



Munich Personal RePEc Archive

**Financial crisis - US versus Asian.
Factors and policy response**

Gulam Hassan, Mohamed Aslam

University of Malaya

10 January 2012

Online at <https://mpra.ub.uni-muenchen.de/38206/>
MPRA Paper No. 38206, posted 19 Apr 2012 14:21 UTC

FINANCIAL CRISIS - US VERSUS ASIAN. FACTORS AND POLICY RESPONSE

Mohamed Aslam
Department of Economics
Faculty of Economics and Administration
University of Malaya
50603 Kuala Lumpur
Malaysia.
E-mail: maslam@um.edu.my

Abstract

The financial crisis which erupted in the United States of America in 2007 drove the real economic sector into a crisis that has diminished the world's economic growth thereafter. There is no single theory that can explain what has happened in the US. Eventhough there were a few financial crises models, however all the models are "meaningless". Traditional macroeconomic policies were used to restore the distress economy but the policies seemed to be ineffective. In this regards, heterodox economic perspectives may provide some answers in dealing with such economic crisis that have been experienced by the US. The financial crisis experienced in Asia in 1997-98 could provide some ideas for economic crisis solutions. The aim of this paper is (a) to discuss the financial crisis in the US and East Asia 1997/1998, and (b) to look at unorthodox economic policies that could possibly be considered in dealing with the financial crisis.

Keywords: Financial Crisis, Macroeconomics, Heterodox Economic Policy, Capital Control

JEL Classification: B50; E60; G01

1.0 THE AMERICAN ECONOMIC CRISIS

In general, the US economic crisis constituted of three “boom-bust cycles”. The first is the boom-bust in the stock market, the second in the housing market and the third in the financial market, i.e derivatives. The US’s economic crisis apparently started since the collapse of NASDAQ, i.e the burst of technology stocks on the New York Stock Exchange (NYSE) in March 2000. The Dow Jones Industrial Average in 1999 increased about 200 percent from 3,600 in 1994 to 11,000 in 1999. In early January 2000 the Dow Jones passed 11,700. The NASDAQ composite index on March 10, 2000 recorded 5048, an increase of more than 500 percent since 1994. On May 23, 2000 the index dropped to 3164, down about 37 percent. The index declined to 1210 in October 2002 dropping about 62 percent and lost about 76 percent since March 2000. More than US\$7.6 trillion in wealth vanished. The crisis affected not only technology related industries but also other sectors of real production such as automobile and electronics¹. The burst of NASDAQ slowly ate up profits and corporate expenditure, and the major candidate affected by the reduction of the operating expenditure were the workers. As mentioned by the former Governor of the Federal Reserve (FED), Alan Greenspan, the collapse of the stock market had affected performance and investment in high-tech industries (Fleckenstein, 2008: 109)². Since March 2000 the unemployment level gradually rose before the sub-prime mortgage defaults or crisis emerged in late 2007.

Given the low interest rate policy which expanded money supply by about US\$1.6 trillion or about 20 percent of GDP from 1996 to October 1999 (Fleckenstein, 2010: 74) and the utilization of information and communication technology (ICT) by financial institutions the credit market bloated at the rapid pace. The credit that was channeled to the real estate sector whether it belongs to sub-prime or prime borrowers were repackaged and sold in the form of asset-backed securities (ABS). About 80 percent of the ABS issued in the US was in the form of mortgage-backed securities (MBS). The securitization of loans into ABS securities ostensibly was to increase banks liquidity to meet further demand from the households sector. Between 1996 and 2007 households reportedly drew US\$9 trillion in cash out of their home equity (Chandrashekar, 2009) and the ratio of sub-prime loan/mortgages to total mortgages were roughly about 20 percent in 2006.

Since the late 1990s new financial instruments were created such as collateral-debt obligations (CDOs) and credit default swaps (CDSs). The CDO’s main purpose is to liquidify the financial market or in other words the issuance of the securities by the banks to derive more money for lending activities. Whereas credit default swap (CDS) is acting as an insurance policy that is engineered and offered by the insurance companies to banks for ABSs and CDOs. These new money market derivatives are traded in unstructured and unregulated market i.e over-the-counter (OTC). The main reason for creating such derivatives is to increase bank liquidity and to meet the (more) market demand for loans or mortgages. The market and the government does not understand what kind of risks are carried by these new financial products and the impact of the securities risk on the economy. Therefore the market or the government are unable to determine the volume and value of such assets traded through the OTC. The main buyers of those derivatives papers were hedge fund, investment banks and other financial institutions with excessive idle funds. The securitization of loans to ABSs and from ABSs to CDOs, later to CDO2 and CDSs enlarge the “vicious” credit boom and burst cycle.

¹ For example Enron collapsed in late 2002 and a year later WorldCom, Tyco and Global Crossing collapsed (Mason, 2009: 72).

² Computer-related shares account for about 40 per cent of the NASDAQ composite index.

The collapse of the housing market in 2007 had affected financial institutions. There were 775 banks which faced problems in the first quarter of 2010 in the US. The problems were such as poor risk management policies, bad quality of assets, liquidity problem, increasing delinquent loans etc. In 2009 there were about 140 banks which had failed. The subprime mortgage crisis had produced spillover effects around the world such as in UK, EU, Japan and Singapore. In the middle of 2008, the US was already facing a credit crunch as well as some countries in Europe particularly the United Kingdom in which a few banks fell into insolvency such as the Northern Rock Bank. The interbank lending market across the world had been freezed in August 2007. The European Central Bank (ECB) and FED injected substantial liquidity to avert a credit crunch from impacting on the real economy.

US's Financial Crisis. Factors

There are a few reasons which caused the financial crisis in the USA (Box 1). The first factor is the financial deregulation. In the late 1990s, Congress passed the Gramm Leach Bliley Financial Services Modernization Act (GLB) in November 1999 and the former US President Bill Clinton signed the bill in 2000. The act became effective in March 2000. The Gramm Leach Bliley Act replaced the Glass-Steagall Act which was enacted after the Great Depression in the 1930s. The Glass-Steagall (GS) Act separated commercial banks and other financial institutions (such as investment banks). The act disallowed the commercial banks to “gamble” depositors money to invest in securities markets. The GS Act ensured banks stick to its traditional banking activities. Also the act prohibited investment bankers betting deposits on the buying and selling of tradable financial securities that can create huge losses. The purpose for the GS Act to was safeguard the US banking system and keep it stable. For 50 years the Act kept the American banking “honest”. However, in 1987 the FED relaxed GS Act to allow 5 percent of a bank’s deposits to be for investment banking, further relaxed to 25 percent in 1996 and in 1999 the act was abolished (Mason, 2009).

The GS Act was replaced by the Gramm Leach Bliley (GLB) Act and this GLB Act broke the rationale of the GS Act. The GLB Act allows commercial banks and investment banks to venture into new types of businesses, i.e creating, marketing and buying securities derivatives such as CDOs and CDSs. In other words, the Act permits qualifying bank holding companies to become financial holding companies and thereby affiliate with a broad range of financial operations, instruments, and exposures (Chofaras, 2010: 21). The Act identifies several financial activities including retail banking, commercial banking, securities brokerage, underwriting, dealing in or making a market in securities, investment management services, insurance business, and more (Chofaras, 2010: 21). The Gramm-Leach-Bliley Act states that the Federal Reserve Board (FED) may impose limitations, restrictions, or prohibitions on the activities or acquisitions of a financial holding company if the FED believes that the company is encountering difficulties with certain activities like mergers and acquisitions (Chofaras, 2010: 21). Critics of the Act say that the FED has not even been given full powers to intervene (Chofaras, 2010: 21). Paul Volcker, the former Governor of the FED was strongly against allowing commercial banks to be involved in investment banking type businesses because it is dangerous to the financial stability.

Before the GLB Act was signed, Ms Brooksley Born, the former chairman of Commodity Futures Trading Commission (CFTC) had warned of the possibility of a negative impact of CDO and CDS or any related products to the financial institutions. She was worried about the fast-growing, lightly regulated market for over-the-counter (OTC) derivatives— customized contracts in which two parties placed bets on the movement of prices for other assets, such as

currencies, stocks, or bonds³. The main players of establishing the GLB Act are bankers and people close to the White House. As cited in Johnson (2010), *Summers, Rubin, Greenspan, and the financial industry lobbied the government for the GLB Acts. In October 1998 the Congress prohibited the CFTC from regulating custom derivatives (such as CDO and CDS). In 1999, the President's Working Group on Financial Markets— including Summers, Greenspan, Securities Commission (SEC) chair Arthur Levitt, and new CFTC chair William Rainer— recommended that custom derivatives be exempted from federal regulation. This recommendation became part of the Commodity Futures Modernization Act which was signed by President Clinton in December 1999.*

The unchecked volume and value of CDOs and CDSs in some ways has “toxified” the financial system. The derivatives grew to over \$680 trillion in face value and over \$20 trillion in market value by 2008 (Chofaras, 2010: 23). CDS grew to over \$50 trillion in face value in 2007. On 13 April 2008, *The Economist* stated that the amount of inventoried CDSs stood at \$62 trillion, a 24 percent increase from 2007, and by the end of 2008 the CDS has approached US\$80 trillion (Chofaras, 2010: 23). On 2nd February 2008, an article in *The Economist* stated that a serious person such as Bill Gross, co-founder of PIMCO, the money-management firm, put the potential losses from such contracts at 1.25 percent of outstanding amount of CDSs (cited in Chofaras, 2010: 23). This would mean a loss of \$715 billion. Based on Bill Gross' estimation of 1.25 percent potential losses of outstanding CDSs, in February 2008 it would be US\$562.5 billion, in March 2008 about US\$625 billion and in April 2008 about US\$715 billion (Chofaras, 2010: 23). The financial crisis contracted the US's GDP by 4 percent. The high volume of the derivatives traded had caused a bubble in the market. When that bubble burst, the value of the securities collapsed and triggered the financial system into crisis. In addition the role of rating agencies are crucial in exploding the demand and supply of those derivatives. CDOs created by the banks were rated triple A eventhough the rating agencies such as Standard & Poor, Fitch and Moody knew that the papers were riskiers. It seems that the commercial and investment banks, regulatory body and rating agencies were working together in expanding the mentioned derivatives and exploding the market into widespread crisis.

The third factor was that the market or the government was unable to identify and estimate the risks carried by the above mentioned OTC derivatives. These kinds of products are so complex mechanically that it is difficult to discern what kind of risks would be produced by the products. The conventional monetary policy, i.e the interest rate policy is unable to check the risks or dilute the impact of the OTC derivatives in order to counter the negative impact of the products on the financial system. To save the Wall Streets and the affected banks, the government indirectly bailed out the banking system.

The fourth factor which is related to the third factor was the FED's monetary policy which was part of the boom-bust credit cycle. Since the middle of the 1990s the “boom” in the New York Stock Exchange (NYSE), i.e the stock market attributed to the low level of interest rate, rising real GDP growth and low inflation rate. As the boom progressed and inflationary pressure built up, the FED inevitably tightened the interest rate policy thus triggering the financial (credit) crash thereafter. As mentioned earlier the crash of the stock market had serious consequences to the economy through wealth effects and this may have affected the

³ Refer to Johnson, S (2010), *The 13 Bankers. The Wall Street Takeover and the Next Financial Meltdown*, Pantheon, New York.

banks liquidity. Similarly to housing bursts in 2007, it destabilized the banking system, burst the OTC derivatives market and subsequently effected the real economy.

BOX 1

US Financial Crisis and Policy Response: In Brief

Factors.

- High investments in assets markets-equity and housing.
- overlending to property markets. High credit to house buyers or mortgages
- financial de-regulation. Replaced Glean-Steagall Act with Gramm Leach Bliley Acts. Allowing commercial banks to be involved in businesses other than “traditional banks” such as creating and selling derivatives, form an asset management company within the bank and so on.

Government Response

- the government run budget deficits
- lower interest rate.
- FED buying secure and unsecure securities papers from the affected financial institutions.
- established Troubled Asset Relief Programme (TARP)(proposed allocation of US\$700 billion) to clean-up “toxic assets” from the financial system.
- allowing banks to fail or close down.
- bailed out selected private firm (for instance General Motor) and financial institution [for instance the government agencies such as Fannie Mae, Freddie Mac, American Insurance Group (AIG)(US\$85 billion)]

Federal Reserve Response (also by central banks in industrialized countries)

- (i) Achieve the official stance of monetary policy.
- (ii) Influence wholesale interbank market conditions.
- (iii) Influence credit market and broader financial conditions.

Measures to Stabilise Financial system (also taken by some members of EU).

deposit insurance, restriction on short-selling, capital injections, debt guarantees, asset insurance, asset purchases, nationalization.

The Impact of US (Global) Economic Crisis on Emerging Economies.

The financial crisis which erupted in the United States in 2007 had spread out and affected the world economic growth thereafter particularly since the middle of 2008. Developed nations, from Japan to major economies of European Union fell into a severe recession. The economic crisis in these countries had influenced other countries, i.e developing countries that rely on their market particularly Southeast and East Asian economies (SEA region) for instance as shown in Table 1. The fell in financial markets had affected countries in SEA and the Pacifics. Most countries experienced depreciation in exchanges except China and Hong Kong. Stock markets in those countries fell in terms of index on average 50 percent. Also the global financial crisis, i.e US had inluenced dropped in real GDP of those countries in 2008/09. Furthermore every country in East Asia and Southeast Asia have seen its exports contracted from year 2008 to 2009. While lower commodity prices may be partly responsible for these declines, China's slowing domestic economy and worsening export outlook of the country is dragging down demand for Asian exports, especially components for further processing.

TABLE 1
Impact of Asian Crisis and Global Crisis 2008/09

	Exchange rate changes ¹ (in percent)		Stock market changes ² (in per cent)		Change in GDP growth ³ (in percentage points)	
	Asian Crisis ⁴	Glob. Crisis ⁵	Asian Crisis	Glob. Crisis	Asian Crisis	Glob. Crisis
Australia	-23	-32	-11	-51	-2.0	-3.8
China	0	12	-12	-71	-3.5	-6.5
Hong Kong	-1	1	-56	-59	-15.3	-15.1
India	-20	-23	-35	-56	-1.3	-3.5
Indonesia	-83	-24	-62	-55	-23.5	-2.2
Japan	-21	36	-35	-58	-4.6	-11.0
Korea	-47	-37	-60	-49	-14.1	-9.9
Malaysia	-43	-14	-72	-40	-19.6	-13.6
New Zealand	-32	-36	-34	-41	-4.4	-6.2
Philippines	-40	-17	-58	-51	-8.4	-7.9
Singapore	-19	-11	-56	-58	-13.6	-19.6
Thailand	-53	-12	-68	-56	-13.3	-13.1

Notes: 1- maximum depreciation (-) or appreciation (+) against US\$. 2-Peak to trough change in the benchmark stock market index, 3- largest difference in year-on-year real GDP growth rates. 4- From June 1997 to June 2000. 5- From June 2007 to March 2009.

Source: Adopted from Filardo and etc (2010)

In general, all countries in the world were pursuing the traditional macroeconomic policies in dealing with the impact of US and the global economic crises. The globalization of the world economy or economic interdependence among countries in the world in the form of international trade has resulted in lower real economic growth for countries that rely on industrial nations for exports growth. Unemployment in the countries have started to rise and many foreign firms have closed down their factories. Anticipation that the worst of the crisis is approaching in countries including developing countries such as Asia have resulted in implementing fiscal stimulus plans and reducing interest rates to confine increasing non-performing loans (NPLs) or delaying the number of bankruptcies.

Table 2 shows economic policies that were pursued in selected developed and emerging countries in dealing with the impact of the global economic crisis. The loose monetary policy and fiscal stimulus were implemented to tackle the impact of the global economic crisis. Monetary policy actions included interest rate cuts, reduced reserve requirements, use of official reserves to stabilise foreign exchange markets and policies to expand domestic credit. The budgetary policies together with other measures in the budget such as stimulating domestic demand, buying local products, encouraging small and medium size industries growth, infrastructure developments, education and health programme, re-training programme for workers who have been retrenched, extension of credit to SME and primary industries, etc, that were announced however the effect of the policies seem to be minimal. Therefore other measures such liquidity assistance to financial institutions, lend in foreign currency and other measures were introduced to calm not only to financial and good markets but also to assets market (i.e equity and bonds).

TABLE 2
Policy actions taken in North America, Europe, Asa and the Pacific

	CA	US	EU	CH	UK	AU	CN	HK	IN	ID	JP	KR	MY	NZ	PH	SG	TH
Ease monetary policy	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Introduce Fiscal stimulus		√	√		√	√	√	√	√	√	√	√	√	√	√	√	√
Liquidity assistance in local currency	√	√	√	√	√	√		√	√	√	√	√		√	√		
Lend foreign currency	√		√	√	√	√			√	√	√	√		√	√	√	
Expand deposit Insurance		√	√		√	√		√		√		√	√	√	√	√	√
Guarantee non-depo liab.	√	√	√		√	√						√		√			
Prepare Bank capital injection		√	√	√	√		√	√	√		√	√					√
Create demand for assets	√	√	√	√		√	√		√	√	√	√	√				
Impose short-sale restrictions	√	√	√	√	√	√		√		√	√	√				√	
Relax mark to market rules		√	√	√	√					√	√	√	√		√		

Note: CA=Canada; US=United States; EU=Euro Area; CH=Switzerland; UK=United Kingdom; AU=Australia; CN=China; HK=Hong Kong SAR; IN=India; ID=Indonesia; JP=Japan; KR=Korea; MY=Malaysia; NZ=New Zealand; PH=Philippines; SG=Singapore; TH=Thailand.

Source: Adopted from Filardo, etc (2010).

2.0 ASIAN FINANCIAL CRISIS VERSUS AMERICAN FINANCIAL CRISIS

A major factor that contributed to the Asian currency crisis in 1997-98 were cross-border flows of portfolio investments in bonds, equity (stocks) and huge short-term inter-bank loans (Box 2). The most important difference between foreign portfolio investment (FPI) and FDI and long-term external loans is that the FPI can flow in and out of a country within a very short time. When FPI found its way into the banking system, pushed up domestic expenditure and increased the current account deficit, its outflow could affect the domestic economy in a number of ways. like a decrease in asset prices, a rise in interest rates, the emergence of liquidity problems in the banking sector and a depreciation of the value of the currency (Corbo and Hernandez 1996). As the pre-crisis Asian experience has shown, FPI can lead to an inflation of asset prices and provoke interest rate hikes. Furthermore, if the central bank did not act quickly enough and the volume of international reserves declined, then the reversal might cause a balance of payments crisis. As shown in the Asian crisis stock prices fell and contributed to a loss of international reserves and an increase in domestic interest rates, a depreciation of the exchange rate, or both. The interest rates, asset prices or exchange rates fluctuated too widely in late 1997 to 1998. The fluctuation dented the economic performance of Indonesia, Malaysia, Thailand and South Korea. The high interest

rates had led to corporate failures and the non-performing loans (NPLs) had increased. The fluctuation of currency value vis-à-vis US\$ deteriorated export competitiveness. Other factors which contributed to the crisis were the banks that borrowed funds from the external market, banks over-lending to property and stocks, financial deregulation, capital account convertibility, inflows of FPI into money and capital markets, weak banking supervision and cronyism. Factors that contributed to the financial crisis were largely generated in the external economy. In the case of the US financial crisis even though the external factor was substantial, the crisis was by and large caused by activities in the internal economy.

The developed countries including IMF lectured that the main reasons or causes of the crisis in Southeast Asia in 1997-98 were the economic mismanagement by governments, the soft-pegging of currencies, over-borrowing by the private sector and cronyism. Portfolio investments were hardly blamed. Medicines for the crisis were said to be the implementation of the so-called Washington Consensus run by the IMF under its financial assistance program, i.e., Structural Adjustment Lending. Thailand, South Korea and Indonesia signed into the IMF assistance package but Malaysia implemented its own. The three countries recovered from the crisis but the reasons may not be solely attributed to IMF financial package since from 1999 the world economy stabilised and subsequently expanded.

BOX 2

Asian Crisis and Policy Response: In Brief

Factors

- financial deregulation/liberalization: allowing operation of foreign banks (commercial and investment), foreign asset/mutual or trust fund companies and foreign stock brokerage firms; opening money and capital markets to foreign portfolio investors; freeing interest rates to be market determined.
- full capital account convertibility. Short-term capital increased largely by portfolio investments and short-term bank loans
- speculation in asset (equity and property) markets
- overborrowing by households
- unhedged overborrowing mainly in US\$ by the corporate sector from offshore financial markets.
- borrowing by local banks of short-term loans in US\$ through intra-bank loans.
- lessening of money or capital market instruments for sterilization purposes by the central banks; related to the government budget policy i.e balanced or surplus budget, thus lesser treasury bills used in mopping excess liquidity caused by external capital flows
- overlending by banks to household equity and property.
- unchecked bubble in equity and property markets.
- increasing interest rates to stem asset price inflation but the policy failed since the expectation of profit in asset markets was larger than in interest-bearing assets.
- unchecked speculation in currency markets, with consequent exchange rate fluctuations.
- politics and corporate links (cronyism)

Policy Response

- tight budget policy-reduce government expenditures, cut subsidies, reduce public investments (infrastructure projects)
- tight monetary policy or high interest rate
- flexible exchange
- cleaning up the banking system: weak or insolvent banks were allowed to close down or sold to local or foreign competitors.
- private non-financial enterprises which were weak or saddled with huge debt were allowed to declare bankruptcy or be sold to local or foreign competitors.
- assets management company to deal with bad loans (NPLs) and banks in distress.
- Indonesia, Thailand, and South Korea sought financial assistance package from IMF.

Malaysia's Case.

- initially followed IMF advice i.e reduced government budget, increased interest rate, flexible

exchange rate but these failed to create confidence in the economy. The government implemented policies against the orthodox stream.

- increased government expenditures, ran budget deficits
- lowered interest rates
- re-classified NPL from three months to six months
- imposed capital controls on outflow of portfolio capital
- fixed exchange rate at US\$1:00=RM3.80 on 2 September 1998.
- de-internationalised the RM, i.e. RM not to be traded in offshore market.
- imposed control on resident and non-resident movement of foreign currency abroad.
- tightened up transactions in stock market; imposed restrictions on short-selling; closed down the central limit order book (CLOB) based in Singapore, the secondary market abroad that conducted trade in company stocks in KLSE, to prevent outflow of capital.
- strengthened banking regulation and supervision.
- exercised commercial bank and finance company mergers, allowing only ten local banks to be in the financial system.
- created universal stock brokering firms (reducing the number of stock brokers).
- tightened corporate laws and installed corporate governance.
- established asset management company, Danaharta, to clean-up bad NPLs from the banks.
- established special purpose vehicle, Danamodal, to recapitalise financial institutions.
- established corporate and debt restructuring committee (CDRC) to help firms restructure debt.
- bailed-out selected private firms.

Malaysia's Response to The Financial Crisis 1997/98

Malaysia's government initially followed policies that were presumably advised by the International Monetary Fund (IMF). The government had cut public expenditures, i.e. cancelled or scaled down various infrastructure projects, restored market confidence by increasing the interest rate so it would eliminate excessive fluctuation of the exchange rate (RM/US\$), decreased classification of NPL from 6 months to 3 months, strengthened banking regulations and supervision. However, the policies were unable to increase the market confidence and reflate the economy. The real GDP growth fell below 1 percent, the unemployment rate soared to about 4 percent, the number of corporate failures rose, inflation rate escalated, foreign portfolio capital continued leaving the economy, inflow of FDI dropped and the exports receipts were still unstable and declined. To move the economy away from the economic depression, the government turned around the policies. The government increased public expenditure, reduced interest rates, the statutory rate was reduced from 13 percent to about 4 percent, reclassified NPLs from 3 months to 6 months, introduced the capital and currency control (CEC) measures, fixed the exchange rate US\$1:00=RM3.80, established asset management company (Danaharta) to remove NPL's from the banking sector, established special purpose vehicle (Danamodal) to recapitalize the weak banks, introduced corporate and debt recovery agency (CDRC) to help corporate entities that needed help in restructuring their debt and bailed-out private companies which were closely linked to the ruling government. These measures that surfaced are classified as heterodox in this paper, were a response when the orthodox economic policies implemented before September 1998 were unable to stem the rapid decline of the economy and instead drove the economy into a deeper economic crisis. The policies recommended by the International Monetary Fund (IMF) to Indonesia, South Korea and Thailand also failed to reduce the impact of the currency crisis on those economies.

Malaysia introduced capital controls on September 1, 1998 mainly to deter the outflow of portfolio capital. Foreign direct investment and repatriation of the income of foreign firm activities were not affected. Under Malaysia's CEC policy, long-term flows and FDI were not

regulated. The RM was fixed at RM3.80 to the US dollar to curb speculation on the currency. The ringgit was pegged at a level of RM3.80=USD1. The pegged exchange rate arrangement was to reduce the volatility of the ringgit exchange rate and to promote a stable environment conducive to the economic recovery.. The main benefit of the introduction of the pegged exchange rate regime was relative stability in the foreign exchange market. Besides the pegging, the government also de-internationalised RM (currency control), i.e the RM was no longer traded in the offshore markets. According to the former Prime Minister, Dr. Mahathir Mohamad (2000), the main purpose of the exchange control was to regain control of the ringgit from speculators and manipulators in the international foreign exchange market. The policy brought back about RM20-25 billion in bank accounts abroad into the country's financial system.

Implicitly, the capital control managed to insulate the economy from the volatility of foreign investment in the capital market. Also, the measure had increased the degree of independence of the monetary policy, hence the activity of sterilization was reduced. Since the movement of international reserves by speculative capital had been cut, the central bank, Bank Negara Malaysia (BNM) had the freedom to introduce stabilisation measures without worrying about the accumulation of reserves from speculation market channels. This matter is important in order to avoid the economy from running off its international reserves, hence further erosion of balance of payments positions and devaluation of currency can be avoided

The CEC had also helped stabilise monetary aggregates and prevented a liquidity crunch in the economy. Measures to control trading of the ringgit in offshore markets and the fixed exchange rate managed to further segregate the economy from external price shocks and enabled the export sector to emerge as an engine for economic recovery. Furthermore, for companies that had borrowed money from abroad, the fixed exchange rate assisted them by stabilising the volume of the principal sum and thus the interest to be paid on the loan. There is, however, no evidence to show that the movement of foreign portfolio capital had a detrimental impact on the corporate sector, except in so far as it influenced share prices of firms listed on the Kuala Lumpur Stock Exchange (KLSE) The performance of the corporate sector, in terms of profits registered or dividend payments, depends on economic factors such as demand and supply.

The main issue arising from the currency crisis in Malaysia was the problem of private sector debt. The total volume of debts was estimated at more than RM60 billion in 1997. The companies most badly affected were those involved in construction, property development and banking. The introduction of the CEC provided time for the CDRC, Danaharta and Danamodal to clear up the debt crisis in the corporate and banking sectors. Danaharta and CDRC have resolved nearly RM100 billion worth of NPLs, while Danamodal has recapitalised ten financial institutions to the tune of RM7.6 billion. Danaharta and Danamodal have prevented a meltdown of the banking sector, while the CDRC has helped turn around a long list of debt-laden companies. In some cases the government had to bail-out or buy over companies/corporations. The rationale of bailing-out firms may be related to the employment factor and worry of the collapse of firms which may hinder the government's effort to eliminate the burgeoning NPL and improve corporate performance.

3.0 ALTERNATIVE ECONOMIC MEASURES TO FINANCIAL CRISIS

The above sections describe the factors that caused the financial crisis in the United States of America and Southeast and East Asia economies. Except in the cases of Indonesia, Thailand and South Korea, the economic policies executed by the governments of Malaysia and US implicitly do not belong to neo-liberal or neo-classical or main-stream types. The government's intervention by implementing expansionary fiscal policy, lowering interest rates, re-structuring or re-arranging the financial system by introducing various measures, bailing-out failed corporate entities and so on are actually against the orthodox economic view. This paper believes that the mentioned governments realized that the main-stream economics view on reflating an economy from the crisis, is to rely on market adjustment however the market adjustment was not sufficient or totally effective in dealing with the latest version of the economic crisis. By allowing the market itself to correct the disequilibrium it may take a longer time for the economy to move to equilibrium or depart from the crisis range or may not happen and the economic situation may get worse. Given the soaring rate of unemployment, corporate failures, banks facing illiquidity or on the brink of bankruptcy, real GDP growth declining and other related crucial economic variables showing a miserable trend, the governments had to step in before the crisis got worse. The policies implemented by the governments, such as in the US and Malaysia are an alternative economic policy or what this paper describes as a heterodox economic policy.

The heterodox economic policy is defined as economic measures taken by the government in addressing the inability of the orthodox economic policy (mainstream economics) in tackling the impact of the balance of payment or currency or financial crisis on the real economy. There are two parts of the policy, i.e the policy related to the internal economy and the policy related to the external economy. The policy on the internal economy basically refers to the government's intervention in the real and financial sectors. Given the soaring unemployment rate, widely corporate failures, banks facing illiquidities, real GDP growth declining and other related crucial economic variables, the government has to step in before the crisis gets worse. Policies of the internal economy such as (1) price adjustments via implementation of income policy - price and wage control in order to achieve disinflation or in other words to reduce inflation rate, (2) containing banks failure by lowering interest rate and thereby reducing the non-performing loans (NPLs) from turning to bad loans and delaying bankruptcies of consumers and firms, (3) re-classification of non-performing loans from short to long term to reduce banks and corporates failure; (4) related to 2 and 3, establishing institutions such as an asset management company vehicle to clear off bad loans from the banking sector and also establish a special purpose vehicle to recapitalize the weak banks; (5) bailout corporate entities where possible to reduce pressure on the labour market; (6) reduce speculation in asset markets (equity/stocks) by restricting short-term selling and (7) implementing budget deficit until the market confidence re-emerges or corporate sector starts to re-invest. In addition to the mentioned policies, the government has to improve the financial system because in any financial crisis the main culprits are the financial institutions. Therefore the sector needs to be regulated and supervised effectively and efficiently. The financial or banking acts need to be restructured or revamped or repealed and the "power" of financial regulators need to be increased. The purpose of financial regulation is to promote national growth and competitiveness, to promote efficient resource allocation, to maintain monetary and financial stability, to protect the interests of depositors/investors and to minimize financial crimes. Innovation and development of financial products are vital and efficient in mobilizing capital/savings. However the government needs to study the risk and the impact of the new product to the entire financial system.

On the other hand, the policy for the external economy includes matters such as imposing capital control either on the inflow or outflow of portfolio investment. Portfolio investment is undesirable during “the boom period” or during the higher demand for financial assets or when the prices of assets are escalating. The inflow of foreign portfolio investment will actually further aggravate the enlarged demand of the financial assets contributed by the local investors. Since the portfolio investment may cause more harm than good, the government or central bank need to control the capital. This has been shown in the Asian and Mexican crises in which the balance of payments was determined by the capital account rather than the current account. The current account of both regions during the period were in deficit. The inflow of short-term capital financed the current account deficits which was not a reliable move. The currency control is also a desirable policy when the government is unable to beat the speculators. If a country adopts a pegged or fixed exchange rate system without any control on currency trading then the exchange rate is prone to currency speculation. In general the stock of international reserves in a developing countries particularly are unable to ward off any speculation of their currencies. If there is a control on capital and on currency trading in offshore markets, a stable foreign price will be preserved and the fiscal and monetary policies would be more effective in dealing with the crisis or reflating the economy. There are lots of arguments as to what extent is the effectiveness of capital and currency control and how these measures assist the macroeconomic policies to promote economic recovery.

From the experience of Malaysia, the standard macroeconomic policies were inadequate to correct economic imbalances that were caused by the currency-cum-financial crises. Since macroeconomic policy influences a limited number of economic fundamentals, i.e indicators of macroeconomic stability such as interest rate and real GDP growth, therefore other economic policies which focus on certain aspects of the economy should be considered. In the case of US, the government did not exactly follow the mainstream economic solutions. The government implemented a massive fiscal stimulus program to eliminate the economic depression, decreased and maintained a low level of interest rate, introduced Troubled Assets Relief Programme (TARP) to clear off the toxic assets from the financial system and bailed out some major financial institutions including a few private companies, i.e automobile firms.

What has been shown in the case of Malaysia in 1998 and in the US in 2007 is that mainstream economics seems to have failed in offering trusted remedies for the depressed economies. The ambiguous assumptions of mainstream economics such as perfect competition in terms of market, information, agents decision-making process and so on are unrelated to the real world. As advocated by Post-Keynesian as well as New Keynesian economics the real economy is subjected to imperfect competition. The imperfect competition produces multiple equilibrium in all ranges of the economic sectors. The financial crisis is related to market failure (private sector). The market failure is actually attributed to the government’s failure in looking at or supervising the sector particularly the financial sector. The government’s policies in liberalising the financial sector including allowing the creation of various types of financial products without examining the possible risks brought by the products is regarded as one of the main causes of the financial crisis. The government had failed to foresee what would be happen in the future due to the deregulation of the financial sector and permitted new financial products to be created and traded in the economy without knowing the risks carried by those products. So the solution of the financial crisis is primarily to check the financial liberalization and/or capital account convertibility

policies. Factors of cronism and favouritism in government projects or privatisation projects should also be blamed.

The Rationale of Capital Control

In international finance, capital control is not a new issue. Industrialised countries have used capital controls to check fluctuations of the exchange rate. Under the Bretton Woods system, capital control was an integral part of the system for ensuring the stability of the exchange rate. The maintenance of capital controls had been authorised in the Articles of Agreement negotiated at Bretton Woods in order to reconcile exchange rate stability with other goals: in the short run, concerted programmes of post-war reconstruction; in the long run, the pursuit of full employment (Eichengreen 1996: 188). After the collapse of the fixed exchange rate regime under Bretton Woods, the flexible exchange rate system gained popularity. Since then particularly in industrial countries, currency and capital controls on international capital flows have been eliminated gradually.

Capital account convertibility refers to the availability of foreign exchange to a country's residents to purchase assets abroad, or to non-residents to purchase assets in the country. It also implies allowing residents to accept foreign currency for assets that they wish to sell to non-residents, and vice-versa. In other words, capital account convertibility means lifting up any forms of control on international capital transactions (financial assets) and freeing currency transactions. There are many forms of capital restrictions from direct control inflow or outflow to indirect control of the capital inflow or outflow. This broad definition suggests that it will be difficult to generalize about capital controls because they can take many forms and may be applied for various purposes (Bakker, 1996). Controls may take the form of taxes, price or quantity controls, or outright prohibitions on international trade in assets. Example of controls: Chile requires non-interest-bearing reserves against certain capital inflows; Switzerland limits interest payments to foreign owners of claims; France and Japan – prohibit residents from purchasing foreign securities except through domestic financial institutions. Other examples of forms of capital control include rationing foreign access to the new issue market and limiting domestic financial institutions foreign currency tradings (including swapping)(Cooper, 1999).

Capital controls are not the same as exchange controls (restriction of trade in currencies), but the two are closely related. Although currency and bank deposits are one type of asset, exchange controls may be used to control the current account rather than the capital account (Neely, 1999). For example, the government may require importers to buy foreign exchange from them (rationing 'scare' foreign exchange), and/or not allow exporters to deposit national currency (export earnings) in foreign banks offshore. The main purpose of this kind of exchange control is to limit speculation on the currency.

Capital control, as a policy instrument was an alternative measure and as the last resort to curb the high swings of portfolio capital inflow and volatile exchange rates. The UN Conference on Trade and Development (UNCTAD) stressed that developing countries needed to make use of capital controls to prevent and manage financial crises. In fact, UNCTAD had consistently warned about the dangers of financial liberalization and the risks posed by allowing freedom of the inflow and outflow of funds. Again in 1998, UNCTAD argued that developing countries needed to protect themselves against international financial instability with the application of capital control since the measures constitute a proven technique for dealing with volatile capital (UNCTAD, 1998). This type of control or restrictions on capital movements will in some ways install greater autonomy in the making

of macroeconomic policy especially monetary policy (Tobin, 1993)⁴. Neo-classical and free trade doctrine advocaters are against the policy of capital control. They stress that the countries should maintain capital account convertibility (and open further) and adopt the floating exchange rate as well as implement a prudent macroeconomic policy to counter any macroeconomic (financial) instability which may occur. However, what is meant by prudent macroeconomic policy? Furthermore, sound macroeconomic policies do not handle the huge volatility of capital movement effectively.

The capital control policy which re-emerged since the policy packages were prescribed to Indonesia, South Korea and Thailand by the International Monetary Fund (IMF) in 1998 failed to contain the impact of the financial crisis. Moreover the package prescribed by the IMF generally resulted in more trouble for the receiving economies such as in Indonesia and countries in Africa and Latin America in the 1980s. The package which comprised of a substantial fiscal contraction and tight monetary policy coupled with financial reforms had been criticized. It has been realized that there was little need for sharp fiscal contraction in an economic environment where domestic saving rates remained high and the investment rate was falling. The policy response of high interest rates and tight control of fiscal spending made matters worse rather than better. While lowering interest rates would improve the servicing of domestic currency loans, but at the same time, it would lead to greater exchange rate depreciation and further deterioration in bank balance sheets. In the IMF package prescribed to the affected countries (excluding Malaysia), the economy had to run tight monetary and fiscal policies to defend the exchange rate. The IMF policy was less workable. With high interest rates, the currency of the receiver countries of IMF packages continued to depreciate. Furthermore, the packages aggravated the soundness of banks and caused loss of confidence in the financial system. Stabilizing the economies by exchange rate stability for restoring investor confidence was a doubtful remedy. Funds attracted by high interest rates are usually short-term and speculative; trying desperately to attract these funds ultimately heightens the risk of re-igniting chaos. Moreover, in as much as economic growth has dropped sharply in countries hit by the crisis, investor confidence cannot be restored in any true sense in this way.

Since the US economy was in disarray and uncertainties in EU economies due to the debt crisis, so the future profit expectation in investing liquid assets in those countries plunged. Investment banks, trust funds, hedge funds and other related institutions have moved commodity markets and also enlarged investment in portfolio markets in emerging economies such as in Brazil, Mexico, members of ASEAN, Hong Kong, South Korea and South Africa since 2009. The heavy influx of the investment has caused appreciation of currencies and implicated macroeconomic stability and this had prompted the countries to introduce capital control policies to safeguard their economies. For instance, Bank Indonesia in May 2010 had imposed measures in discouraging short-term debt inflows. Also the central bank had set a one-month minimum holding period for investors in its bills last week. The South Korean government on 13 June 2010 had also tightened rules on currency derivatives to reduce volatility on Won. The rules are expected to come into force in October 2010 in which the government would set a ceiling of 50 per cent of equity capital for currency derivatives positions of domestic banks and a 250 per cent ceiling for foreign bank branches

⁴ As quoted by Tobin (1993), losses of national macroeconomic autonomy are of two kinds. First, capital mobility surrenders some autonomy to the rest of the world, specifically to the foreign policy makers who determine world interest rates and the other attractions of external assets. Second, capital mobility gives considerable power to speculators who can generate excess volatility of exchange rates in the same way that they produce excess volatility of stock prices.

to account for their typically much lower capital. The Indian government had proposed a capital-gains tax on stock trades. India's move was similar to one by Pakistan on June 5, 2010. Other countries such as Taiwan, Brazil, Colombia and Russia have already tightened rules on inflow or outflow of (foreign) portfolio capital. The Monetary Authority of Singapore (MAS) plans to review its rules for the fund management industry. MAS had set up a department to supervise and drive regulatory policies on fund management activities.

The IMF which was against capital control measures has now realised that the measures are desirable in order to check unwanted impact of cross-border financial flows. One justification for capital controls is to prevent the inflow of hot money from boosting the value of the home currency excessively, thereby undermining competitiveness. Another is to reduce vulnerability to sudden changes in financial-market sentiment, which can wreak havoc with domestic growth and employment. The IMF has only now acknowledged that developing countries with capital controls were hit less badly by the fallout from the sub-prime mortgage meltdown. The capital controls in countries such as Chile, Colombia, Taiwan and Malaysia have shown the relevance of the policy. Taiwan's use of administrative measures that rely heavily on close monitoring of flows may be inappropriate in settings where bureaucratic capacity is more limited. Similarly, Chilean-style unremunerated reserve requirements may be easier to evade in countries with extensive trading in sophisticated derivatives. Indeed as recently as November 2009, the Brazilian government had announced an imposition of temporary tax on inflows of speculative capital. Controls on foreign capital into emerging economies can be part of the policy options available to governments to counter the potential negative economic and financial effects of sudden surges in capital. In 1942, when working to establish the International Monetary Fund, John Maynard Keynes said the "control of capital movements, both inward and outward, should be a permanent feature of the post-war system."

Portfolio capital is different with loans and foreign direct investment (FDI) in terms of contribution to economic development, impact on prices and exchange rate. The most outstanding feature of portfolio investment (FPI) as opposed to FDI and external loan, is that the FPI ("hot money") can reverse in a very short time. When FPI have found their way into the banking system and have pushed up domestic expenditures and increased the current account deficit, their reversal can affect the domestic economy through a decrease in asset prices, a jump in interest rates, liquidity problems in the banking sector, or a depreciation of the currency (Corbo and Hernandez, 1996). Furthermore, if the central bank does not react quickly enough and the stock of international reserves is low, the reversal may cause a balance of payment crisis.

The FPI can cause inflation of asset prices (including consumer prices) and provoke interest rate hikes. These matters stimulate a "chain-reaction" and "herd behaviour" in the asset market. Due to the expectation of an increase in future returns on investment, domestic investors further pour their money or savings in the market; consequently a "bubble" will be created in the market. If future expectation of making profits falls, then foreign (domestic) investors will leave the market by selling their domestic stock holdings and buying foreign currency. The general stock price index will fall and, depending on the exchange rate system, either a loss of international reserves and an increase in domestic interest rates, or a depreciation of the nominal exchange rate, or both may occur. If interest rates, asset prices, or exchange rates fluctuate too widely it can be very damaging for the economy because (i) high interest rates will increase corporate failure (non-performing loans may accelerate) and, (ii) appreciation of currency value will decrease competitiveness or profitabilities of

exporting and import-competing sectors, current accounts of balance of payment will deteriorate thereafter. The other impact of FPI is that it will induce a diversion of resource allocation (deposit) in the banking system from the productive to the unproductive sector. In other words, the resources move from the tradable to non-tradable sectors, and the shifting will harm the real economic growth in the long run, which is exactly what happened in Malaysia prior to the Asian crisis.

Malaysia: The Logic of Capital Control

As mentioned earlier Malaysia imposed a capital control on the outflow of portfolio investment on 2nd September 1998. Long-term flows and FDI were not regulated. The government had also imposed an exchange control to disallow non-residents from holding the ringgit either in the form of hard currency or in bank accounts in offshore markets.

The main objective of the capital control in Malaysia was to delay a fall in international reserve. International reserve is a part of the monetary base. A fall in the reserve, means monetary aggregates will be unstable and might create illiquidity in the financial system. The monetary base or high power money (M^B) consists of domestic credit (D) plus international reserves or foreign assets (F) held by the central bank, as given by the equation $M^B = D + F$. A change either in international reserves and domestic credit will influence the monetary base. D is a 'control variable', which means that a government can control expansion (or accumulation) of domestic credit through interest rate policy or credit rationing. But F is an 'exogenous variable', that is, it depends on external sector positions (balance of payments account) as represented by the equation $F = CA + KA$, where CA=current account and KA=capital account. To simplify the matter, we decompose the KA into two groups, non-speculative capital F_{NS} and speculative capital (FPI, hereafter F_S). We can rewrite the equation and read as $CA + [FDI + F_{Loan} + FPI] = F$. A change in F will reflect changes in D and M^B . If we assume that a deficit in CA is offset by F_{NS} , thus F will be equal to F_S . Therefore the monetary base is entirely influenced by the FPI⁵. So it must be true that $M^B = D + F_S$. Control of the F_S allows the government to manage the monetary sector more effectively. This is done by delaying a fall in international reserves through the outflow of F_S and allows accumulation of international reserves through the current account and non-speculative capital. Therefore, the central bank, Bank Negara Malaysia (BNM) will have greater freedom in implementing monetary policies without worrying about the accumulation of reserves from the speculative market. Secondly, the policy of capital control will permit the economy to re-build international reserves via other components of balance of payments. Since the outbreak of the financial crisis in July 1997, the Malaysian economy had run losses in international reserves particularly from the outflow of portfolio capital. Thirdly, capital control can avoid a liquidity or credit crunch in the economy. The reason as mentioned above is the delay in a fall in international reserves. And lastly, the policy will install predictability in the exchange rate.

The main objective of Malaysia's exchange control on the other hand was to regain control of the ringgit from speculators and manipulators in the international foreign exchange market (Mahathir, 2000). This was done by 'freezing' the external ringgit accounts of the non-residents in Malaysia. Non-residents were not allowed to sell or lend the ringgit to other non-residents but could invest their funds freely in the country. Thus, the currency traders were

⁵ The movement of F_S is not only influenced by the exchange rate but also by money supply growth. In Malaysia, the main factor influencing money supply growth (and exchange rate stability) in pre-crisis and during the crisis is the short-term capital (FPI) (see Bank Negara Annual Report 1993 and 1994).

unable to shortsell the ringgit and change its exchange rate. Only the government could determine the exchange rate.

A combination of capital control and exchange control had increased the degree of independency of the monetary policy. The exchange control assisted the effectiveness of the capital control by alleviating speculation on the RM in the international foreign currency market. Those controls allowed BNM to embrace the monetary sector firmly. The measures also reduced sterilization costs to the bank. The policy of exchange and capital control granted the government a way to deal with the economic recession more efficiently.

4.0 CONCLUSION

The global finance and the impact of US' economic crisis on the world economy to a certain extent rang the bell to the governments around the world that excessive financialization and a complete capital account convertibility without proper regulations or active monitoring as well as good surveillance in place by relevant authorities will damage the whole economy. The cost of the financial crisis to the economy was not only in the US but also experienced greatly by Asia and Latin America. Roughly, the cost of repairing the financial system particularly accounted about more than 10 percent of the GDP. Furthermore, the economic condition will be stagnated with lower real GDP growth rate, escalating inflation rate, the soaring unemployment rate and the increasing incidence of poverty. The market (or economic) confidence will drop internally and externally. In the case of US the cost of financial crisis in absolute terms was even larger to developing countries.

Eventhough the crises in the US and Asia were different in terms of the origin of the crisis, however the policy which was embarked by Malaysia for instance could provide some lessons in dealing with the financial crisis. One main lesson that countries in East and Southeast Asia have learnt is that opening capital accounts (capital account convertibility) particularly the inflow and outflow of short-term capital need to be monitored and the movement of the capital need to be guided or monitored with some element of capital or exchange controls. The control is essential presumably to ensure that movement of the capital will not significantly disrupt producers and exporters in setting prices of the goods. Capital inflows in the form of foreign direct investment in production activities are welcomed by most countries in the world and the capital is most desirable than international short-term capital or foreign portfolio capital. It is because the capital stimulate economic growth and the reversal of capital in the short-term is considered nil. On the other hand, inflow of portfolio capital into capital or money markets may be desirable for banking activities. However since the frequency of such capital is very high therefore the rapid reversals of the capitals can lead to domestic liquidity problems.

In a nutshell, given the extensive development of financial products which carry uncertainty risks, the speed of transactions, and a huge portfolio capital movement in the international financial markets, any countries involved in such markets are prone to unexpected currency or financial crisis. Given the extensive financialization and policy of capital account convertibility, these moves have delivered complications to the government in stabilizing the macroeconomy if there is a significant economic shock from internal or external sectors.

References

BANK NEGARA MALAYSIA , *Annual Report 1993*, Kuala Lumpur, 1994.

BANK NEGARA MALAYSIA, *Annual Report 1994*, Kuala Lumpur, 1995.

BAKKER, AGE (1996). *The Liberalization of Capital Movements in Europe*, Kluwer Academic Publishers, Netherland.

CHORAFAS, DIMITRIS N. (2010). *Financial Boom and Gloom The Credit and Banking Crisis of 2007–2009 and Beyond*, Palgrave, UK.

COOPER, RICHARD N. (1999). ‘Should Capital Controls Be Banished?’ , *Brookings Papers on Economic Activity*, no.1, pp:89-141

CORBO VITTORIO and LEONARDO HERNANDEZ, “Macroeconomic Adjustment To Capital Inflows: Lessons From Recent Latin American and East Asian Experience”, *The World Bank Research Observer* 11 (1), February 1996: pp 61-85.

CHANDRASEKHAR, C.P (2009), *An Insider View from George Soros . A Book Review of "The New Paradigm for Financial Markets: The Credit Crash of 2008 and What it Means" by George Soros.*, www.ideaswebsite.org.

EICHENGREEN, BARRY, *Globalizing Capital: A History of the International Monetary System*, New Jersey: Princeton University Press, 1996.

JOHNSON, S (2010), *The 13 Bankers. The Wall Street Takeover and the Next Financial Meltdown*, Pantheon, New York.

MAHATHIR, MOHAMAD (2000). *The Malaysian Currency Crisis. How and Why It Happened*, Pelanduk Publication, Kuala Lumpur, Malaysia.

MASON, PAUL (2009). *Meltdown. The End of the age of greed*, Verso, London.

NEELY, CHRISTOPHER J. 1999. ‘An Introduction to Capital Controls’, *Economic Review*, FRB of St. Louis, November/December, pp.13-30.

TOBIN, JAMES. 1993. “International Currency Regimes, Capital Mobility and Macroeconomic Policy”, *Greek Economic Review*, vol.15 (1): pp 1-14.

UNCTAD. (1998). *Trade and Development Report. 1998*, September, Geneva.

