions reached $10 billion in Hong Kong dollar, $2 billion in Singapore dollar, $ 9 billion in ringitt etc. and these positions were created by

\(^{43}\)Id.
\(^{44}\)Id.
hedge funds. As the positions of these macro hedge funds grow stronger in the market, they started leveraging their positions more aggressively by borrowings from securities companies and banks. The effect of which was that there was no constraint on position taking by hedge funds in Asian markets and these positions were finally became vulnerable to changes in credit conditions. An instance of which was seize up in US financial markets in 1998. In Asian financial crisis, the price action was dependent on certain other players also but mainly it was a creation of macro hedge funds. The main exception was Indonesia, where the price fall in 1997 was associated with domestic capital flight. The analysis of both the reports suggests that IMF’s findings are based on the study of the macro economic conditions of the affected countries whereas FSF took into account the impact of HLI’s and macro funds and in lieu of the collapse of LTCM. There is no doubt that affected countries had weak financial and banking system which deteriorated further with rampant industrialization. Therefore, it is quite difficult to suggest that entities like HLI’s and macro funds can cripple the economies of several nations to such an extent.

45 Id. at 43; FSF Working Group report, 2000
46 Id. at 47
47 Id.
Often banks and security companies that finance hedge funds tend to follow the investment activities of hedge funds. "FSF working group on HLI’s(2000:105) observed that financing of hedge funds by banks and other security companies creates a “structural opportunity” for the proprietary desks to follow the positions and flows of hedge funds.”\textsuperscript{48} This copy cat trading creates a rippling effect in the market and thus responsible for a chain reaction.\textsuperscript{49} This is referred to as herd behavior.

In 1990’s hedge funds were quite effective in understanding the market liquidity. It is evident from the fact, that they understood that there was no use short selling currency in the market if the depreciation created by shorting is offset by the appreciation associated with buying. Thus macro hedge funds paid close attention to the market flows of other participants. In order to make money from short selling, it is necessary for speculators that selling is to be done quietly without letting the prices fall i.e. selling when other participants like banks etc. buy. Speculators then close the position by buying in the market when other players sell. If the prices do not fall after short positions, speculators tend to maneuver price fall by some “noisy” selling.\textsuperscript{50} In the same way when a speculator wants to

\textsuperscript{48} Id.
\textsuperscript{49} Id. at 48
\textsuperscript{50} Id. at 48
close its position and there is not much volume of selling in the market, they have the incentive to do some noisy selling.\textsuperscript{51} Many participants who are constantly following hedge funds tend to copy the move of hedge funds and this creates a chain reaction and makes noisy selling more effective. Thus speculator has to sell a relatively small amount and rest of the work would be accomplished by copy cats. According to scholars and market participants, this phenomenon of noisy selling led to the Asian crisis. In order to get the desired reaction of long or short position, hedge funds do a little transaction and deliberately show their position to other players who tend to follow hedge fund. This accomplishes the purpose of hedge funds whether to buy or sell.

In 1997, all the participants in the market wanted to know the positions of hedge funds but only hedge funds clearly knew their positions. However, some financial institutions doing transactions for hedge funds had little insight about the hedge fund activities. The view that hedge funds are always on the sell side is also misguided one.\textsuperscript{52} The example of Indonesia gives more insight into the activities of hedge fund.\textsuperscript{53} Hedge funds were on the buy side of the market in Indonesia in 1997 and suffered huge losses.\textsuperscript{54} Therefore, while

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{51} Id.
\item \textsuperscript{52} Id. at 50
\item \textsuperscript{53} Id.
\item \textsuperscript{54} Id.
\end{itemize}
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trading, hedge funds can be on either side depending on the market and returns relative to the buy or sell side.

The experience of East Asia in 1997–98 shows that hedge funds due to their positions in midsized markets can pose twofold threats to market integrity. First, the presence of hedge funds and their positions tend to have deep effect on the perceptions of other market participants which is a classic case of herding. These participants try to establish same positions or stand out of the market i.e. refrain from taking contrary positions. In both these cases balance in the market is lost as liquidity in the market is adversely affected and price movements become more disorderly. Secondly, players who know this effect tend to make use of it for price adjustments. Therefore, hedge fund in such a case uses his influence to increase chances of favorable outcome.

As already discussed above, different scholars have separate views on the causes of crisis. Like IMF study in 1998 base its argument on the fact that apart from hedge funds there are many other forces which were instrumental in crisis. The Asian financial crisis was a complex phenomenon and although the

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55 Id.
56 Id.
57 Id.
58 Id.
59 Id.
crisis was triggered by Thailand’s current account deficit and pressure on their fixed exchange rate, in other affected countries it was exacerbated by their excessive unhedged short term borrowing in foreign currencies, weak banking and financial institutions, policy errors by national governments and international organizations, excessive risk aversion by international investors like hedge funds, and bouts of destabilizing speculation by residents or nonresidents or sometimes both.\(^{60}\)

South Asian countries were rapidly growing in 1990’s owing to rapid industrialization. This opened new vistas for domestic and foreign investors. In order to facilitate domestic and foreign investors, South Asian countries started deregulating their economies. Uncontrolled liberalization with insufficient control mechanisms and inadequate laws resulted in the weakening of entire system. However, it is difficult to say that macro hedge funds and proprietary trading desks were solely responsible for crisis but it is certain from the factors analyzed that they were material force behind the instabilities created in Asian financial markets in 1997.

South Korea and Asian Financial Crisis:

\(^{60}\) Id. at 71
Pre crisis, South Korea was experiencing a constant growth of around 7-10% and reasons of its sustained growth were export oriented policies and investment growth, which was financed largely by private savings and foreign borrowings. South Korea’s phenomenal economic growth is evident from the fact that per capita income in Korea had increased from $82 in 1961 to $10,315 in 1997. Asian Miracle, a book published by World Bank praised South Korea for its economic achievements.

In 1997, the foreign exchange crisis started with plummeting of Thai baht reached South Korea along with other Asian economies. The South Korean economy, which was once an example of economic accomplishments for other developing countries started falling with the devaluation of Korean won. The prominent members of Korean chaebol like Hanbo, Jinro and Kia groups filed bankruptcies shattering the belief that chaebols can never fall. What went wrong with the so called Asian Miracle? Some blamed it on the hot-money that flooded the markets before crisis. The hot money was considered to have created instability of foreign exchange market and thus

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61 The Asian Financial Crisis and its Implications for Vietnam’s Financial System- Doan Phuong Lan, ISEAS Visiting Research Fellow.
62 Financial Crisis and Transformation of Korean Business Group, Page 3; Also see Korean crisis, Donald Kirk;
63 Id. at 3
64 Chaebol are the large, conglomerate family controlled firms of South Korea characterized by strong ties with government agencies.
65 Financial Crisis and Transformation of Korean Business Group, Page 3
66 Hot money is the money that flows regularly between financial markets in search of the highest short term interest rates possible.
responsible for crisis. But according to IMF, “The government had begun an economic reforms program that gained momentum in 1993-96 to gradually liberalize financial markets and the capital account. Capital account liberalization, however, was neither well sequenced nor accompanied by the necessary reforms and strong prudential supervision of financial system. The vulnerabilities of economy to external events stemming from weaknesses in the corporate and financial sectors were not fully recognized. Controls on short-term external borrowing by banks were eased, but controls on medium and long term capital remained in place.”

The Western popular press and financial community blamed chaebol as main culprits of financial crisis in Korea. It identified the debt ridden chaebols with an unholy alliance with financial institutions as the root cause of the crisis: “In 1994-96, Korean conglomerates undertook an aggressive investment drive financed by large increases in borrowing from domestic banks, which, in turn, sharply increased short term external borrowing. During 1997, an unprecedented number of highly leveraged conglomerates went into bankruptcy, the buildup in capacity proved unviable owing to the depreciation of the yen, a

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67 Capital account means net result of the public and private international investments flowing in and out of the country.
68 Financial Crisis and Transformation of Korean Business Group at page 7.
69 Id. at 8.
sharply adverse movement in the Koreas terms of trade, and the slowing of domestic demand in 1996. The bankruptcies resulted in severe deterioration in the balance sheets of Korean financial institutions.”

South Korean government also believed to have contributed to this crisis by implementing the anti-bankruptcy agreements after the Hanbo, Jinro and Kia went bankrupt. The agreement barred all the banks from calling payments of overdue debts of insolvent companies and also forced banks to provide more assistance to these bankrupt entities. Considering the situation and potential losses, banks started recalling loans from other companies that had financial problems. This further aggravated the situation by driving more companies into bankruptcy. Reacting to this, foreign investors started withdrawing their funds and investments at a loss by converting them into dollars. Foreign financial institutions also started calling on their loans from financial institutions in Korea. All these actions created more contraction in the stock and foreign exchange market and thus induced larger bankruptcies in Korea. In order to protect further depreciation in won, Bank of Korea intervened which reduced its foreign currency reserves to

70 Id. 71 Id. at 7. 72 Id. at 4. 73 Id. 74 Id.
$5 billion.\textsuperscript{75} Korean won depreciated abruptly from 864 won per dollar to 1695 won per dollar by December 1997, stock exchange tumbled from 669 to 390 and number of bankruptcies has increased from 1000 per month to 3500 per month.\textsuperscript{76} In short, the financial sector was inefficient to handle huge foreign investments.

Amid financial crisis, South Korean government had to take measures to uplift economic growth. South Korean government appealed to IMF for a massive $58 billion bailout package and used nearly $20 billion out of it.\textsuperscript{77} IMF provided the relief funds but demanded stern measures from Korean government. Some of the measures include restoration of investor confidence in Korean economy, restructuring of Korea’s financial and corporate sectors. In order to restore confidence in Korean economy, government raised short term interest rates to 25\% and ushered in floating exchange rate regime.\textsuperscript{78} However, this led to the unprecedented increase in exchange rates. Joseph Stiglitz, the then Vice President of World Bank, criticized this measure.\textsuperscript{79} For restructuring Korea’s financial and corporate sector, IMF asked for reorganization of chaebols.\textsuperscript{80} In order to accomplish this, Korean government had to inject public funds in virtually

\textsuperscript{75} Id.
\textsuperscript{76} Id.
\textsuperscript{77} Hedge Funds in Emerging Markets, Gordon De Brouwer
\textsuperscript{78} Financial Crisis and Transformation of Korean Business at page 6
\textsuperscript{79} Id.
\textsuperscript{80} Id.
insolvent banks who were the victims of anti bankruptcy agreements.\textsuperscript{81} Korean government then demanded chaebols to focus on particular areas only and cut down on range of operations.\textsuperscript{82} This policy was also criticized by chaebols and there was lot of politicization of this measure.\textsuperscript{83}

Crisis in South Korea brought to the fore the inherent weakness of the system. Policy makers and international organizations like IMF had to act fast and propose new laws both for the resolution of present crisis and for averting such crisis in future. After the crisis, Korean government proposed Foreign Investments Promotion Act and Foreign Exchange Transactions Act and also put pressure on big conglomerates to reform their business practices and to end the system of cross guarantees\textsuperscript{84}.

Because foreign investors had lost confidence in Korean economy, Korean government had no leverage against IMF in bargaining loan conditions. Therefore guidelines imposed by IMF greatly influenced the Korea’s subsequent restructuring policies.\textsuperscript{85} The political system in Korea at that time understood that restructuring of chaebols was necessary to restore foreign

\textsuperscript{81} Id.
\textsuperscript{82} Id.
\textsuperscript{83} Id.
\textsuperscript{84} When the Baht comes in Money Marketing, June 8 2000; Lexis Nexis
\textsuperscript{85} Financial Crisis and Transformation of Korean Business Groups, Page 189; Also see Korean crisis, Donald Kirk; New Development strategies, Akira Koshaka
investor confidence. On January 13, 1998, government announced five principles for corporate restructuring.\(^6\)

1. The government required chaebols to introduce combined financial statements and adopt Western accounting practices to improve transparency.
2. The government forced chaebols to abolish debt guarantee practices to avoid serial bankruptcies.
3. Chaebols should reduce their debts and sell unprofitable assets.
4. Chaebols would improve international competitiveness by focusing on core businesses.
5. The government would improve the governance system of companies and would enforce the responsibilities of family owners to minority shareholders.

These reforms were basically related to the restructuring of huge business houses which were considered to be the prominent reasons for crisis in South Korea. These were also important from the point of view that operations of chaebols in Korea were so intertwined with financial sector that in order to restructure financial sector it was imperative to restructure conglomerates. E.g. “as of June 1998, 40 trillion won in loans were officially classified as bad and with 55% loan recovery

\(^{6}\) Id. at 191.
rate, the total amount of required write offs was estimated to be about 47.1 trillion won, which was about 2.6 times the equity capitals of all the banks at the end of 1998".\(^87\) Not only this there was a threat of impending financial crisis as people started withdrawing their deposits from banks and firms continued to go bankrupt as banks have restricted additional loans.\(^88\) Thus, government has to delay corporate restructuring efforts in order to fix financial sector first.\(^89\)

During early 1990’s there was a deregulation of Korean banking sector. Banks in Korea reacted to deregulation and liberalization of their financial sectors by rapidly increasing their lending portfolios.\(^90\) In 1997, government came out with stricter limits on the lending to chaebols. But this did not deter them from expanding on leverage because of alternatives like non banking financial institutions including merchant banks, development banks, insurance companies, investment trust companies, credit unions, which were bigger than commercial banks in terms of assets.\(^91\) The increase in bank loan portfolio was result of easy availability of foreign funds. But these foreign funds were available at a very short maturity period and

\(^{87}\) Id.
\(^{88}\) Id. at 192
\(^{89}\) Id.
\(^{90}\) Management and Resolution of Banking Crisis; Lessons from Republic of Korea and Mexico; Also see Financial Crisis and Transformation of Korean Business Groups, Page 189; Also see Korean crisis, Donald Kirk
\(^{91}\) Id. at 4
short term assets cover only a small portion of short term liabilities. Along with these, the problems of nonperforming loans also increased. Thus, lending boom, huge debt of domestic corporations, increasing short term foreign liabilities, increasing non performing loans and decreasing capitalization were regarded as the main reasons for crisis.

The situation further deteriorated with the macro economic scenario in 1997. The appreciation of Korean won led unsustainable current account deficit which was financed largely by short-term capital inflows.\(^{92}\) Investors were losing confidence because of macroeconomic fundamentals and there were huge capital outflows. The announcement of Korean government of devaluation of currency in November 1997 further worsened the situation.\(^{93}\) Currency devaluation led to the substantial decrease in the foreign exchange reserves of banks and other entities. Increase in interest rates and decrease in economic output further exacerbated the situation and debtors defaulted on their debts deteriorating the loan portfolios of banks. Also, instabilities in the domestic markets and loss of confidence in the economy of Korea mostly attributed to devaluation make it all the more difficult for banks to roll-over their short term

\(^{92}\) Id. at 11
\(^{93}\) Id.
currency liabilities. This led to the breakout of liquidity crisis. However, all the factors discussed above were only part of larger deficiency in whole system. There were other deficiencies in overall framework which includes poor legal system, lax prudential regulation and supervision, lack of reliable information on banking system, lack of risk management capacity and inefficient management of banks, persistent government interference in lending decisions, and weak market discipline.

**Reforms and Regulatory measures in South Korea after the Financial Crisis:**

In South Korea, currency crisis has not only limited to foreign exchange crisis but it triggered many other crisis like balance of payment crisis, banking crisis and corporate sector crisis which ultimately led to severe economic downturn. South Korean government had to act fast in order to find out solutions for the current crisis and to avert such a situation in future. Therefore, Korean government had focused on areas like resolution of banking crisis to restore investor confidence in their economy, stabilization of currencies, addressing other

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94 Id.
95 Id. at 6.
96 Management and Resolution of Banking Crisis; Lessons from Republic of Korea and Mexico; Also see Financial Crisis and Transformation of Korean Business Groups, Page 189; Also see Korean crisis, Donald Kirk; New Development strategies, Akira Kohsaka
structural weaknesses in the system and resumption of economic
growth.\textsuperscript{97} In order to achieve this, government had taken a staged
model which includes: \textsuperscript{98}

a. Containing systemic risk.
b. Establishment of overall crisis resolution unit.
c. Recognition of losses and establishment of a strategy for
restoring the solvency of the banking system.
d. Reduction of bad debts through purchase of NPL’s.
e. Recapitalization of banks.
f. Corporate/household debt restructuring.
g. Strengthening of prudential regulation and supervision.
h. Management and disposition of impaired assets.

Weak financial situation of banks in Korea and
deteriorating investor confidence led government to take some
drastic measures. Banks were not allowed to default on their
liabilities and provided immediate liquidity to banks to meet
their short term and liabilities in both domestic and foreign
currencies.\textsuperscript{99} Government also guaranteed bank deposits till
2000.\textsuperscript{100} Korea Deposit Insurance Agency (KDIC) was created and
all existing deposit insurance agencies were merged into KDIC.\textsuperscript{101}

\textsuperscript{97} Id. at 12
\textsuperscript{98} Id.
\textsuperscript{99} Id. at 13
\textsuperscript{100} Id. at 14
\textsuperscript{101} Id.
These measures were effective and helpful in short term resolution of crisis and Korean banks successfully returned to international capital markets and continued working as they were working before crisis. However, these measures not sufficient to solve all the problems.

There were a number of government agencies like finance ministry, central banks etc. working at different levels. All these agencies had different institutional objectives and there were bureaucratic hurdles, therefore, a central unit was required for fast resolution of crisis. The centralized unit should be provided with wide powers to coordinate all agencies, eliminate other administrative hurdles, and also ensuring consistency of policies at all levels. With this in view Korean government established Financial Restructuring Unit, a special task force within the financial supervisory authority.

Another important aspect of crisis resolution was to realistically recognize actual and potential bank losses. Unless losses are recognized, all other measures would be ineffective and insufficient. A proper recognition of losses had two problems:

102 Id. At 15
103 Id.
104 Id. at 16 and 17
1. Valuation of assets and liabilities at market prices in distressed times.

2. Unavailability of information on financial situation of banks if domestic and international accounting standards are different.

This is also difficult because actual losses will determine which banks are viable to restructure and on which efforts are worthless. Korean government understanding this came out with certain criteria like: 105

1. All the institutions not meeting the minimum capital adequacy ratio of 8% at the end of 1997 were identified as potentially non-viable.

2. These potential viable institutions had to submit a rehabilitation plan.

3. For finding financial conditions, government hired recognized accounting firms to conduct a diagnostic review of each of the ailing banks using international standards.

4. To evaluate the rehabilitation plans, an independent Appraisal Committee was established.

5. Based on the recommendations of appraisal committee, FSC will determine which banks are viable.

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105 Id at 17
On June 1998, FSC announced that five small and midsized banks are not viable and their assets and liabilities would be transferred to five stronger banks.\textsuperscript{106} The other seven troubled banks were given conditional approval and requested to submit revised plans.\textsuperscript{107}

After determining which banks are viable and which are weak but viable and could be restructured, the next important step was the treatment with bad assets i.e. how and under what conditions bad assets be removed from banks, extent of losses which shareholders had to assume, how much government resources be allocated etc.\textsuperscript{108} In this direction and to prevent further deterioration, government started buying back all NPL’s and transferring them to separate entity. These entities purchased NPL’s at a predetermined price, thereafter, these entities were responsible for collection, managing or selling the NPL’s. In Korea all these NPL’s were purchased by Korea Asset Management Corporation (KAMCO). Before September 1998, all NPL’s were bought by KAMCO at 55% of their face value while after 1998, KAMCO modified this system and started buying all secured loans at the rate of 45% of their face value and all unsecured loans were bought at 3% of their face value.\textsuperscript{109} Thus instead of banks,

\begin{flushleft}
\textsuperscript{106} Id. at 18  \\
\textsuperscript{107} Id.  \\
\textsuperscript{108} Id. at 19  \\
\textsuperscript{109} Id. at 20.
\end{flushleft}
loss or gain is shifted to KAMCO. Another important measure taken by Korean government to restore investor confidence was by injecting public funds for recapitalization of banks. The amount of around 64 trillion won ($54 billion) was injected in banks.\textsuperscript{110} Korean government understood that recapitalization does not have significant impact unless borrowers regain the capacity to pay off the loans. For this, government came out with debt restructuring programs like court liquidation of non-viable corporations, voluntary top five chaebol restructuring programs etc.\textsuperscript{111}

Apart from these it was imperative to identify and eliminate weaknesses in the legal and regulatory framework that prevent prudent and efficient management of financial services industry.\textsuperscript{112} Thus better standards of prudential regulation were established, better accounting and disclosure practices were adopted, and exit mechanisms were devised for non viable institutions and strict sanctions for fraudulent financial practices.\textsuperscript{113}

With prompt reformatory measures and aid by international organization like IMF, South Korean government was quite effective in reforming the economy at an unusual fast pace after

\textsuperscript{110} Id. at 22
\textsuperscript{111} Id. at 25
\textsuperscript{112} Id. at 26
\textsuperscript{113} Id.
the crisis. All the measures taken by Korean government were right in time and properly implemented. The fast recovery of Korea could be attributed to some international events also. In 1998, crisis started infecting Russia and other South American economies and lastly advanced countries like US. E.g. US government intervened to save the collapse of one of the biggest hedge fund, Long Term Capital Management.\footnote{Id. at 6.} As the crisis spreading globally without control, the Federal Reserve Bank of the United States responded by lowering the interest rates.\footnote{Id.} Other countries followed suit. This resulted in the stabilization of exchange rate in Korea and by the end of 1999 won stabilized at 1100 won per dollar, market interest rates decreased to less than 10% and stock index surged past 1000 in the middle of 1999.\footnote{Id. at 7} Korean government announced that it will repay the IMF assistance ahead of schedule and there is no need of further assistance.

**Conclusion:**

Amid financial crisis, South Korean government had to take measures to uplift economic growth. South Korean government appealed IMF which granted massive bail-out package. Before
One of the primary reasons for South Korean sustained growth was export-oriented policies and investment growth, which was financed largely by private savings and foreign borrowings. The financial sector of South Korea was inefficient to handle huge foreign investments and deteriorated further with the deregulation of the banking sector in 1993; funds were directed to unproductive projects leading to the loss of investor confidence, higher cost of borrowing and finally bankruptcies of some firms. This led to the rapid outflow of short term capital and a sudden depreciation of currencies which further aggravated the situation. Crisis in South Korea could be attributed to inherent deficiencies of the system. Reasons like unchecked investment drive undertaken by conglomerates in Korea financed by huge borrowings by domestic banks which were in turn financed by external borrowings. Anti bankruptcy agreements, lending boom, increase in short term external liabilities, increase in NPL’s were some of the other reasons.

Despite the fact that hedge funds had large and concentrated positions in 1997 but there were several other players in the market which were acting as opposing forces. According to a research reported in Social Sciences Research Network,¹¹⁷ “We test the hypothesis that hedge funds were responsible for the crash in the Asian currencies in late 1997.

To do so, we develop estimates of the changing positions of the largest ten currency funds in one currency, the Malaysian ringgit and to a basket of Asian currencies. Our methodology is adapted from the Sharpe’s (1992) style analysis approach that decomposes fund returns. We find that the net long or short positions in the ringgit or its correlates did fluctuate dramatically over the last four years. However, these fluctuations were not associated with moves in the exchange rate. The estimated net positions of the major funds were not unusual during the crash period, nor were the profits of the funds during the crisis. In sum, we find no empirical evidence to support the hypothesis that George Soros, or any other hedge fund manager was responsible for the crisis.” This research seems to provide additional insight into the role of hedge funds in crisis because of its objectivity and statistical approach.

All the measures undertaken by Korean government were primarily related to improvement of economic system. Perhaps even if Korean government may have contemplated regulating hedge funds but policy makers emphasized and adopted all measures that will ultimately help in strengthening of financial system, so that Korean economy could sustain such crisis situation more efficiently. Thus, hedge funds do not seem to have played a
substantial role in crisis; however they may be one of the many causes.