Money and Sustainability

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Abstract

This paper overviews the political-economics of FIAT and asset-based money. The paper further highlights the presumably syariah standpoint of the impartiality character of money as the fundamental factor that differentiates money from her conventional counterpart. The paper argues that while it is ideal for asset-based money to make a comeback in the interest of holistic wellbeing (*maslahah)* of humankind, it necessarily be complemented by an appropriate financial and regulatory system to safeguard its impartiality, i.e., viz, non-tradable, non-interest bearing, and non-debt financing to avoid the recurring pitfalls which are immanent in conventional financial system. It is hoped this rather concise paper will offer a thought provoking discourse on how syariah principles may present the world a useful ideological construct for a new monetary and financial architecture in light of the global financial crises.

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Introduction

There is increasing agreement among scientists, economists, theologians, politicians, policymakers, social and development analysts alike that wellbeing sustainability[1] of humankind which necessitates the balanced consideration of economic-material progress, socio-cultural properties and the resiliency of ecological systems shall be the crucial driving cause in every national planning agenda and development pursuit across the globe. This paper espouses an ideological thought on the roles of money and monetary system on the wellbeing sustainability of mankind across cultures and nations. This paper is prompted by two observations; i) the recurring international financial crises that results in the disarray of economic progress and human resource development, and ii) high economic-material growth over the past four decades accompanied by inflationary pressures and degradation of ecological resiliency, environmental quality, and socio-cultural properties that might impair the ability of economies to sustain the level of socio-economic development and wellbeing of mankind in the future. We attempted in the paper to emphasize the adverse repercussions of the non-neutrality attribute of conventional (FIAT) money in economic processes and suggest that any new international financial architecture necessarily requires money to be neutral or impartial to ensure wellbeing sustainability. It will be shown that such neutrality of money is indeed consistent with the viewpoints of money as prescribed by the Islamic syariah. Subsequent sections discuss the essence of FIAT and commodity based money. This is followed by a deliberation on the fundamental factors that differentiate the syariah and contemporary held views of money and its implication. The paper ends with an ideological brief on the way forward for the return of commodity-based money, namely gold and silver.

[1] *I define Sustainable Wellbeing as simply the conventionally understood notion of Sustainable Development plus the elements of freedom, happiness and contentment. Sustainable Development is a necessary but not sufficient condition for Sustainable Wellbeing*

The Political Economics of FIAT Money

FIAT money as is well known relates to the type of money that generates value and demand through the legal imposition or assurance by monetary authorities. Hence it is also known as Government's money. Money made of metals or any commodity is also FIAT money if it fetches a higher price than the market value of the base (metal or commodity) itself. The concept of Food Stamps as practiced in the U.S for her welfare program is also a kind of FIAT money.

FIAT money has existed in many parts of the world throughout history including the period of Islamic rule. However, never in the history of mankind, the use of FIAT money is more widespread and pervasive than ever since the demise of the Bretton Woods system in the early 1970s.

Characteristics of FIAT Money

i. Devoid of Intrinsic Value

The most fundamental and unique character of FIAT money is its devoid of intrinsic or organic value. As mentioned earlier, the power of FIAT money is derived from 'legal tender' or put simply the assurance of monetary authorities (central banks) which are legally monopolistic. Like the colors of a traffic light, they do not readily generate any meaning upon sight, but we know a red light means a no go because the law says so.

ii. Tradable with Observable "Price Tags"

This feature is not uniquely attributed to FIAT money but is quite a practice that has been synonymous with contemporary financial system. The birth of nation states give rise to the need for countries introducing own currencies (for national sovereignty) and hence the existence of exchange rates across currencies, albeit a fixed one. Only very few countries are on "dollarization". When money is deemed a tradable commodity, one may trade, hedge or speculate (either in the spot markets, forward markets, futures and options market) in any currencies given his/her anticipation of price movements (e.g. interest and inflation rates differentials) or macroeconomic variables (e.g. trade balance) which are thought not in tandem with exchange rates movements.

iii. Earn Interest Income

This character constitutes the life-blood of conventional financial intermediaries across the globe. However, like the second feature, it is not unique to FIAT money alone. In the conventional sense, interest income is seen as a perfectly productive factor rents which stems from the monetization of utility gain from the use of money capital by economic agents.

The FIAT Money System

Practically, every country in the world now is on FIAT money. The US dollar remains the world's most important FIAT money, given its dominant role in international trade exchange and official reserves of countries. The world's major commodities and even gold itself are all measured and traded in US dollars. Other currencies notably Euro and Yen still have a lot of catching up before they could manifest into a competitive rival to the dominance of the US dollars. To provide an impression of the extent of 'FIATNESS' of the US dollar - the US does not even possess sufficient gold to pay off a portion of the debts of all her foreign investors. As of Sept 30 2007, the country has only $182 billion in custodial deep storage reserves of gold. This compares to some $3 trillion of total foreign holdings of US treasury bills by the end of 2008. Hence, it is quite possible that at redemption time many of her investors may not be able to regain the value of their principals should the downward drift of the US dollars is sustained.

FIAT money is associated with the credit monetary system or fractional reserve banking system which creates commercial bank money as multiples of base money devoid of support by the real sector. For instance, in the U.S., in January 2007, the amount of central bank money was $750 billion while the amount of commercial bank money in circulation was $6.33 trillion.

It will be far stretched to attribute any economic instability to either FIAT money or asset-based money in entirety. Many early macro-economic crises such as the Great Depression were observed when the US were on gold standard. Surely then the gold standard alone cannot be faulted. One has to examine the entire system in which the gold standard operates. Some studies have indeed attributed the Great Depression to 'Bank Runs', where local banks were not able to meet the sudden and massive demand for withdrawals of deposits, ultimately resulting in credit crunch that depressed the economy for a long time. Hence, a return to gold standard or any alternative commodity-based curreny as a remedy to the current financial woes will not be sufficient. An appropriate monetary and financial system that upholds and protects the neutrality of money will be necassary. It will be in contrary to common sense economics should gold or any equivalent asset is brought back as currency but nations or economic agents are allowed to retain their instruments and means to affect exchange rates changes to alter trade competitiveness or to generate profits from currency trading/speculation.

Non Neutrality of Contemporary Money

Economic theory presumes that money serves two major functions, viz measure of value, and means of exchange. This suggests that while money is important to facilitate economic exchanges (production and consumption processes), it is necassarily impartial in the sense that it shall not directly affect economic structure itself. Like the good gasoline, it is supposed to keep the engine running and not to affect the engine case in any particular way. Consider the following system of equations;

$$P_O^D = f(Q_O^M, Q_O^S) \qquad (1)$$

$$Q_O^M = f(P_O^D, Y, Y^* \bar{S}) \qquad (2)$$

$$\bar{S} = f(Q_O^E, Q_O^{Im}, Z) \qquad (3)$$

$$Z = (\frac{M}{M^*} \iota(\Delta P^e - \Delta P^{*e}) \left(\frac{Y}{Y^*}\right)) \qquad (4)$$

Where;

P_O^D	=	Domestic price of good *O*;
Q_O^M	=	Market demand;
Q_O^S	=	Market output supply
Q_O^E	=	Export demand
Q_O^M	=	Domestic demand + export demand
Y	=	Domestic income
$\bar{S}$	=	Spot exchange rate (e.g. RM per USD)
Q_O^{Im}	=	Import demand

M = Domestic money supply
P^e = Expected change in domestic general price level (inflation)

* Asterisk denotes respective foreign variables

The above equations simply illustrate how money, viz changes in exchange rates (Equation 3) eventually (via Equation 2) affects the price determination of marketed goods. Therefore, it is clear that contemporary money fails to be a measure of value as it is itself subject to changes via changes in exchange rates, especially in an economy that adopts a non fixed exchange rate regime. Note also the price or cost of money in a domestic economy is manifested in interest rates, which is yet again a function of money supply and demand, in which case the monopolistic monetary authorities may exert influence through various monetary policy instruments. Contemporary money system and the market mechanism that ensued (such as the various risks management tools) are therefore a logical manifestation of the concept of money that prevails.

The above repercussions are more evident under the present era of globalization where international capital mobility is close to perfect. Any slight change in the pertinent economic variables (interest rates, inflation, money supply and exchange rates) whether real time or expected across countries will induced varying anticipatory reactions amongst economic agents.

Marked fluctuations in interest rates (due to the inflationary FIAT money) and exchange rates inevitably lead to the ingenuity of innovative, sophisticated risk management instruments, such as currency futures and options, and currency swaps that even many economists themselves never really fully comprehend. Such instruments may also act as a double-edge sword – either for good hedging or to provide opportunities for profits via speculative indulgence. As is well known such tools combined with speculative money trading results in perfect capital mobility across the globe that has adverse macroeconomic and wellbeing consequences. The case of the 1997/98 Asian financial crisis is illustrated in Figure 1. The crisis is an apparent case of international capital departure, comparable to Bank Runs, leading to various repercussions in the entire economy. A positive and negative sign in the figure denotes an increase and decrease in the said variables, respectively. The figure attempts to illustrate how foreign investors' insight of weaknesses of the Thai export sector led to the short selling of the Thai Baht (The Baht was tied to the US dollar). The Thai National Bank attempted to counter this selling pressure by buying Baht in the open market until they exhausted all their international reserves. This massive plunge of the Baht led to the fear that the currencies of nearby economies would be next targeted, hence the term 'contagion effect'. The ramification of exchange rate changes in the entire economy was very clear. Millions across South-East and East Asia lost their social security overnight without ever understanding what had happened[2]. Even the late President Suharto of Indonesia was reported to be very baffled on why Rupiah should plunge in such a drastic manner. As 'downstream' social impacts were amplified, human wellbeing took the final beating. Years of economic-materials achievement gone into the wind. However, in the name of sustainable development and human wellbeing, I am not going to show support to high growth policies either.

The apparent reasons for the Asian financial crises have been well documented and understood. Most studies, as anyone would have thought pointed to policy failures or put plainly bad macro-economic management. Whatever you point your finger to, to the writer one thing has been very clear. It is the impartiality or double-edge sword effect of money that underlies the brittleness of conventional financial system. Owing to the pervasive nature of FIAT money system, understandably but quite despondently this double-edge sword effect is not regarded as morally or legally incorrect. For that matter, when Tun Dr Mahathir, the then Prime Minister of Malaysia was calling those economic agents that gains from currency trading and human adversity – George Sorrows and the likes as financial robbers/gangsters, it unmistakably falls into deaf ears.

I agree wholeheartedly with Stefan Brunnhuber, et. al (2005) who asserts that six effects as follows are inherent in the current financial system. This renders the current financial design incompatible with the notion of sustainable development.

1. *Immanent instability of the present financial system*.

   *C*urrency instability poses uncertainties to all economic agents, consequently sub-optimal decisions are made.
2. *Compulsory growth pressure*.

[2] *One fine day in April 1997, just 2 months before the onslaught of the Thai Baht, the writer was at the grand hall of the prestigious Magister Management Program of Gadjah Mada University , Jogjakarta, Indonesia, proudly delivering a public lecture titled "Towards Economic Dynamism: The Malaysian Way". Barely two months later, as the lecture material was about to be published by the university's Jurnal Kelola, the Asian financial crisis struck. What a mockery of our intellect! It was undeniably this deep irony that has prompted the writer to indulge on research affecting money, financial system and sustainability.*

Present monetary and financial system exerts systematic pressure to achieve growth at any costs—regardless of whether it makes sense for the entities involved, or enhances the quality of life in a society or not.

3. *Short-term orientation*.

   The present financial system systematically favors short-term projects and discourages investments in long-term ones.
4. *Unrelenting concentration of wealth*.

   Capital owners benefit over-proportionally relative to factor labor.
5. *Towards capital concentration*.

   Systematic financial incentive towards building huge corporations encouraging a global concentration in many sectors such as energy, car industry, military equipment, and pharmaceuticals.
6. *Loss of social capital.*

   The capacity of a society to create responsibility, trust and solidarity is impaired.

Consequently, the authors argued that money is nowhere value neutral. The mechanisms that drive these effects are inherent in the design of contemporary financial system. The authors further contend that the consequences of such flawed monetary system (i.e. macroeconomic crises) will not be resolved through improved economic policies, technological progress, or by improving a population's educational level. However, the authors did not deliberate any prospective solution to the causes of financial woes that has consistently engulfed the global economy.

Money and Economics from the Syariah Worldview

Before I present what I thought as the syariah standpoint of money in proper, it will be useful to first recognize the underlying philosophy of syariah with respect to economic conduct in general.

The fundamental distinction between syariah-induced and conventional worldviews is with respect to the source of legislations and governance relating to economic matters. The syariah (main source being the muslims' holy book - Quran followed by the sunnah as documented in the book of Hadis) outlines a set of rules and principles specifying the norms of conduct in practically all aspects of life including economic matters. While there are specific detailed rulings on the dos and donts in some aspects, in most areas the rulings and guidelines are principles oriented.

Having said the above, the syariah worldview of economics (both positive and normative economics) is one where mankind shall conduct their economic affairs following a given set of rules and values, i.e., derived from the syariah rulings. Some specifics in economic conduct outlined by the syariah include the forbidden of usury, gambling, *gharar,* and production/consumption of intoxication. In great contrast, the conventional worldview contends that human beings shall have the liberty to follow own values and economic behavior that are deemed desirable, in which case economic theories and analytical (problem solving) tools are then constructed from observed economic behavior. Thus, the benchmark of conventional economic models and theoretical validity is whether or not they can explain and correctly predict a particular real world economic phenomenon.

Moving into the dimension of resource and environmental economics, in the syariah, allocation and use of economic resources is seen from the global community and holistic wellbeing (*maslahah*) perspective. This is in sharp contrasts to the conventional practice where economic and specific interests of inhabitants within an enclosed geo-political boundary (countries) seem to matter most to the domestic policymakers. Such unbecoming game theoretic behavior of nations are however increasingly under challenged and scrutinized by civic-minded international interest groups and consumer groupings, given the advent of sustainable development worldview, globalization and global environmental issues that can only be handled through a global platform (e.g. the UN Convention on Climatic Change and Kyoto Protocol on carbon emissions reductions).

We admit that for now no truly syariah society or Islamic economics exists as yet in reality due to many obvious and understanadable reasons. Nevertheless, given the failures of conventional economic systems and now that the 'cultural superiority' of the West has taken a beating, the world has shown an increasing interest in looking for 'brand new' solutions to the recurring economic woes. This is where it will be worthy to explore the syariah dimensions of money.

Drawing upon the Islamic tradition and early history, the following attributes of money can be derived or inferred from the teachings of the syariah:

Has intrinsic or organic value

This criterion markedly differentiates the syariah standpoint of money from her FIAT counterpart. Money to the former is composed of assets which are readily or universally regarded as valuable by mankind. Man has the natural instinct to consider them as worthy for ownership and exchange in the first instance they are faced with such assets. Such assets are normally scarce, durable, divisible and homogenous. Gold and silver easily fall into the domain of such assets, and indeed they have been used as money throughout the ages.

Means of Exchange

This is a fundamental function of money, as in FIAT money system too. However, for money to function effectively as a means of exchange, money shall not earn interest income (or the term 'mbm' - money begets money). It is worthy to mention here that usury indulgence is a big sin in the syaria. Money has to be used strictly in the productive or active sense, say via profit and risk sharing or in trading via exchange of ownerships of goods.

Non Tradable

Money in syaria is strictly a non-tradable commodity and therefore do not carry "price tags". Such character or money will then ensure that money will be a true unit measure of value, of course the quantum of value will depend on one's willingness to pay to obtain a particular goods or services. For instance, while the level of prices of goods may be determined by the usual supply and demand forces that vary across regions, it will not be influenced by variations in the value of money itself. This will also mean if one works and earns an income in a particular region, the value of his/her real income everywhere will only be influenced by the prevailing general price level in that locality.

Therefore, money in syaria is akin to a single regional or global currency, hence ideally, a common monetary denomination is advocated for the entire world (recall the sharia considers resource allocation from the perspective of a globally integrated economy, not disjointed by man created political boundaries). On the other hand, under contemporary economics, countries tend to have own currencies and its value contingent on monetary policy and a host of relevant economic factors.

Given the aforementioned features of money from the syariah viewpoint or at least during the time of the Darul al Medina (first Islamic state), money shall necassarily be impartial. It creates an ufettered market where government role in money creation and control will be drastically reduced. Perhaps its only major role in monetary policy will be to ensure that the market runs smoothly. As Friedman puts it: "If money consisted wholly of a physical commodity...in principle there would be no need for control by the government at all". Let it be clear, Friedman like his intellectual foe Keynes (advocates government control of money), was actually no fan of commodity based money.

Financial Crises and Money

Having presented the preceding arguments, it is to my deliberation that the recurring financial crises may not at all be attributed to weak economic fundamentals. Weak economic fundamentals may only be a manifestation of an inherent systemic weakness. Essentially they are due to the flaws in the philosophy and use of money, viz:

- Money as a tradable commodity
- The 'mbm' syndrome – money that earns passive interest income
- Unsustainable exchange rate policy
- Unproductive (FIAT-based) investment instruments, including debt securitization

Further, contemporary money and associated financial system through credit creation, interest taking, and illusionary inorganic value leads to:

- *unsustainable economic production*
- *overexploitation of environmental and natural resources*
- *unsustainable consumption, and*
- *socio-economic inequity*

The next logical question is; What is the implication of the presumably syariah perspectives of money (if ever prescribed) on sustainability? Briefly, these shall be observed through the following manifestations:

- Allow only efficient economic activities (real sector transactions, free of influence from inflationary credit or commercial bank money creation) in the entire supply chain of goods and services (resource use-production-final consumption)

- No zero sum game in investment and commercial ventures – this is to ensure both efficient resource allocation and equitable distribution of benefits and risks, viz mudarabah and musharakah or a mix of both. The notion of equitable distribution here relates to the idea that no one party (capital owners or entrepreneur) can be made better or worse off unilaterally. Further, capital owners shall also be obliged to be active partners and possess business and management skills. These are important prerequisites for the enhancement of social capital in a society.

- Safeguard the sanctity of money as a means of exchange and a unit measure of value only, i.e., impartiality of money is attained.

I shall reiterate that the recurring financial crises are not due to the breakdown of the monetarist approach which advocates unfettered market, but fundamentally due to money itself. A return to Keynesians (government intervention) without addressing the fundamental features of money will only bring temporary relief. A mere return to gold or any asset-backed money won't be helpful either. That will only be necessary but not sufficient as long the right system is not being emplaced.

Macro-economics management should not be an 'overly fearful beast' if sustainability is the underlying philosophy. A mix of non-tradable commodity-based money (could be a basket of commodities) and a prohibition of unproductive use of money (i.e. interest taking), and reliance on profit and risk sharing would lead to production and consumption efficiency and sustainability. Equitable distribution of wealth amongst population groups will ensue. Government spending behavior would be discreet and efficient in the sense that it would not run on fundamental or chronic deficits. There will be no easy way and quick fix for 'bad' economic growth. These are seemingly ideal development pursuits but surely not undoable. All we need are conviction to the new thoughts, commitment to reforms across nations, in togetherness we build a new international finance apparatus while gradually we dismantle the entrenched FIAT money and its accompanying institutions. However, should this call to a return to asset-based money seems very far fetch, given the global geo-political constraints and the likely resulting deep shocks in the short-run, a practical compromise in the near run would to identify mechanisms that focus on inhibiting the non-neutrality of FIAT money, such as a review of bank reserves, commercial bank money creation, exchange rates regimes, as well as business/investment dealings not backed by the real economy.

Advocates of Gold Standards

Currently, there are a number of renowned economists and individuals who are strong advocates of the gold standard. Especially notable are the economists affiliated with the so-called Austrian School of thoughts or the Vienna School economists. They promote free markets, where government intervention, especially in monetary policies is reduced or minimal. Such economists include the Nobel Laureate Friedrich Hayek. The former U.S Federal Reserve Chairman Alan Greenspan and notable macro-economists Robert Barro have also expressed support to the return of the gold standards. Way back in 1966, interestingly Greenspan wrote a paper titled "Gold and Economic Freedom" which argued that supporters of FIAT money are advocates of monetary policies that include the financing of government deficits. There are also a number of U.S Congressman who argued for the restoration of gold as money. However, it is important to note here that such calls for the return of gold standards, or asset-back money in general, have not been accompanied by an equally pressing premonition for an appropriate financial and regulatory system to safeguard the impartiality of money, i.e., viz, non-tradable, non-interest bearing, and non-debt financing, amongst others.

Conclusions and Implications

The paper has highlighted the syariah standpoint of the impartiality character of money as the fundamental factor that differentiates money from her conventional counterpart. We have argued that while it is important for asset-based money to make a comeback in the interest of holistic wellbeing (*maslahah)* of humankind, it necessarily be complemented by an appropriate financial and regulatory system to safeguard its impartiality, i.e., viz, non-tradable, non-interest bearing, and non-debt financing to avoid the recurring pitfalls which are immanent in conventional financial system. Neutral money, even under a modified FIAT money system is imperative in any new financial architecture to ensure development and wellbeing sustainability.

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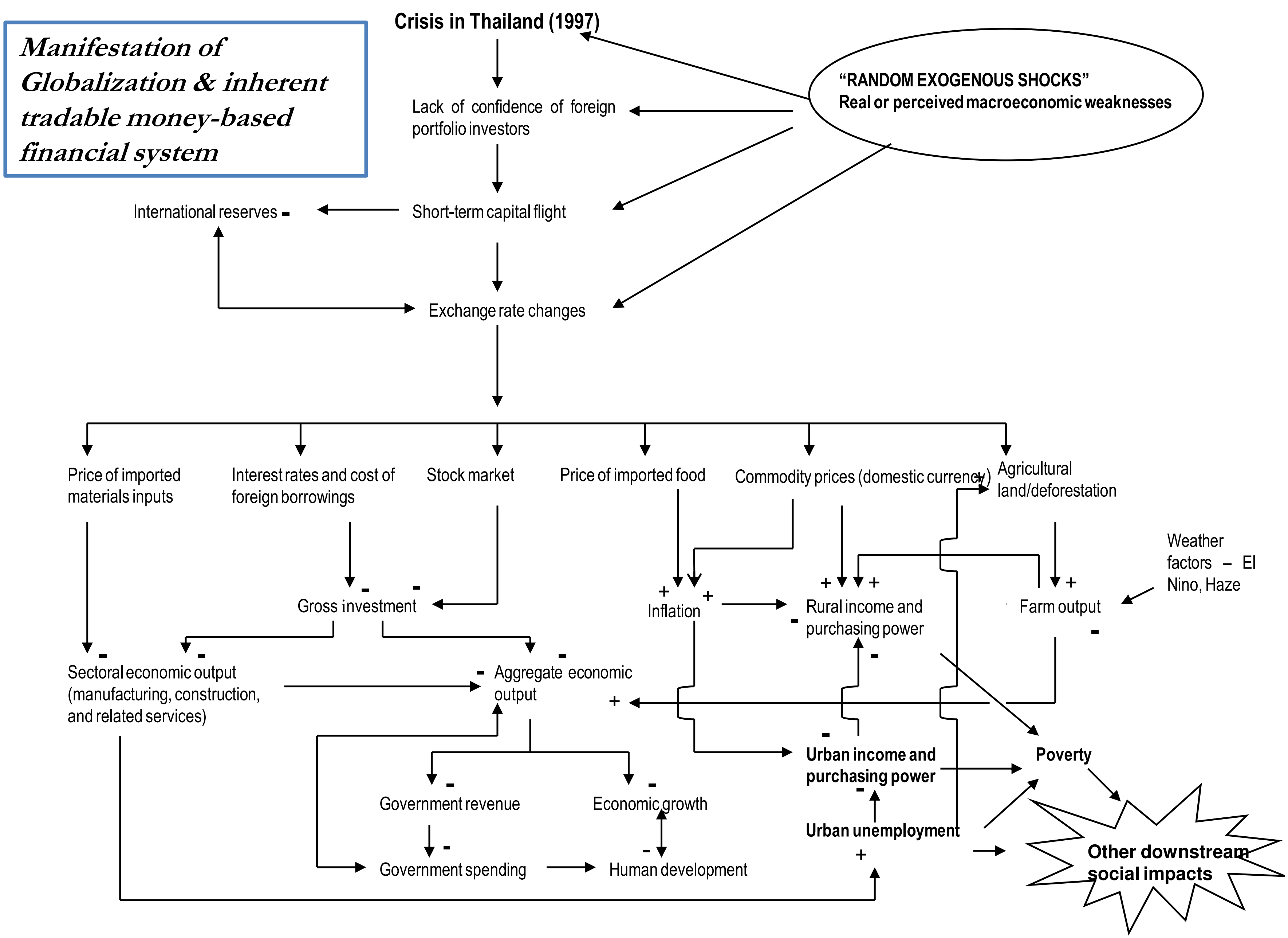

Manifestation of Globalization & inherent tradable money-based financial system
Crisis in Thailand (1997)
"RANDOM EXOGENOUS SHOCKS"
Real or perceived macroeconomic weaknesses
Lack of confidence of foreign portfolio investors
International reserves -
Short-term capital flight
Exchange rate changes
Price of imported materials inputs
Interest rates and cost of foreign borrowings
Stock market
Price of imported food
Commodity prices (domestic currency)
Agricultural land/deforestation
Weather factors – El Nino, Haze
Gross investment
Inflation
Rural income and purchasing power
Farm output
Sectoral economic output (manufacturing, construction, and related services)
Aggregate economic output
Urban income and purchasing power
Poverty
Government revenue
Economic growth
Urban unemployment
Other downstream social impacts
Government spending
Human development