

PEGGING, SPECULATORS, AND THE ASIAN CURRENCY CRISIS OF 1997

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Abstract

Stability of an exchange rate can be achieved through a variety of currency policy regimes. While a currency peg can be beneficial to many developing economies, a poorly managed peg can have negative effects on the exchange rate. During late 1997, a currency crisis began to spread through several Asian countries and has become one of the most effective examples of the perils of poorly managed exchange rate regimes. This crisis will be examined in depth to provide and insight into its causes, the way it was handled by each nation involved, and its effects. This will provide a better understanding of the importance of understanding and effectively managing a pegged exchange rate.

Introduction

The goal of this paper is to examine the economic impact that exchange rate regime and monetary policy decisions have had on the countries that implemented them. More specifically, this paper will focus on the Asian currency crisis of 1997 to provide examples that illustrate the importance of a country's exchange rate regime. Monetary Policy is the main driver in the issue of exchange rate regime choice. A country can make claims about their regime choice but in order to enact and maintain an exchange rate regime, monetary policy must be used. Therefore, it is vital that one understands what monetary policy is. Per the International Monetary Fund, monetary policy is defined as "adjusting the supply of money in the economy to achieve some combination of inflation and output stabilization." (Mathai, 2009). Sometimes exchange rate regimes choice is referred to as currency policy, but this is just referring to one aspect of monetary policy and is not a separate concept. The term exchange rate regime is defined as the amount of influence a country has on the exchange rate of its currency. For example, some countries may choose to peg their currency to fix their exchange rate to that of a more stable currency, while others may choose to let the value float freely. The maintenance of certain exchange rate regimes relies on altering the money supply (which is accomplished through monetary policy), rendering monetary policy and exchange rate/currency policy are deeply interdependent. The term money supply is referring to the amount of currency that is in circulation that is not in the hands of government entities. To alter the money supply, a central bank or other regulatory authority usually accomplishes this by the repurchase of short-term debt such as U.S. Treasury Bills which forces banks to add cash to the accounts to meet maintenance requirements, and visa-versa (Mathai, 2009). To illustrate the concept more clearly, let's say inflation is on the rise and the government want to slow the rise of prices. To do this, the

government needs to decrease economic activity so prices will fall, which can be accomplished by selling debt obligations because these sales reduce the money supply and subsequently increase the cost to borrow money. When the cost to borrow goes up, people are going to be less likely to spend, which slows inflation.

One way for countries to enact monetary policy is to implement a currency peg. To provide stability to the value of their currency, many smaller/developing economies will “peg” the value of their currency to that of a larger, more stable country (one of the most popular being the U.S. dollar), referred to as the “anchor currency.” There are various types of pegs, some involving multiple anchor currencies, referred to as a basket, but the general idea is the same; adjust the money supply to maintain the proportional relationship between the value of the currency in question and the anchor currency chosen. In the past, the cause of currency crises was thought to be an “inconsistency between domestic policies – typically money-financed budget deficits – and the attempt to maintain a fixed exchange rate,” referred to as the canonical currency crisis model or first generation model (Rogoff, Krugman, Fischer, McDonough, 1999). This model has value, but it fails to capitalize on all data available. Research has indicated that fixed exchange rate regimes like a peg increase a nation’s risk of being subject to a currency crisis. Taro Esaka found that the most important part of an exchange rate regime when it came to avoiding a currency crisis was the stay true to declared policies; even if that policy was a peg, the consistency between policy and action lends credibility to the nation’s currency and reduces the likelihood of a speculative attack (Esaka, 2014). Research has shown that the classification of exchange rate regimes done by the IMF is frequently inaccurate due in part to its reliance on data given to the by the countries in question, but does little investigation of its own (Reinhart, 2002). So, a nation could provide inaccurate or incomplete data or just plain lie about their exchange

rate regime to give their currency credibility when in fact their actions are quite different. Due to this inconsistency between stated and real exchange rate regimes and the risk associated with that relationship, implementing a peg as a long-term solution frequently ends poorly for a nation's economy. A good example of this effect can be seen in the collapse of the Argentinian economy. In the late 1990's the fixed exchange rate regime that was being used by the Argentinian government caused the peso to be vulnerable to external shocks and speculative attacks and the depletion of foreign currency reserves in an attempt to combat such attacks left them unable to control inflation (Manning, 2003). The currency peg works better when used as a short-term strategy to add stability to the value of a currency since the long-term risk of a currency crisis is too great.

Literature Review

Traditional wisdom would have you believe that countries implementing a currency peg are more prone to a crisis due to their increased likelihood of being subject to a currency attack. Taro Esaka explains that this is not the case. According to Esaka, countries that declare, and implement a consistent peg reduce the likelihood of being subject to a speculative attack. This is due to the increased credibility of their currency that results from their execution of the declared strategy (Esaka, 2014). Carmen Reinhart and Kenneth Rogoff discuss variations between actual and stated exchange rate regimes. In their working paper, Reinhart and Rogoff critically examine the International Monetary Fund's country classification system and finds it to be woefully inadequate in the modern international economic climate (Reinhart, 2002). The ideas set forth in their working paper are relevant to the research on the perceived vulnerability of pegged currencies done by Esaka since Esaka draws heavily on the ideas set forth in Reinhart and Rogoff's paper. Reinhart and Rogoff found that the IMF relies heavily on the economic data given to them but does not look critically at the actual behavior of a country's regulatory bodies, so a country could say it is adopting a currency board to give the perception of stability but in reality, they are using a managed float (Reinhart Rogoff, 2002). The findings lead-the authors to create a new and more accurate classification system for exchange rate regimes. Their research has important implications because this reimagining of the classification system could lead to a better understanding of exchange rate regimes and how they work for or against a country's economy. John Macbeth did some research relating to this subject, specifically on whether countries should adopt a peg or not. Macbeth's article from a 1998 issue of the Far East Economic Review came right on the heels of the Asian currency crisis and drew heavily on that

event. Macbeth (1998) claims that much of the hardship facing these economies was directly related to poor decisions as far as currency policy goes; countries like Indonesia were plagued by governments that were unwilling to stray from the status quo regarding their current policy and that lack of interest in updating monetary policy to keep with changing times lead to the massive devaluation of the currency of many Asian nations. Macbeth's research is closely related to the research done by Reinhart and Rogoff. Macbeth (1998) references Milton Friedman, who is a known supporter of floating rates, who apparently recommends currency boards/unified currencies for most developed nations. Friedman's theory only works, however, if the country effectively has no central bank because a central bank interferes with the value of currency too much for the peg to be effective (Macbeth, 1998). Research has shown that the reason for this interference is most often to keep the value of a country's currency low enough to be competitive in the export market since many developing countries generate a large portion of their GDP from exports (Coudert, Couharde, Mignon, 2013).

Research has also been done on anchor currency choice for countries that choose to adopt a currency peg. Christopher Meissner and Neinke Oomes wrote a very insightful article for the Journal of International Money and Finance titled "Why do countries peg the way they peg? The determinants of anchor currency choice." that takes an in-depth look at this topic in particular (~~It is interesting to note~~ that Meissner and Oomes use the Reinhart-Rogoff classification method in their research since it is much more accurate). Meissner and Oomes (2009) found that size is a key determinant for whether or not a country chooses to apply a peg (larger countries are less likely to use one) and that countries can be forced to adopt a peg that is suboptimal due to the currency choice of the neighboring countries and frequent trade partner. This relationship makes sense since a country's optimal anchor currency choice is more closely related to trade than to

geographic proximity (Meissner, Oomes, 2009). In the wake of any crisis, people attempt to identify the cause and determine how to detect it in the future, the same being true in the case of the Asian currency crisis. Fang Dong wrote a dissertation in 2002 analyzing leading indicators that show a country to be at risk of a currency crisis. Dong (2002) concluded that there are detectable leading indicators of crisis risk and they are closely related to economic uncertainty, regime changes, and weak financial systems. These factors make a country the prime target for speculative attacks (Dong, 2002). Dong's findings make sense given the other research that has been done on the subject. His research lead me into the research done by Robert P. Flood and Nancy P. Marion about speculative attacks. Flood and Marion (1996). Their research was done before the Asian currency crisis so Flood and Marion (1996) draw heavily on experiences from the Mexican peso crisis of 1994 and the European currency crises of 1992-93. Speculative attacks are very dangerous to struggling economies and can cause the collapse of a nation's financial system if timed right. Flood and Marion (1996) found that governments that adopt a fixed exchange rate system but the implement policies inconsistent with that long-term goal they become vulnerable to speculative attacks. They also found that the creation of multiple equilibria is a major risk factor (Flood, Marion, 1996). Multiple Equilibria and the third currency phenomenon was examined in more depth by Ramkishan Rajan and Graham Bird in 2002. Bird and Rajan (2002) advocated for a system where the currency is pegged to an optimal "basket" of currencies instead of one particular one such as the U.S. dollar. Bird and Rajan (2002) also support the idea that smaller, developing nations should only implement systems at the ends of the spectrum like a currency peg or a floating rate, since "middle of the road" strategies were part of the reason for the currency crisis in Asia in 1997. They acknowledge the risk associated with

total flexibility of exchange rates in developing countries and advocate for a wide band and gradually altered peg levels (Bird, Rajan, 2002).

Several studies have been done just to analyze the Asian currency crisis and its causes. Kim Hoon wrote a dissertation titled: “Interpreting the Asian currency crisis: an empirical analysis and prediction.” In it, Hoon (2002) examines the two accepted causes of the crisis: weak economic fundamentals and financial panic. Although evidence supports both cases, the author is inconclusive as far as which case was more important, finding that the fundamentals of many Asian economies had indeed deteriorated but they may not have deteriorated far enough to make the crisis inevitable (Hoon, 2002). Hoon’s findings are important because they support the theory that financial panic is a main cause of currency crisis (Hoon, 2002). Eric Chiu also wrote a dissertation on the causes of the Asian currency crisis of 1997. In it, Chiu (2006) contradicts research done in the past and claims that various types of exchange rate regimes can be viable (even intermediate ones, which are traditionally accepted as too volatile for developing economies). The author draws on the classification methods of Reinhart to more accurately understand the crisis and looks at a variety of contributing factors outside of monetary policy such as political environment and public perception (Chiu, 2006). Chiu (2006) found that political factors play a large role not just leading up to a crisis, but in the way a country handles one. One of the biggest surprise crises in history (coming right on the heels of what had become known as the “east Asian miracle” referring to the exponential growth of east Asian economies), the Asian currency crisis and its causes were examined in depth in “Ten Years After: Revisiting the Asian Financial Crisis”, a series of essays by international scholars edited by Bhumika Muchhala in 2007. This collection provides a variety of inputs and opinions on the crisis and the recovery/economic strengthening process in the subsequent ten years.

When discussing the Asian Currency Crisis of 1997 it is important to understand the specific countries that were involved since the crisis was not pan-Asian and some background information about these countries. The crisis was mostly centered in southeast Asia, involving most of the ASEAN nations. The countries that will be detailed in this paper are Thailand, Indonesia, the Philippines, South Korea, and Malaysia.

Countries Involved: Pre-Crisis

Malaysia has a long history of pegging its currency, the ringgit, to a variety of currencies. The ringgit was pegged to the Pound Sterling in 1957 until the collapse of the Sterling area in 1972, at which point the Ringgit was pegged to the U.S. dollar (Umezaki, 2006). The Dollar was a likely choice for a developing nation looking to achieve a measure of stability for the value of its currency, especially if the Malaysian government was looking to be competitive in the U.S. import market. This arrangement was fleeting, and the Ringgit was allowed to float in 1973 until it was pegged once more to a basket of currencies in September of 1975 (Umezaki, 2006). This basket arrangement developed over time into a de-facto peg against the Singapore Dollar, which lasted until the early 1980's (Umezaki, 2006). Malaysia is one of the only nations affected by the Asian currency crisis of 1997 that did not have an explicit U.S. Dollar peg. The ringgit was subject to a managed float up until 1997, but a lack of volatility in the exchange rate versus the U.S. dollar while volatility against other nations increased suggests a de-facto U.S. Dollar peg (Umezaki, 2006). This de-facto pegging practice is notable when one recalls Taro Esaka's findings on the risks associated with countries declaring one exchange rate policy but effectively implementing another.

South Korea was not initially predicted to be affected by the Asian Currency crisis of 1997. Certain earmarks that were present in other victims of the crisis were not visible in the

South Korean economy. Unlike many of its counterparts, average annual growth remained one of the highest of all developing nations in the years leading up to the crisis and inflation remained modest (Kihwan, 2006). While these indicators may have been warning signs for other countries, the indicators don't tell the whole story in South Korea. South Korea was a fast growing developing country that earned a large portion of its GDP from trade during the 1970's-1990's. South Korea's growth was not built on a solid foundation; "the accounting and disclosure procedures expected of financial institutions were below international best practices" according to Kim Kihwan in a presentation to the IMF in 2006. South Korea's outdated accounting and disclosure procedures left them vulnerable to a crisis by allowing irresponsible lending and borrowing practices. The South Korean Won was not pegged to the dollar, but was subject to a managed float that was heavily influenced by the U.S. Dollar (Kihwan, 2006). One of the only nations involved in the Asian currency crisis of 1997 who's currency was not pegged to the U.S. Dollar, South Korea's Won still possessed a value connection to the Dollar that contributed to its involvement in the crisis. South Korea was dependent on remaining competitive with its neighbors in trade, but as the value of the U.S. Dollar grew (and subsequently the Won) and the Japanese Yen weakened, the trade deficit between South Korea and Japan, among others, grew (Kihwan, 2006). The trade deficit, the poor financial practices of the South Korean banking sector, and the global slowing of market growth in the late 1990's laid the groundwork for South Korea to be swept up in the Asian currency crisis of 1997.

Thailand was one of the five countries that earned the name, the "Asian Tigers" during the 1990's for its impressive economic growth. A lot of this growth was due to the attractiveness of its low-cost labor force for use in foreign direct investment projects to produce exports (Lai, 2000). This was consistent with many of the nations affected by the Asian currency crisis of

1997; their economic growth was largely due to their attractiveness on the export market. The years leading up to the crisis were very good for Thailand; from 1987 to 1995 the country saw economic growth reach almost 10% per year (Fischer, 1998). Thailand's growth was not to last, and it was the first nation to show signs of a crisis. The aggressive growth led to excessive spending and relaxed lending practices in Thailand, laying the groundwork for problems (Lai, 2000). As with many of the other Asian crisis players, many of the loans were denominated in U.S. Dollar to capitalize on lower interest rates and the weak exchange rate (Lai, 2000). This would become a serious problem as soon as the U.S. Dollar regained its potency, even though the Thai Baht was pegged to the U.S. Dollar. As the value of the U.S. Dollar grew in the mid-1990's, so did the value of the Thai Baht and Thailand's exports became less attractive, creating a trade deficit (Sussangkarn, 1998). Thailand would have to make a choice between the value of their currency and the solvency of foreign currency denominated debt.

The Philippines was the most unimpressive of its neighbors in the years leading up to the crisis when it came to economic growth, earning it the derisive nickname "the sick man of Asia" (Noland, 2000). The Philippines had been experiencing growth since 1992, when the financial market was liberalized (in a similar fashion to its neighbors), resulting in a higher exchange rate (Noland, 2000). As with the other southeast Asian nations, the Philippines was heavily dependent on its competitiveness in the export market and a higher exchange rate was not conducive to that. To combat this, the Philippine central bank relaxed capital outflow restrictions and took sterilization actions to moderate the rise in the value of their currency in the years leading up to the crisis (Noland, 2000). These actions would have unforeseen consequences that would result in the Philippines being swept up in the Asian currency crisis of 1997 despite its apparent stability.

Indonesia may not have been the largest country involved in the currency crisis of 1997, but it was one of the hardest hit, with negative effects persisting for many years to come. This surprised many experts since Indonesia had been such a strong economy in the years prior. GDP per capita grew 6.6% on average every year from 1965-1995 (Kartasasmita, n.d.). This growth was due to the same factors as its neighbors, globalization and the subsequent increase in trade and foreign investment. In the 1980's, Indonesia made attempts to strengthen its manufacturing sector to reduce its reliance on oil income. The government accomplished this through an updated tax system, deregulation of trade and foreign direct investment, and trade liberalization (Kartasasmita, n.d.). These efforts were successful at first, allowing Indonesia to expand its share in the export market and drag its population out of poverty. From 1985-1995 non-oil exports grew about 22% annually, which was four times faster than the growth of world trade, and the poverty line fell from 40% in 1976 to 11.5% in 1996 (Kartasasmita, n.d.). Although the increase in exports and foreign investment was very beneficial at the time, the growth was not sustainable with a currency band on the U.S. Dollar because, as with several of the other ASEAN nations involved in the crisis, Indonesia's competitiveness in the export market was dependent on a competitive exchange rate and the value of the dollar rising makes that impossible.

Countries Involved: During the Crisis

Thailand's economic conditions had been weakening throughout the 1990's, coming to a head in late 1996 (Kim, 2002). Thailand is considered by most to be the country where the Asian Currency Crisis of 1997 began. Thailand had previously been considered a "model developing economy", averaging over 8% real GDP growth since the late 1980's (Asian Currency Crisis 1997-1998, n.d.). This notion collapsed in 1996 when it was discovered that Thailand's national banking

system was fraught with problems such as fraudulent lending and high default rates (Asian Currency Crisis 1997-1998, n.d.). The real GDP growth rate slowed and short-term debt rose to 106.95 percent of foreign reserves after it was used to finance increasing deficits (Kim, 2002). This overexposure of foreign reserves left Thailand vulnerable to a speculative attack. As the value of the U.S. Dollar increased, the trade deficit in Thailand grew, prompting the government to abandon the U.S. Dollar peg (Sussangkarn, 1998). This created a debt crisis when a large number of Dollar denominated loans were unable to be paid by the holders, due to the relative increase in value versus the Baht. As the economic indicators for Thailand began to show the Thai Baht to be overvalued, foreign investors began to abandon their investments held in the Baht and currency speculators flooded the market with the currency, exponentially devaluing it (Asian Currency Crisis 1997-1998, n.d.). This started the chain reaction that would spread to many other southeast-Asian nations in early 1997.

Indonesia was one of the nations known as the “Asian Tigers” for its aggressive and reliable economic growth; the IMF even lauded Indonesia for its “prudent macroeconomic policies, high investment and savings rates, and reforms to liberalize markets” (Asian Currency Crisis 1997-1998, n.d.). The growth seen in South Korea is not out of the ordinary since many of the nations wrapped up in the currency crisis received similar kudos and were known for their impressive growth, which was one of the reasons the crisis was able to strike with such devastating effect. Indonesia was put in a vulnerable position by risky borrowing and saving practices that placed an excess of confidence in the strength of the Indonesian Rupiah (Asian Currency Crisis 1997-1998, n.d.). Indonesia was a popular destination for foreign investment due to its strong GDP growth and high interest rates, the value of the Rupiah being pegged to the U.S. Dollar and held within a band of 2 percent (Kim, 2002). Despite attempts by the central bank to slow inflation, the value of the

Rupiah continued to decrease and foreign debt grew. The currency band was widened from 2 percent to 8 percent by the end of 1996 and high interest rates failed to attract enough foreign investment to balance the countries rising foreign debt (Kim, 2002). The weight of foreign debt continued to increase as the value of the Rupiah dropped and in August of 1997 the government announced the abandonment of the peg and the Rupiah was allowed to float, causing an even more precipitous drop (Asian Currency Crisis 1997-1998, n.d.). Despite being one of the largest countries in the world and one of the more promising developing Asian nations, lack of hedging and a poorly managed peg crippled Indonesia.

The Philippines did not show some of the obvious signs of vulnerability to a currency crisis and speculative attacks that were visible in other southeast-Asian nations. GDP growth in the Philippines was reliably good but not as aggressive as some of its neighbors (Kim, 2002). The danger for the Philippines lay in growing current account deficits, which are frequently a precursor to speculative attack (Kim, 2002). It is likely that although the Philippines was not as vulnerable to a crisis as the other ASEAN nations, contagion effects coupled with the deflationary pressure from current account imbalances lead to its inclusion in the Asian Currency Crisis of 1997. The currency of the Philippines also experienced real appreciation against the dollar in the years leading up to 1997 which lead to a decrease in competitiveness in the export market, an imbalance of investment and trade growth, and subsequent deflation (Kim, 2002). Though risk factors were present in the Philippines, the contagion effect of currency crises was apparent and will be examined later in this paper.

South Korea is well known for its close military and economic relationship with the United States. As with the other Asian Tigers, South Korea's economic growth brought a reduction in competitiveness on the export market and a subsequent reduction in export growth (Kim, 2002).

Nations like china have been known to purposefully devalue their currency to remain competitive internationally in the export market so it is not uncommon to see increased trade volume result in decreased competitiveness. Unable to remain competitive, several major South Korean firms such as Kia and Hanbo Steel went bankrupt, further contributing to the national deficit (Kim, 2002). In 1997, as the value of the U.S. Dollar increased, so did the Won since the South Korean government had pegged its value to the Dollar. This increase caused the Won to become significantly overvalued and prompted large scale selling of the Won, heavily devaluing the currency (Black, T., & Black, S., 1999). Reminiscent of the United States housing bubble that burst in 2008, The lending practices of the South Korean Banking system were outdated and unable to appropriately manage the corporate conglomerates that dominated the South Korean economy. Large amounts of U.S. dollar denominated debt exacerbated the crisis as the Won's value dropped and interest payments on said debt grew exponentially harder to pay (Asian Currency Crisis 1997-1998, n.d.). The government waited far too long to abandon the South Korean Dollar peg but, despite IMF assistance and suspension of currency trading for days at a time, the Won was allowed to float in December of 1997 (Black, T., & Black, S., 1999). With the government's announcement of the float came the drastic reduction in the value of the Won as seen in the other countries involved in the crisis of 1997.

While the Malaysian Ringgit was involved in the Asian currency crisis of 1997, the Malaysian banking system was not as vulnerable as its counterparts in one important aspect: the central bank had to approve any foreign loans made by local companies, allowing them to ensure that the loans would generate value in foreign exchange (Khor, 2005). Despite this advantage, the Malaysia had very large current account deficits (Kim, 2002). These deficits (which were also apparent in most of the other nations involved in the crisis) left the ringgit vulnerable to speculative

attack should foreign investors lose confidence in the currency. This is exactly what happened as the high interest rates cause companies to default on loans and banks to close without guarantees of loan repayment (Khor, 2005). The financial crisis grew into a full-blown recession as the government failed to effectively handle the situation. Large-scale selling of foreign and local capital by both foreign investors and speculators continued to devalue the ringgit and on July 14, 1997, the Government abandoned its defense of the currency (Kim, 2002). Malaysia is important to the understanding of the Asian currency crisis of 1997 because its involvement was most notably due to contagion effects of the economic struggles of its neighbors.

Countries Involved: Post-Crisis

After South Korea suffered from the instability of its financial system during the Asian Currency crisis of 1997, the South Korean government was left to decide how to repair their damaged system. During and immediately after the crisis, South Korea requested a bailout from the IMF. This bailout was granted, but a large portion of the funds provided was withheld pending the lack of success with the first disbursement (Kihwan, 2006). This initial round of funds was judged by foreign creditors to be inadequate and confidence in the Won remained very low. This prompted the U.S. to push the IMF to re-evaluate the payment schedule and move for the restructuring of large amounts of short-term debt obligations (Kihwan, 2006). This proved to be much more beneficial, allowing the Won to stabilize and even make up some lost value. The leaks had been plugged, but the ship was still full of water, so the government took several actions to promote long-term recovery. Firstly, legislation was introduced to strengthen and update financial regulatory infrastructure, including the establishment of a Financial Supervisory Commission to enforce these regulations (Kihwan, 2006). This would prove a crucial move to the modernization of the South Korean economy. The South Korean government also began to

work on rehabilitating financial institutions left in ruin after poor quality assets, bad debt, and bankruptcy of major Korean corporations lead to the crisis (Kihwan, 2006). Another asset of rehabilitation that also played a part in the beginning of the crisis was the liberalization of the financial system. Incomplete efforts at capital account liberalization played a role in the cause of the crisis but more concrete actions such as the free floating of the exchange rate and the removing of regulations on mergers and acquisitions by foreigners allowed the Won to build strength on its own without being propped up by a peg (Kihwan, 2006). The road to recovery has been long, with South Korean growth still struggling to return to pre-crisis levels.

The severity of the Asian Currency crisis of 1997 in Indonesia has been stated several times to this point. Not only was Indonesia crushed by the financial crisis, but severe storms destroyed food crops nationwide, contributing to the rising inflation (Kartasasmita, n.d.). because of the catastrophic effects of the crisis, Indonesia's response was not as well organized as South Korea's. The President stepped down in 1998 leaving the process to his Vice President, Habibie, who began to introduce regulations to strengthen the financial system and outlaw harmful business practices (Kartasasmita, n.d.). as with the other Asian crisis nations, the regulatory system was not updated to handle the growth caused by the liberalization of the financial system, so the introduction of these regulations was a very important step. The corrupt political process in Indonesia was also tackled by the new president, allowing the "crony capitalism" that encouraged unethical business practices and contributed to the crisis to be reduced (Kartasasmita, n.d.). As noted in the literature review, this lack of synchronization between globalization and regulation made the Dollar peg placed on the Rupiah a time bomb. When it blew, the peg/floating band system that Indonesia had been using was replaced by a floating exchange rate. This regime change left the value of the Rupiah vulnerable to fluctuations but

ensured that its real and nominal value would be closer that they were under the peg (Berg, 1999). Indonesia had the largest reduction in their exchange rate compared to all other crisis nations and the road to recovery was long. Indonesia took similar measures to its neighbors to slow the fall of the Rupiah such as increasing interest rates and accepting aid from the IMF to help reduce the deficit (Berg, 1999). Overall, Indonesia had years of work to do to get its financial system up to date to deal with the capital inflows stemming from globalization, a process slowed by political and social unrest.

Malaysia did not respond to the crisis in quite the same way its neighbors did. Along with Indonesia, South Korea, and Thailand, Malaysia accepted monetary assistance from the IMF. This assistance was conditional, requiring Malaysia to implement the traditional measures in response to the crisis, such as contractionary monetary policy, floating the exchange rate, continued liberalization of capital accounts, and reduction or elimination of state subsidies, etc. (Khor, 2005). Several of the other crisis nations took the same measures, not surprising since they were also seeking assistance from the IMF. Attempts to curb the crisis in Malaysia only made things worse. Many of the policies implemented at the insistence of the IMF caused the financial crisis to progress into an economic crisis (Khor, 2005). After the IMF's solutions failed to provide relief to the Malaysian Ringgit, the Malaysian government began to develop its own plan to combat the Asian currency crisis. Unlike the IMF package, the Malaysian solution involved fixing the Ringgit to the U.S. Dollar, strictly regulating foreign exchange and trade of the Ringgit (going so far as to render the offshore Ringgit invalid), and implementing expansionary monetary policy; exactly the opposite in many ways (Khor, 2005). The logic behind this decision was explained very well by the Prime Minister of Malaysia at the time, Dr. Mahathir Mohamad:

“But the market is now abused by currency traders who regard currencies as commodities which they trade in. They buy and sell currencies according to their own system and make profits from it but they cause poverty and damage to whole nations. That is very regressive and the world is not moving ahead but backward.”

He is specifically describing the harmful effect that currency speculators have on the financial systems of many nations, a phenomenon which will be discussed in more detail later. Malaysia began to enact these new measures that included actions like reducing interest rates and even a fiscal stimulus package (Khor, 2005). The new fixed exchange rate began to work stabilizing the value of the Ringgit. Currency “black markets” were discussed in the literature review of this paper as a possible side effect of a fixed exchange rate system but this phenomenon has not come to fruition yet, and the exchange rate of the Ringgit remains 3.80 to 1 USD (Khor, 2005). The Prime Minister described the importance of the fixed exchange rate system as a means to “cut the link between interest rates and the exchange rate” meaning it allowed the Malaysian government to take the actions necessary to protect its economy without facing exchange rate backlash from investors’ loss of confidence (Khor, 2005). The Malaysian approach to the Asian currency crisis of 1997 was very different than most of its neighbors but it worked very well, comparatively. It is proof that the IMF’s standard crisis response package is not always the best option for developing countries.

Almost as severely affected by the Asian currency crisis of 1997 as Indonesia, Thailand took a more traditional approach to the crisis than Malaysia. As the exchange rate of the Baht fell and the relative value of foreign debt obligations grew, investors began to flee the market in the same way they did in the other countries affected. To combat this, Thailand accepted assistance from the IMF to expand currency reserves and prevent debt defaults (Berg, 1999). This was

marginally beneficial, but the package provided was not large enough to meet obligations since Thailand's reserves were so depleted. Thailand's reserves had been drained trying to fend off a speculative attack during the crisis, an effort which was ultimately futile and the Baht was floated when the ratio of foreign reserves to foreign short-term debt obligations became unmanageable (Sussangkarn, 1998). Without the predation of speculators, Thailand may have been able to retain enough reserves to ride out the crisis in a more stable position. Fortunately for Thailand, many of the banks holding the short-term debt in Thailand were willing to maintain their exposure and not force restructuring (like we saw in South Korea), which kept the default rate comparatively low (Berg, 1999). Monetary support was not the only response to the crisis in Thailand; reforms to the financial sector and regulatory environment were also undertaken. The Thai government closed many insolvent banking institutions and worked to get private capital to support others (Berg, 1999). It is important to note that the Thai government was not using state money but attempting to bail out banks with private capital, a safer bet for the federal reserves but not a speedy process. As with the other countries following the IMF program, Thailand significantly raised its interest rates (Berg, 1999). In contrast with Malaysia, Thailand retained open capital accounts but continued to make attempts to reduce capital inflows (Sussangkarn, 1998). Thailand weathered the crisis without total collapse but its response was not ideal since it was one of the most severely affected.

Last but certainly not least comes the “sick man of Asian”, the unimpressive ASEAN nation that fared surprisingly well during the Asian currency crisis of 1997. One reason for the Philippines relative lack of suffering during the crisis was the banking reforms undertaken in the 1980's, which created a more efficient financial system than that of its neighbors (Noland, 2000). Due to these reforms, the Philippines was already ahead of the game, so to speak, when referring

to financial modernization. Unlike other Asian crisis nations, the Philippines had a very large percentage of investment in tradable sectors which allowed them to take advantage of the drop in the real exchange rate and increase exports, generating hefty capital inflows to balance the current account deficit (Noland, 2000). The Philippines did not accept financial assistance from the IMF, which allowed them freedom to manage the crisis as they saw fit. Aggressive actions to stem the flow of the crisis were not necessary for the Philippines due to the relative stability of the economy compared to its neighbors.

Discussion

After examining the breakdown of the Asian currency crisis in 1997 going back to the root causes and years leading up to it as well as the response by each individual nation it is obvious that there are several common threads; pegged exchange rates and speculative attack. All the countries involved in the crisis had an exchange rate pegged to the Dollar, whether it was a de facto peg, a fixed rate, a dirty peg, or a managed band, the effect was the same: a close tie to the value of the U.S. Dollar. This system of pegging the exchange rate to the dollar worked very well for these nations for many years, especially during the 1980's, a time when the Asian tigers were growing exponentially and becoming major players in global trade. Having the value of their currency insured by the connection with the U.S. Dollar gave these nations credibility to investors who were more inclined to contribute their capital because of the stability that it conveyed. For a while this tactic worked quite well and the Asian tigers saw unprecedented growth. This growth should have brought new, reformed financial systems in these countries to effectively manage the capital inflows but this did not happen, save for the Philippines. As noted, the Philippines had undertaken many reforms prior to the crisis of 1997 and this undoubtedly helped them weather a large portion of it.

The main danger to developing nations when it comes to maintaining a pegged exchange rate is the growth of incongruence between the nominal and real exchange rates. This creates what is referred to as a "black market" for the currency since it is assessed to be overvalued on the regular market. This difference in the real and nominal rates can be caused by several factors. One of the most common is poor anchor currency choice. Many countries choose an anchor currency because it is commonly recognized as a safe bet (the U.S. Dollar) or because of trade connections (Meissner and Oomes, 2009). This can lead to the adoption of a sub-optimal anchor currency that will cause the domestic currency to be incorrectly valued. The central bank will have to expend a lot of foreign reserves in attempts to maintain the peg to the sub-optimal currency. Another aspect of currency pegging which played a major role in the Asian currency crisis of 1997 is the inconsistency between stated and practiced regime when it came to currency policy. Many countries were claiming to be operating a peg to the U.S. dollar but in fact were using a managed band or were claiming not to be pegged to the dollar but were, in fact, using a "dirty" peg. This difference between stated and adopted regime choice is a major indicator of vulnerability to a speculative attack (Reinhart and Rogoff, 2002). Based on historical evidence, having a currency peg places a country at higher risk for a speculative attack even when managed properly, but this is not necessarily the case. Current research has shown that the main problem with enacting a currency peg is the lack of commitment to it and improper management of it, creating multiple equilibria and prompting a speculative attack (Esaka, 2014). If the countries involved in the crisis of 1997 had remained faithful to their stated regime choice and enacted a peg efficiently they would likely have been much less exposed to an attack and the effects of the crisis would have been much less severe. The main goal of a pegged exchange rate is to increase investor and consumer confidence by reducing inflation. When the Asian currency

crisis began in 1997, the nations involved did not have the reserves to defend the value of their currency for very long and quickly expended all of them in attempts to maintain the value of their currencies.

This brings us to speculative attacks. Speculative attacks are a danger facing developing nations and can bring a country to its knees. The basic premise behind a speculative attack is that speculators see a currency that they believe to be overvalued and see investors beginning to abandon that currency. Speculators will then buy debt denominated in the struggling currency and convert it to a stable currency, such as the U.S. Dollar. The goal is to make a profit when the debt is repaid since the currency will continue to devalue and the speculator will owe less money than they did initially since they will be able to buy more of the original currency with their U.S. Dollars. The problem with this practice is the effect that it has on the financial system of a nation in crisis. Speculators are the sharks of the global financial system; when they smell blood, the feeding frenzy starts and there is little hope for the victim. Most countries will try to combat speculators by buying their own currency using their foreign currency reserves but if their reserves are not large enough to last, then the result will be the same. This was the case in the Asian currency crisis of 1997; these nations had been operating largely outdated currency policy regimes and had expended a large portion of their foreign currency reserves trying to maintain said regimes. As the economic indicators and financial fundamentals of these nations began to show signs of crisis, speculators jumped at the opportunity to make a quick buck and there were not enough foreign reserves to mount a significant defense.

It is clear after examining the Asian currency crisis of 1997 that currency pegs, speculative attacks, and crisis are all intimately linked. There are several other factors that contributed to the crisis of 1997 but the most interesting to me is the relationship between these two factors. It is

fascinating to see how an effort to reduce inflation and stabilize a currency can end up laying the groundwork for its ultimate demise.

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