Causes of Currency Crises and Banking Crises

<u>Introduction</u>

Based on my readings, I have found that currency crises often accompanied by banking crises or banking crises preceded by currency crises or even has no significant relationship between the two. So, why are currency crises often accompanied by banking crises? In this paper, I will discuss on how such problem may occur based on historical perspective, in which the countries that have experienced *Twin Crises*. The next issue is the effectiveness and desirability of capital controls as a means by which developing countries can manage sudden capital inflows and/or outflows. This is where the credibility of capital controls are being challenged whether such restriction should be taken into a serious consideration for the policymakers to implement. It is important to analyse these economic situations due to past economic disasters in which the issues stated were significant in the 1994 Mexican peso crisis, 1997 Asian Financial crisis and the 1998 Russian financial crisis.

<u>Twin Crisis</u>

The simultaneous occurrence of currency crises and banking crises is known in economic term as *Twin Crises,* introduced by economists Carmen Reinhart and Graciela Kaminsky in the late 1990s. This phenomenon became a common problem in financially liberalized emerging market economies in the 1990s which started with the 1994 Mexican crisis, followed with the 1997 Asian financial crisis and the 1998 Russian financial crisis. Kaminsky and Reinhart (1999) did an extensive research on the relationship between financial and banking crises for 20 countries and over a 25-year sample and found that banking crises often precede currency crises. The mechanism basically relies on two features. Firstly, governments hold a fixed exchange rate system and secondly, a mismatch between domestic assets and foreign liabilities by domestic banks, thus, exposing to exchange rate risks(Goldstein, Itay 2005).

A currency crises, also known as the Balance of Payment crises,is a situation in which a nation is suffering from a chronic balance of payment deficit. This problem exists when a nation is unable to finance the imports and debt repayments. The country’s central bank would be in a doubtful position whether, given the fixed exchange rate, it has sufficient foreign exchange reserves to maintain the value of domestic currency. Government often intervenes by using the country’s own currency reserves or its foreign reserves to satisfy the excess demand for a given currency (Wikipedia, 2014). It came to a period when these emerging market economies were experiencing rapid economic growth, creating massive capital inflows, which will then lead to the crises.

A banking crises, however, is a financial crisis that affects banking activity which includes bank runs, banking panics and systemic banking crises, in which a country experiences a large number of defaults and financial institutions face difficulties repaying contracts. A bank run occurs when depositors believe that the bank may fail which led them to withdraw all of their deposits from that bank. This causes the banking system to be insolvent if it cannot pay its debts as they fall due. Insolvency can be defined as the inability to pay ones debts. Cash flow insolvency, or a 'lack of liquidity' may occur as well when the bank might end upowingmore than itowns or is owed (postivemoney.org, n.d).

Twin Crises started off when investors begin to lose their confidence as the massive capital inflow in the country creates uncertainty among investors in which the debt their capital is generating. The country's currency will be at stake as the resulting outflow of capitals created by investors as they withdraw all of their funds will devalue the affected nation's currency. Firms of the affected nation who have received the inbound investments and loans will suffer, as the earning of those firms is typically derived domestically but their debts are often denominated in a reserve currency (Kallianiotis, 2013). Once the nation has exhausted its foreign reserves trying to support the value of the domestic currency, government can raise its interest rates to try to prevent from further decline in the value of its currency. While this helps those with debts denominated in foreign currencies, it generally further depresses the local economy as high interest rate usually encourages saving and discourages investment.

Real-World Financial Crises

The 1997 Asian financial crisis was a period of financial crisis which affected many economies in the East Asia. It began in Thailand when they had accumulated a massive foreign debt. In the effort to support the value of baht, the government had no choice but to float the Thai baht due to insufficient of foreign currency reserves, reducing peg against the US dollar. Until 1999, economies in South East Asia enjoyed a prosperous period as they had received large inflow of money. High interest rates in emerging economies attracted many investors due to the fact that it may give a high return for the investors. As a result, price of assets in these countries began to rise at an alarming rate which created insecurity among investors. Lenders started to withdraw all of their funds at a large scale, creating credit crunch and bankruptcies. Furthermore, there was a depreciative pressure on their exchange rates as the supply of currencies of the crisis countries was high in the exchange market. Governments from these countries had to intervene in the exchange market. To prevent any loss in value of domestic currency, they had to raise domestic interest rates by buying up any surplus of the domestic currency.

The Mexican government's move to devalue the peso against the US dollar created an outburst which led to the Mexican peso crisis in 1994. In order to maintain in the value of peso, the Mexico's central bank allowed the peso to free float within a narrow band against the US dollar through an exchange rate peg (Wikipedia, 2014). Furthermore, the central bank would constantly intervene in the open market by purchasing or selling the pesos. The central bank's intervention involved issuing new short-term public debt instruments denominated in U.S. dollars, using the borrowed dollar capital to purchase pesos in the foreign exchange market, will cause an appreciation in its value. Since the peso is reckoned to be increasing in value, the high purchasing power by domestic businesses, firms and consumers created an incentive to purchase more imported goods, resulting in a large trade deficit. Speculations regarding the over-valuation of peso began to circulate which encouraged investors to purchase more of U.S assets. It will be more profitable for investors as they will be able to capitalize the high exchange rate when they exchange dollars for pesos later. The resulting capital outflow from Mexico to United States caused a capital flight which put a downward market pressure on the value of peso. To curb this issue, newly inaugurated President Ernesto Zedillo in 1994announced the Mexican central bank's devaluation of the peso between 13 and 15 percent. Due to the unpredictability of Mexican policymakers, investors felt insecure and afraid of further devaluations in the currency, putting an upward market pressure in the interest rates and a further downward pressure on the value of peso. Foreign investors began to rapidly withdraw their capital from Mexican investments due to possible devaluation of peso. As a result, the Mexican central bank had to raise the interest rates to prevent from capital flight.

Capital Flows

Capital flows is simply defined as the transaction of real and financial assets and it is recorded in the capital account. When a country has a deficit in the capital account, it means the country is experiencing a capital outflow, like Japan. The country is supposedly purchasing more assets or making more loans or both at the same time, thus accumulating net claims on other countries. It is a situation in which it is undesirable to the economy. Contrarily, if the country is having a surplus in the capital account, depicting capital inflows, it is said that other countries are accumulating claims on that particular country.

Capital flows provides many great economic advantages. Countries are now able to "catch-up" with the advancement of other countries by capitalizing on their differences. Capital flows enables residences of different nations to invest in other countries by engaging in inter-temporal trade, allowing them to reap benefits or profits for future consumption. Be it an economic boom or recession, optimum level of national consumption or expenditure is vital in every economy. Thus, capital flows helps to prevent from a fall in national consumption in case of an unexpected economic downturn, by selling domestic assets or borrowing from the rest of the world. Thus, overall improvement in economic performance can be achieved as it will aid substantially in terms of productivity and efficiency.

Free capital mobility may seem desirable, though, in reality it comes at a cost. Given the exchange rate, developing countries or emerging market economies tend to acquire more assets by purchasing a massive amount of goods and services than the rest of the world. This is due to several reasons. These countries may not be on par in terms of economic performance, efficiency as well as resources compared to the rest of the world. Besides, it may be due to fluctuation in the world price of commodities. The implementation of expansionary economic policy by government will increase the demand for imports. As a result, appreciation of foreign currency will occur due to high demand of foreign goods and at the same time, a depreciation in own currency due to a low demand for domestic commodities. Since government would want to hold a fixed exchange rate regime, they can implement a contractionary monetary policy, a method of selling domestic bonds which increases the domestic interest rate, in order to maintain the value of domestic currency. The demand of domestic currency will be improved which will increase the value of domestic currency. Again, it proves to be costly as high interest rate will discourage investment, since it is now more expensive to borrow from the bank, reducing a potentially larger economic growth. This shows that free flow of capital may cause an upward pressure in the value of currency which may jeopardise local firms, making them less competitive in the global market. Emerging market economies are the usual target for “hot money” with sudden injection or withdrawal of funds, thus, creating distortion or instability in the market. Large volumes of capital inflows on search for higher yields causes dislocations in the financial system. Foreign funds might fuel asset price bubbles, encourage excess risk taking by cash-rich domestic intermediaries (Magud, Reinhart & Rogoff, 2005).

Having a strong and independent monetary policy is more viable than sustaining free flow of capital. Due to potential harmful effects of free flow of capital to the economy, capital controls is introduced to prevent such consequences from happening. A capital control is any policy designed to limit or redirect capital account transactions and may take the form of taxes, price or quantity controls, or outright prohibitions on international trade in assets (Neely, Christopher J. , 1999).

Capital Controls

There are two types of controls which are the controls on inflow and outflow of capital. Like Malaysia during the Asian financial crisis in the late 1990s, control on capital outflows was introduced to supposedly generate revenue, correct balance of payment deficit as well as preserve savings for domestic use. Control on capital inflows, used by Chile during the Latin American debt crisis, was used to prevent potential volatility inflows, financial destabilisation and real appreciation as well as correcting balance of payment surplus and limit foreign ownership of domestic assets. This shows various type of capital controls are targeted at specific type of movement. The question is, how effective capital control is and to what extent should it be implemented ?

During the Asian Financial Crises, Malaysian government imposed controls on outflows in 1998 by pegging the exchange rate at RM 3.80 for every US dollar. Their objective was to delay from exhaustion of foreign reserves and provide as much time possible for policymakers to implement reflationary policies as well as eliminating speculation against the ringgit. Malaysia's stock market capitalization ratio at 310 percent of GDP, compared to 116 percent in the U.S., and 29 percent in Korea and domestic debt-GDP ratio at 170 percent were, at the time, highest in the world (Perkins and Woo, 2000). In response to the crisis, Malaysian government raised the interest rates to stem the decline of the ringgit and restructured their expenditure by reducing it by 18 percent (Ethan Kaplan and Dani Rodrik, 1999). However, the economy showed no sign of improvement. Their effort to reduce domestic interest rates seemed to be pointless as speculation against the ringgit in offshore markets was circulating widely. The speculation lead to the borrowing of ringgit at premium rates to purchase dollars, which created a devaluation pressure on ringgit. Worried of capital flight and further depreciation of the currency, the Malaysian government also banned for a period of one year all repatriation of investment held by foreigners. Malaysia also lowered the 3-month Bank Negara Intervention Rate from 9.5% to 8% and the liquid asset ratio was reduced from 17% to 15% of total liabilities (Ethan Kaplan and Dani Rodrik, 1999). On February 15th, 1999, the Central Bank of Malaysia changed the regulations on capital restrictions, shifting from an outright ban to a graduated levy and replacing the levy on capital with a profits levy on future inflows (Ethan Kaplan and Dani Rodrik, 1999). After the imposition of capital controls in 1998, Malaysia showed a strong and quick revival from the Asian financial crisis. The fact that Korea and Thailand, which had opted for IMF's programme, recovered remarkably suggesting that capital controls imposed in Malaysia did not make any significant difference than the IMF's financial aid.

Chile seemed to favour controls on capital inflows and been relying on it in two different occasions (1978-82 and 1991-98). The effectiveness is questionable, however, as in 1981-82 Chile went through a currency crisis despite with controls and restrictions. The peso was devalued by almost 90 percent and a large number of banks had to be, bailed out by the government (Edwards, Sebastian 1999). The controls were being reintroduced in 1991 with the objectives of slowing down the volume of capital inflows into own country, reducing the real exchange rate appreciation resulted from these inflows, allowing the Central Bank to maintain a high differential between domestic and international interest rates. In 1984, Chile has adopted a slightly flexible exchange rate system, where the peso-dollar rate was allowed to fluctuate within an upward-moving band. The authorities argued that by maintaining domestic (peso) denominated interest rates above international rates, inflation would decline gradually (Massad, 1998). This policy mix worked relatively well until the late 1980s, when Chile regained access to international financial markets, and capital began to flow into the country putting pressure both on the real exchange rate and domestic interest rates (Edwards, Sebastian 1999). By early 1990, domestic firms were considerably affected, as the rapid strengthening of peso has reduced their level of competitiveness and profitability. To sum it up, the effectiveness of Chile's controls on capital inflows has been overestimated. After the controls were imposed, the maturity of foreign debt contracted by Chile increased significantly. The evidence suggests more than 40 percent of Chile's debt to G-10 banks had a residual maturity of less than one year (Edwards, Sebastian 1999). Although the policy affected the composition of capital inflows, it did not reduce the total volume of aggregate flows moving into Chile during the 1990s. The controls on inflows had no significant effect on Chile's real exchange rate in which it appreciated by approximately 30% during the 1990s. The controls had a short term effect on domestic interest rates. The magnitude of the effect was very small, however, raising the question of whether the central bank's ability to undertake independent monetary policy really enhanced by the controls on capital inflows (Edwards, Sebastian 1999) .

Conclusion

Control on inflows seems to be more favourable among authors and economists than those on outflows. Controls on outflows usually create corruption as it easier to evade than the inflows (Reinhart and Smith, 1998; Eichengreen, et al. 1999). If there is an anticipation in the depreciation of domestic currency, this creates an incentive for investors to evade controls on outflows to prevent from losses.When faced with the prospect of a major crisis, the private sector finds ways of evading the controls, moving massive volumes of funds out of the country. Controls on capital outflows have resulted in corruption, as investors try to move their monies to a "safe haven." In almost 70% of the cases were controls on outflows were used as a preventive measure, there was a significant increase in "capital flight" after the controls had been put in place. Cuddington (1986) reached a similar conclusion in his study on the determinants of capital flight in developing countries. Evading controls on inflows, however, proved to be less beneficial among investors as investing in other countries would be less viable compared to domestic return.

Sovereign Debt Crisis with Examples

Explanation for U.S., Europe, Greece, and Iceland Debt Crises

A sovereign debt crisis is when a country is unable to pay its bills. But this doesn't happen overnight as there are plenty of warning signs. It becomes a crisis when the country's leaders ignore these indicators for political reasons.

The first sign appears when the country finds it cannot get a low-interest rate from lenders. Why? Investors become concerned that the country cannot afford to pay the bonds. They fear that it will go into debt default.

As lenders start to worry, they require higher and higher yields to offset their risk. The higher the yields, the more it costs the country to refinance its sovereign debt. In time, it really cannot afford to keep rolling over debt. Consequently, it defaults. Investors' fears become a self-fulfilling prophecy.

That happened to Greece, Italy, and Spain. It led to the European debt crisis. It also happened when Iceland took over the country's bank debt, causing the value of its currency to plummet. But this did not occur in the United States in 2011, as interest rates remained low. But it experienced a debt crisis for very different reasons.

Greek Debt Crisis

The debt crisis started in 2009 when Greece announced its actual budget deficit was 12.9 percent of gross domestic product, more than quadruple the 3 percent limit mandated by the European Union. Credit rating agencies lowered Greece's credit ratings and consequently, drove up interest rates.

Usually, a country would just print more money to pay its debt. But in 2001, Greece had adopted the euro as its currency. For several years, Greece benefited from its euro membership with lower interest rates and foreign direct investment, particularly from German banks. Unfortunately, Greece asked the EU for the funds to pay its loans. In return, the EU imposed austerity measures. Worried investors, mainly German banks, demanded that Greece cut spending to protect their investments.

But these measures lowered economic growth and tax revenues. As interest rates continued to rise, Greece warned in 2010 that it might be forced to default on its debt payments. The EU and the International Monetary Fund agreed to bail out Greece. But they demanded further budget cuts in return. That created a downward spiral.

By 2012, Greece's debt-to-GDP ratio was 175 percent, one of the highest in the world. It was after bondholders, concerned about losing all their investment, accepted 25 cents on the dollar. Greece is now in a depression-style recession, with a 25 percent unemployment rate, political chaos, and a barely functioning banking system.

The Greek debt crisis was a huge international problem because it threatened the economic stability of the European Union.

Eurozone Debt Crisis

The Greek debt crisis soon spread to the rest of the eurozone, since many European banks had invested in Greek businesses and sovereign debt. Other countries, like Ireland, Portugal, and Italy, had also overspent, taking advantage of low-interest rates as eurozone members. The 2008 financial crisis hit these countries particularly hard. As a result, they needed bailouts to keep from defaulting on their sovereign debt.

Spain was a little different. The government had been fiscally responsible, but the 2008 financial crisis severely impacted its banks. They had heavily invested in the country's real estate bubble. When prices collapsed, these banks struggled to stay afloat. Spain's federal government bailed them out to keep them functioning. Over time, Spain itself began having trouble refinancing its debt. It eventually turned to the EU for help.

That stressed the structure of the EU itself. Germany and the other leaders struggled to agree on how to resolve the crisis. Germany wanted to enforce austerity, in the belief it would strengthen the weaker EU countries as it had Eastern Germany. But, these same austerity measures made it more difficult for the countries to grow enough to repay the debt, creating a vicious cycle. In fact, much of the eurozone went into recession as a result. The Eurozone Crisis was a global economic threat in 2011.

U.S. Debt Crisis

Many people warned that the United States will wind up like Greece, unable to pay its bills. But that's not likely to happen for three reasons:

1. The U.S. dollar is a world currency, remaining stable even as the United States continues to print money.
2. The Federal Reserve can keep interest rates low through quantitative easing.
3. The power of the U.S. economy means that U.S. debt is a relatively safe investment.

In 2013, the United States came close to defaulting on its debt due to political reasons. The tea party branch of the Republican Party refused to raise the debt ceiling or fund the government unless Obamacare were defunded. It led to a 16-day government shutdown until pressure increased on Republicans to return to the budget process, raise the debt ceiling, and fund the government. The day the shutdown ended, the U.S. national debt rose above a record $17 trillion, and its debt-to-GDP ratio was more than 100 percent.

The year earlier, the debt was an issue during the 2012 Presidential election. Again, tea party Republicans fought to push the United States over a fiscal cliff unless spending was cut. The cliff was averted, but it meant the budget would be cut 10 percent across the board through sequestration.

The U.S. debt crisis began in 2010. Democrats, who favored tax increases on the wealthy, and Republicans, who favored spending cuts, fought over ways to curb the debt. In April 2011, Congress delayed approval of the Fiscal Year 2011 budget to force spending cuts. That almost shut down the government in April. In July, Congress stalled on raising the debt ceiling, again to force spending cuts.

Congress finally raised the debt ceiling in August, by passing the Budget Control Act. It required Congress to agree on the way to reduce the debt by $1.5 trillion by the end of 2012. When it didn't, it triggered sequestration. That's a mandatory 10 percent reduction of FY 2013 Federal budget spending that began in March 2013.

Congress waited until after the results of the 2012 Presidential Campaign to work on resolving their differences. The sequestration, combined with tax hikes, created a fiscal cliff that threatened to trigger a recession in 2013. Uncertainty over the outcome of these negotiations kept businesses from investing almost $1 trillion and reduced economic growth. Even though there was no real danger of the U.S. not meeting its debt obligations, the U.S. debt crisis hurt economic growth.

Ironically, the crisis didn't worry bond market investors. They continued to demand U.S. Treasuries. This drove interest rates down to 200-year lows in 2012.

Iceland Debt Crisis

In 2009, Iceland's government collapsed as its leaders resigned due to stress created by the country's bankruptcy. Iceland took on $62 billion of bank debt when it nationalized the three largest banks. Iceland's GDP was only $14 billion. As a result, its currency plummeted 50 percent the next week and caused inflation to soar.

The banks had made too many foreign investments that went bankrupt in the 2008 financial crisis. Iceland nationalized the banks to prevent their collapse. But this move, in turn, brought about the demise of the government itself.

Fortunately, the focus on tourism, tax increases, and prohibition of capital flight were some major reasons why Iceland's economy recovered from bankruptcy.