

# **The 2008 Global Economic Crisis and Public Expenditure: A Critical Review of the Literature**

**James M. Gatauwa<sup>1</sup>**

## **Abstract**

The United States of America subprime mortgage market precipitated the occurrence of the 2008 global economic crisis that has made financial disruptions the world over. Therefore there has been the need to evaluate the extent to which this crisis affected economies globally. Hence, the effect of the 2008 global economic crisis on public expenditure was reviewed. The paper concludes that economies whose public expenditures were significantly affected by the crisis were those closely integrated to the US financial markets, those with imprudent macroeconomic measures at the pre-crisis period and those with a high level of export dependence. Also the interrelation between macroeconomic factors and public expenditure as influenced by economic policy indicates that the crisis caused the macroeconomic factors to deteriorate. Hence this led to governments adopting economic policy measures that could curtail the crisis effect on public expenditure.

**JEL classification numbers:** G01, E62

**Keywords:** Global economic crisis, public expenditure, economic policy, macroeconomic factors.

## **1 Introduction**

Public finance is a subject that deals with the financing of state activities in particular, the financial operations of the public treasury. Public finance has been described as a subject that entails financial aspects of the business of government and it has normative and positive elements [1]. The normative perspective as a type of economic analysis, deals with how things should be done, in particular an inquiry of how the quality of fiscal institutions and policies can be evaluated and how their performance can be improved. On the other hand, positive economics is a type of economic analysis that deals with predicting how firms and consumers will respond to economic changes. The public sector

---

<sup>1</sup>University of Nairobi, Kenya.

can be viewed as a public household whereby it has three main objectives namely the allocation function, distribution function and stabilization function [1]. Public finance has various dimensions which include public revenue; public expenditure; financial administration; stabilization, growth & distributive justice; and federal finance. Public expenditure being one of the dimensions of public finance refers to the expenses that a government incurs in its own maintenance, the society and the economy and assisting other countries [2].

In 2008, there was a global economic crisis (GEC) that led to one of the largest and sharpest drop in global economic activity in modern times. Its proximate cause is attributed to the sub-prime mortgage sector in the United States of America (US). A crisis can be described as the unfavorable state of instability or disequilibrium, which is by a large negative deviation from the normal state of affairs [3]. However, the most common features of a crisis is the abrupt change in economic indicators such as interest rates, exchange rates, level of inflation, unemployment rates, gross domestic product (GDP) growth and net exports [4]. The 2008 GEC could be attributed to the persistence of large global imbalances, which were the outcome of long periods of excessively loose monetary policy in the major advanced economies during the early part of the previous decade [5, 6, 7]. However, that notion has been disputed and instead laxity in financial regulation has been attributed to be one of the key causes of the crisis [8, 9, 10].

It is notable that crises have been a feature of the financial landscape for hundreds of years. In the finance literature the terms economic crisis and financial crisis seem to be used interchangeably to refer to abrupt and severe disruptions of the financial systems and markets that have effects on an economy. Furthermore there seems to be no clear conceptual and operational definition of a financial crisis. For instance, the conceptual definition differences of what is a financial crisis can be seen when some studies argue that financial crisis is a combination of other crisis types [11, 12] while other studies argue that financial crisis is a severe disruption of the financial system of an economy [13, 4].

In Kenya, the capital market was affected as evidenced by a 35% decline in the Nairobi Securities Exchange 20-Share index and also a decline in trading of shares by foreign investors [14]. However, the banking sector seemed to have weathered the crisis mainly due to their low level of participation in the global financial markets. The crisis caused rising unemployment and food prices, declining per capita incomes and remittances, fall in commodity prices of tea, coffee, flowers and horticultural products due to a decline in global demand and declining international trade [15]. In summary, the 2008 GEC affected both the public and private sectors of the economy. Hence, the key decision makers in these sectors have the main objective of adopting measures that curtail the effects of the crisis.

The central contention of this paper is that the 2008 GEC affected the public finances of economies worldwide. Studies have been undertaken to examine this relationship and mixed results have been obtained whereby the crisis effect was found to be significant [6, 16, 17, 18, 19, 20]. On the contrary, other research findings indicate that the crisis effect on economies was insignificant except a decline in exports, remittances and foreign direct investment (FDI) [14, 15, 21, 22, 23]. The question is what could be the reasons to the variation of these research findings? There are two main approaches that can be used to answer the question above. First, conducting empirical investigations of the extent to which the 2008 GEC affected the public expenditure of countries. Second, entails undertaking a conceptual analysis on the effect of the 2008 GEC on public expenditure.

This paper presents a foundation for the second approach by analyzing and presenting a critique of the theoretical constructs and empirical information to determine the extent to which the 2008 GEC affected the public expenditure of economies worldwide.

### **1.1 Statement of the Problem**

The US subprime mortgage market is regarded as the epicenter of the 2008 GEC that led to the global repercussions as observed in the instability of financial markets, reduction of private investment and consumption, increased rates of unemployment and trade & manufacturing production declining rapidly with the effect of global economic growth turning negative in the first quarters of 2009 [17]. The relationship between the 2008 GEC and public expenditure has been found to be significant in some studies as highlighted previously. These studies find that the GEC affected the public finances of countries especially the developed economies mainly due to their extensive integration with the US financial market. On the other hand, there are studies that indicate that the relationship between the 2008 GEC and public expenditure is insignificant. These were studies mainly based in developing economies in Africa and Asia with the exception of new European Union (EU) countries in Eastern and Central Europe whereby the findings could be attributed to a weak integration with the global financial markets and weak export dependence.

In the African context, studies on the 2008 GEC and public expenditure mainly find that economies were affected by the 2008 GEC through the real channel in particular a drastic decline in the exports. However, some studies indicate the contrary whereby the crisis had a negative impact on African economies and the challenge is on enhancing post-crisis recovery [24]. It is notable that there is general consensus that Africa's high growth was interrupted by the crisis whereby most countries were hit hard through the real channels such as declining exports and FDI and in some cases also aid, remittances, and tourism receipts hence most key macroeconomic indicators thus deteriorated. However due to the built up reserves and the debt relief prior to the crisis, a number of countries were in a position to adopt counter-cyclical measures when the crisis hit hence fiscal policies played a key role, especially increased government expenditures on infrastructure.

The debate on the relationship between the 2008 GEC and public expenditure is attributed to the following reasons; firstly, differences in the conceptual definition of economic and financial crisis. Most studies on the global crisis seem unclear on the conceptualization of crisis and even the crisis types that have affected economies even though operationalization of crisis has been the external shock on real GDP growth. Secondly, are the research methodology differences. Most studies have adopted a descriptive research methodology yet a causal or correlational type using mathematical models would yield more robust results. Finally, is the level of macroeconomic imbalances (imbalances in the current account & net foreign assets) in a country before the 2008 GEC. Several studies attribute the origin of the crisis as large and external macroeconomic imbalances built up at the pre-crisis period. However, this argument is debatable therefore yielding mixed findings.

### **1.2 Research Objectives**

The first objective of this paper is to examine the empirical literature on the influence of economic policy and macroeconomic factors on the effect of the GEC on public

expenditure. Secondly, the paper seeks to examine the theories applicable in analyzing the 2008 GEC effects on public expenditure.

### **1.3 Organization of the Paper**

This paper is subsequently subdivided in the following sections which include section two discussing the theoretical underpinning of the study in particular the theories of public expenditure and economic crises while section three covers the empirical literature review and conceptual model and finally section four highlights the summary and conclusion.

## **2 Theoretical Literature Review**

### **2.1 Wagner's Law of Increasing State Activities**

This Law states that there is a long run propensity for government expenditure to grow relative to national income hence the growth elasticity of public expenditure is greater than one. All types of governments were seen to exhibit increasing public expenditure irrespective of their sizes or intentions [25]. This means that there is a functional relationship between economic growth and government activities. However it was not clear whether the study referred to an increase in the ratio of government expenditure to Gross National Product or absolute level of expenditure or the size of the public sector in the whole economy. Furthermore, Wagner's law did not present a hypothesis in a mathematical form. However it is assumed that Wagner's focus was on the size of the public sector in the total economy [1] but it is not fruitful to seek an explanation for the total expenditure. This is because it may be far more rewarding to adopt a desegregated approach (an approach which divides the study of expenditures of government) through a study of expenditures of government on capital formation, consumption and transfer payments. Wagner's contribution to public expenditure theories is particularly significant when we consider that before Wagner made his observations, the prevailing view was the notion that as a country grows richer, government activities would have a tendency to decline [26].

This law has given rise to a number of debates that relate to public finance. Firstly, the specification of an appropriate functional form for empirical testing and a means by which the results are to be interpreted. Secondly, in regression analysis, there is a choice between time series models and cross section models to adequately test this law. However, the test of Wagner's law should focus on time series behavior of public expenditure in a country for as long the time period as possible rather than on a cross-section of countries at different income levels [26]. Finally, is on whether Wagner's hypothesis is applicable to developing nations and to a lesser extent to highly mature economies. Wagner's law has posed a challenge to test empirically since it is not clear in its formulation leaving it to economists to use different arguments and statistical tools to test the law and its historical view in relation to explaining the future. Hence it is not clear which variables can be used to explain economic growth and state activity.

## 2.2 Peacock – Wiseman Hypothesis

This hypothesis argues that public expenditure does not increase in a smooth and continuous manner but in a step-like way and a displacement hypothesis is highlighted which explains temporal increases in the ratio of government expenditure to GDP in the United Kingdom (UK) [27]. The hypothesis argues that government spending in the UK did not follow a smooth trend but instead appeared to jump upwards at discrete intervals in particular, high peaks in war times followed by steady paths. This behavior is attributed to the fact that government expenditure depends broadly on the tax revenues and when the society is not being subjected to unusually violent pressures or disturbances, people's ideas about the tolerable burden of government taxation tend to be fairly stable. This has been known as the tolerable level of taxation. Large scale social disturbances, like wars, influx of refugees change the tolerance limit of people to the burden of taxation which arises as a result of increased spending leading to the displacement effect, which shifts expenditures and revenues to new higher levels. So a displacement effect is created when the earlier lower tax and expenditure levels are displaced by new and higher budgetary levels. Even after the event is over, new levels of tax tolerance change and the society feels capable of carrying a heavier tax burden. The level of public expenditure does not return to the low level it was before the event.

The hypothesis does not indicate the statistical test or approach that proves a displacement effect occurring after a large scale social disturbance but rather Peacock and Wiseman relied on observations made in public expenditure against GDP for countries after World War II [28]. Hence formal testing procedures have been used in order to assess the validity of the hypothesis. Statistical testing based on Wagner's law has been done where it involves undertaking a joint test of the displacement hypothesis and also the hypothesis that the share of national income devoted to government spending increases with income [29]. Alternatively, univariate testing of the displacement hypothesis has been done whereby data has been examined in the UK for evidence of significant shifts in the ratio of government expenditure to GDP [28].

## 2.3 Pure Theory of Public Expenditure

This theory began to attract much attention with the wide acceptance of the *laissez-faire* philosophy and the free market mechanism. There is a fundamental distinction between goods that are private and goods that are collective, whereby the private goods can be parceled out among different individuals while collective goods are those that an individual's consumption of this good leads to no subtraction from any other individual's consumption of that good [30]. However, other economists have added to and clarified essential dimensions of the distinction between goods that are private and goods that are public in the sense that they provide various forms of collective benefit. Samuelson's work has been further developed where a foundation has been laid on contemporary definitions of pure public goods, mixed or impure public goods and pure private goods, whereby a pure public good has been defined as being wholly non-rival in consumption (jointness in consumption) and non-excludable [1].

The key argument here is that a good does not become more public or less public in one state of the world versus another [30]. Therefore, there is no reason to believe that the relative value of public goods versus private goods depends on the general state of the economy. Hence neither the original contribution by Samuelson nor subsequent

refinements appear to support the Keynesian assertion that the optimal level for public expenditure is countercyclical with respect to the general state of economic activity. It is assumed that the government forces people to contribute to the production of public goods and then allow its citizens to consume them in order to enhance economic efficiency. It is notable that many public goods are successfully produced in the private sector, hence government production is not necessary and also many of the goods government actually produces do not correspond to Samuelson's definition of public goods [31]. Therefore this theory does not clearly explain the role of the government in enhancing production of a collective/public good.

## **2.4 Theory of Fiscal Policy**

This theory, especially well developed in [1, 32] treatises, states that the goals of fiscal policy extend beyond stabilization since fiscal tools can be used also for redistributing income and for reallocating resources. It is viewed that policymakers have an objective of promoting the social welfare of the citizens. The social welfare does not depend on any single variable or indicator, but on several indicators, some of an economic nature and some of a social nature. The way in which the policymakers rank these indicators change with time or with the government in power. In representative democracies this ranking is assumed to reflect the preferences of the citizens and changes in those preferences [33].

As regards this theory several assumptions have been established [1, 32] whereby the first, implies the existence of an all-inclusive budgetary process. No public finance decision is made outside the budget; or, at least, all decisions, whether in or out of the formal budget are directly or indirectly controlled by the central government. Secondly, when the government makes the budgetary decisions, it is based on the best economic analysis supported by reliable data, on unbiased forecasts, and on accepted economic principles that establish links between changes in policy instruments and changes in policy objectives. Thirdly, government representatives have the public interest of citizens in mind when undertaking policy decisions. Finally, the executive arm of government must have as much control over the policy instruments as it is feasible in a democratic society [1, 32]. The theory of fiscal policy has fundamental weaknesses. First, it has a deep suspicion of governments and its skepticism that policymakers and bureaucrats can be separated from their personal interests and incentives in the pursuit of the public interest and secondly, the theory will have higher validity if better institutions and better institutional arrangements are in place [33]. Therefore, this theory tends to be a normative theory in sense that it tends to state what should be done instead of what usually happens in regards to fiscal policy. Specifically, the theory has not clearly stated what normally occurs in relation to public revenue and spending in an economy unlike the previous theories.

## **2.5 Marxist Theory of Business Cycles**

From the 1840s to the 1860s Karl Marx and Frederick Engels were among the first people to recognize the existence of business cycles. However they did not write a systematic treatise on capitalist crises but their major comments on the subject are spread around their major economic writings and articles [34]. These writings suggest that there is a relationship between crisis and class struggle but the most important change results from Marx's elaboration of his theories of surplus value and accumulation that allows him to

integrate crisis and class struggle [34]. There is consensus amongst Marxist analysts in that capitalism produces two different types of economic crisis. One is the periodic business cycle recession, which is resolved after a relatively short period by the normal mechanisms of a capitalist economy. The second is a long-lasting economic crisis that requires significant restructuring such as institutional change.

Marx's approach to business cycles can be viewed in three stages [35] where the first one involves showing that crises are a possibility in a monetary or a commodity economy while the second stage is found in Marx's analysis of production and circulation in a capitalist economy. Marx further argues that in a capitalist commodity economy periods of profitable accumulation necessarily tend to undermine profitability, and that this blunts both the desire and the ability of capitalist enterprises to promote further accumulation. The third stage of Marx's approach is concerned with why a decline in profitability should lead not merely to a slowdown in accumulation, but to a period in which economic activity contracts [35].

## **2.6 Minsky's Theory of Financial Crises**

This theory was developed in the context of a domestic economy where a post-Keynesian explanation is proposed to be the most applicable to a closed economy [36]. Financial fragility has been theorized to be a typical feature of any capitalist economy and that higher fragility can lead to occurrence of a financial crisis. The theory has described various approaches to financing that firms may choose from depending on their tolerance of risk. There is ponzi finance which can lead to the highest fragility and in hedge finance, income flows are expected to meet financial obligations in every period while in speculative finance, an entity should roll over debt since income flows are expected to only cover interest costs [37]. Minsky's theory has been evaluated in an international economy whereby a vital issue in extending the domestic theory is the possibility that money from one country can be lent or invested in another country [37]. Before the Asian financial crisis, lending and investment to emerging markets became the new focus in the 1990s. This was partly as a result of the recession and falling interest rates in the US and other developed countries in the early 1990s, whereby billions of dollars flowed to countries in Asia, in form of lending to Asian banks and businesses and investing in Asian financial markets. As profits grew, expectations of further profits expanded, which led to further flows of funds, in a speculative, endogenous development of expectations, confirming Minsky's perspective.

Minsky's theory was developed in a domestic context hence being insufficient in applying it on an international context hence requiring some modification. However it can be modified so that, in a global context, financial fragility is increased by the ability of funds to cross national borders and invest in domestic markets; an increase in exchange-rate exposure; and global interest-rate speculation. The movement to the brink of financial crisis can come about from increases in foreign interest rates and decreases in exchange rates. The infrequent event can be contagion and debt deflation can take the form of a debt-exchange-rate interaction. The debt deflation can be worsened by the absence of a global central bank, the absence of coordinated macroeconomic policy, and intervention that reduces aggregate demand [37, 38]. In conclusion, it is notable that this theory was developed in the context of a domestic economy hence posing the challenge of applying it on the perspective of an international economy considering that financial crises involving the international financial system can develop in various ways.

## 2.7 Theories of Coordination Games

The economic choices that individuals make based on the expectations of what others will do is what economists refer to as coordination games. There are various models formulated in support of coordination games such as models on currency crisis and models on bank runs. The currency crises models are often categorized as first, second or third generation. In first-generation models the collapse of a fixed exchange rate regime is caused by unsustainable fiscal policy. The classical first-generation models [39, 40] are related to earlier work on speculative attacks in the gold market [41]. The vital extensions of these early models [42, 43] incorporate consumer optimization and the government's intertemporal budget constraint into the analysis. A key feature of first-generation models is that the government runs a persistent primary deficit. This deficit implies that the government must either deplete assets, such as foreign reserves, or borrow to finance the deficit. It is infeasible for the government to borrow or deplete reserves indefinitely. Second-generation models generally show multiple equilibria so that speculative attacks can occur because of self-fulfilling expectations. Obstfeld's model of 1996 indicates that the central bank minimizes a quadratic loss function that depends on inflation and on the deviation of output from its natural rate [44]. The level of output is determined by an expectations-augmented Phillips curve. The government decides whether to keep the exchange rate fixed or not. Third-generation models emphasize the balance-sheet effects associated with devaluations. It is argued that banks and firms in emerging market economies have explicit currency mismatches on their balance sheets because they borrow in foreign currency and lend in local currency hence facing credit risk because their income is related to the production of non-traded goods whose price, evaluated in foreign currency, falls after devaluations. Banks and firms are also exposed to liquidity shocks because they finance long-term projects with short-term borrowing. Currency mismatches have been observed to be an inherent feature of emerging markets [45].

The model of bank runs [46] sought to explain why banks choose to issue deposits that are more liquid than their assets and to understand why banks are subject to runs. The model has been widely used to comprehend bank runs and other types of financial crises, as well as ways to prevent such crises. It has been argued that an important function of banks is to create liquidity, that is, to offer deposits that are more liquid than the assets that they hold [46]. Specifically, investors who have a demand for liquidity will prefer to invest via a bank, rather than hold assets directly. In conclusion, the theories of coordination games may not clearly indicate a unique prediction about the outcome of a strategic interaction thus having multiple outcomes/equilibria hence this can lead to severe outcomes. This requires the need for macroeconomic policy that can be applied across an economy. Hence these theories do not clearly support an investigation of crisis studies and macroeconomic policy outcomes unless the theories are adjusted to accommodate macroeconomic policy outcomes.

## 3 Empirical Literature Review

### 3.1 Global Economic Crisis and Public Expenditure

The effect of the global crisis on developing economies has been undertaken whereby the findings indicate that the channels of crisis transmission entail lower private capital flows,



declining remittances, reduced aid flows, lower and more volatile commodity prices and smaller world trade volumes [47]. These findings seem to concur with other studies [21] whereby Africa's high growth was interrupted by a severe external shock in the form of the global financial and economic crisis through the real channels such as declining exports and FDI and in some cases also aid, remittances and tourism receipts. However, there are mixed results in the crisis response in developing countries. Some studies contend that aggressive counter-cyclical policies need to be adopted in responding to the crisis [47] and that there is a challenge in adoption of such policies in developing countries while others argue that due to the built up reserves and the debt relief prior to the crisis, a number of African countries were in a position to adopt counter-cyclical measures when the crisis hit [21].

The effect of the 2008 GEC on economies has been investigated in a number of studies. For instance, using a descriptive research design the EU economy was hard hit by the shockwave of the crisis, which emanated and quickly spread from the US, due to the EU's strong export dependence, its integration and role in global capital markets, and large external and internal macroeconomic imbalances that had built up in a number of member States [16]. However other studies while applying a causal research approach, investigate the effect of the 2008 GEC on public finances of new EU states from Central and Eastern Europe [22]. The findings indicate that the direct impact of the crisis on public finances was limited but the severe downturns have strained public finances and increased debt ratios remarkably. These studies on the crisis effect on Europe exhibit variations in the level of significance of the crisis effect which could be attributed to research methodology differences. The differences in the levels of integration with the US financial markets and differences in the levels of export dependence could explain the variation of crisis effect on Western Europe countries and Eastern and Central Europe.

There are studies that focus on the effect of the 2008 GEC on African economies [14, 15, 21] and their findings indicate that the crisis effect was indirect and insignificant although exports declined sharply, remittances and trade reduced remarkably. These findings differ from the experience in developed economies due to prudent macroeconomic policy measures adopted during the crisis period, weak integration to the US financial markets and availability of domestic resources to undertake counter-cyclical policies. However, other studies have obtained different results whereby they show that the 2008 GEC had a significant effect on public expenditure of African economies [24, 47]. These mixed results highlights a discord as to the extent to which the global crisis affected African economies. They contend that the crisis effect was significant due to Africa's adoption of pro-cyclical policies over the years and much focus directed on maintaining low and stable inflation instead of the implications on output. It is notable that there is consensus that the prudent policy measures for post-crisis recovery include adoption of counter-cyclical economic policies and more stringent financial regulation measures.

### **3.2 Economic Policy and Public Expenditure**

The relationship between macroeconomic policy and development during the 2008 GEC has been examined whereby the report contends that the conventional wisdom before the 2008 GEC was that countries experiencing economic turmoil should adopt austerity measures in the form of restrictive monetary and fiscal policies to maintain macroeconomic stability [24]. This view has been supported in that in crisis period countries should adopt restrictive and pro-cyclical economic policies [6, 48]. However, on

the contrary it is argued that counter-cyclical policies are vital for economies Africa included, so as to stimulate aggregate demand in an economy as part of the post-crisis recovery strategy [21, 24]. These mixed findings could be attributed to Africa's history of insufficient borrowing capacity, political economy factors, policy conditions imposed by the international financial institutions and existence of fiscal rules designed to attain debt sustainability [48]. On the other hand, counter-cyclical policy measures have been recommended because they enhance macroeconomic stability.

It is notable that previously the main objective of monetary policy was viewed as the maintenance of low and stable inflation with much attention directed to controlling inflation instead of enhancing output [7]. Similar views have been expressed [24] but there is consensus that in overcoming the crisis effects countries should not only focus on macro-financial stability but also stability in asset prices. In enhancing successful post-crisis recovery, financial regulation needs to be more stringent and prudent so as to control for systemic risk [9, 10]. The level of macroeconomic imbalances has been cited as a possible cause of the 2008 GEC. These imbalances refer to the situation where some countries have more assets than the other countries yet the ideal scenario is whereby there should be equilibrium/no imbalance in countries all over the world. Hence, the 2008 GEC can be attributed to the large and external imbalances in developed economies [6, 7]. However, there are contrary arguments that focusing on macroeconomic imbalances as the cause of the 2008 GEC is misplaced [8, 9, 10] but there seems to be agreement that greater efforts need to be focused on financial regulation measures. This raises questions as to the actual causes of the 2008 GEC apart from the general agreement that the epicenter of the crisis was the US sub-prime mortgage sector.

### **3.3 Macroeconomic Factors, Economic Policy and Public Expenditure**

The crisis had a substantial impact on fiscal positions in the G-20 countries whereby overall deficits were projected to increase by 5.5 percentage points of GDP in 2009 and 2010. The fiscal deficits in 2009 to 2010 were estimated to be larger, in some instances reflecting weaker growth prospects in 2009 before a stronger recovery in 2010 [19]. An IMF report projected a decline in real GDP growth in industrial Asia i.e. Japan, Australia, and New Zealand from 3.2 percent in 2007 to -2.3 percent in 2009; from 5.7 percent to -2.4 percent in Asian newly industrialized economies, that is Hong Kong, China; Republic of Korea; Singapore; and Taipei, China; and from 6.3 percent to 0.7 percent in Indonesia, Malaysia, Philippines, Thailand, and Vietnam [17]. China and India were severely affected, with growth in those countries expected to fall from 13 percent to 8.5 percent and from 9.4 percent to 5.4 percent, respectively. Most countries in Asia responded to the sudden collapse of real activity by easing both monetary and fiscal policies [49].

Developing economies were affected by the 2008 GEC whereby the transmission mechanisms through trade, private capital flows, remittances, aid were similar but the crisis effects varied on a country basis [50]. FDI which was regarded as resilient to the crisis fell dramatically in several countries whereby in Cambodia, net FDI inflows fell by 50 percent in 2009, while in Bolivia, FDI flows reduced sharply in the fourth quarter of 2008 and this pattern continued in the first two quarters of 2009. In regard to remittances there was reduced growth during the second half of 2008 in Bolivia, Kenya and Uganda and/or at the beginning of 2009 in Bangladesh, Bolivia and Ethiopia. The BOP effects was that the current account was badly affected negatively in Democratic Republic of

Congo, Kenya and Sudan by \$1-2 billion while in Cambodia, Mozambique and Zambia the current account was in surplus but turned negative in 2009 [50].

Asset price booms supported through leveraged financing and involving financial intermediaries should be dealt with, since they entail risks for the supply of credit to the economy [17]. Monetary and pro-cyclical prudential policies can help to contain dangerous booms while fiscal space to deal with a potential crisis should be built during upswing and tax distortions favoring indebtedness and leverage should be eliminated [5, 17]. The crisis has reignited the debate on whether economic policy should be concerned with asset price booms and increases in leverage. Hence, monetary policy decisions should be based on a framework that incorporates the longer-term implications of asset-price booms for inflation and economic growth [17].

The Asian region was directly hit when the crisis spread to the real sector and caused the volume of world trade to collapse [49]. Most Asian countries responded to the sudden collapse of real activity by easing both monetary and fiscal policies. The expansionary macroeconomic policies seem to have succeeded in preventing the economies from collapsing. The level of interest rates was high at the onset of the crisis while the conventional monetary policy transmission channel was largely intact thereby allowing a substantial reduction in market interest rates. This indicates the relatively fast economic recovery in countries such as Australia, Korea, and New Zealand. However, most studies [17, 19, 49] have not clearly evaluated the interrelation among the global crisis, economic policy, macroeconomic indicators and public expenditure hence this paper attempts to discuss these interrelationships. However in the finance literature, the effect of the global crisis on public finances has been evaluated.

### **3.4 Conceptual Model**

The conceptual model has integrated the ideas of various theories of public expenditure and economic crisis as discussed previously. The model presents the conceptualized interaction among economic crisis, (independent variable), macroeconomic factors (intervening variable), economic policy (moderating variable) and public expenditure (dependent variable). The model postulates that economic crisis shapes the macroeconomic policy that a country adopts in relation to the level of public expenditure. The macroeconomic factors are expected to influence the levels of public expenditure and also the economic policy will affect the degree of such influence. The GEC is conceptualized as the unfavorable state of instability in an economy. Public expenditure is represented by amounts spent on government acquisition of goods and services for current use; government acquisition of goods and services intended to create future benefits, such as infrastructure investment or research spending; and government expenditures that represent transfers of money. Economic policy is represented by monetary and fiscal policy. Macroeconomic factors are determined by level of unemployment, inflation rate, GDP growth, the exchange rate between the local and foreign currency, level of exports to imports and the BOP.

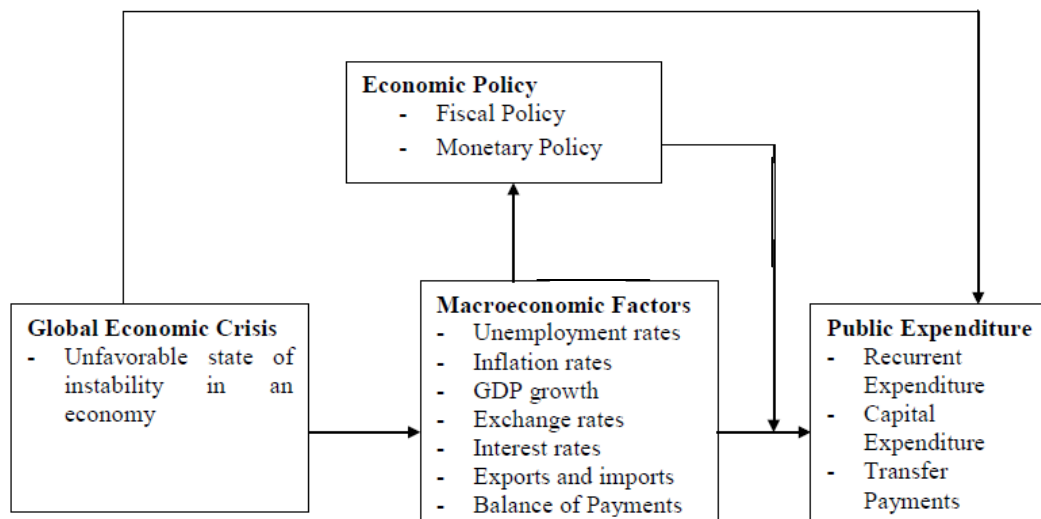


Figure 1: Conceptual Model

Source: Researcher (2014)

#### 4 Summary and Conclusion

The research on the relationship between the 2008 GEC and public expenditure has ignited inconclusive debate on the significance of the crisis effect on economies the world over. Several studies indicate that the 2008 GEC had a significant effect on public expenditure. This has been attributed to a high level of integration of the affected economies with the US economy. Also the macroeconomic structure of a country in the pre-crisis period could explain the significant crisis effect on public expenditure of economies. On the other hand, some studies indicate that the crisis effect on economies was insignificant. These findings could be attributed to prudent macroeconomic measures at the pre-crisis period. However it is notable that most African and Asian countries experienced a decline in exports and FDI and in some cases also aid, remittances, and tourism receipts hence most key macroeconomic indicators were adversely affected.

It is notable that economic policy being a government tool that enhances economic growth has influenced the relationship between the 2008 GEC and public expenditure. The existing literature presents divergent views on the application of economic policy in the crisis period. Most studies argue that countercyclical measures are preferable in curtailing the crisis effect on public expenditure since these measures tend to stimulate aggregate demand in an economy. On the other hand, there are studies that argue that pro-cyclical measures need to be adopted as a way of implementing restrictive and stringent measures that could reduce the adverse crisis effect. Pro-cyclical policy measures have been less popular in recessions and crisis periods because they tend to restrict post-crisis recovery. However there is general consensus that financial regulation should be prudently undertaken so as to enhance price stability plus macro-financial stability.

The interrelation between macroeconomic factors and public expenditure as influenced by economic policy indicates that the 2008 GEC caused the macroeconomic factors to deteriorate. This entails increased unemployment rates, increased inflation rates, a drastic decline in GDP growth, adverse exchange rates, increase in interest rates, decline in

exports and deficits in BOP in most countries. Hence the empirical literature indicates that the macroeconomic factors caused governments to adopt economic policy measures that could curtail the crisis effect on public expenditure. The economic policy measures adopted include expansionary policies that would enhance the stimulation of aggregate demand in economies as a way of mitigating the adverse crisis effects even at the post crisis period.

The review of public expenditure theories indicates that Wagner's Law and Peacock and Wiseman hypothesis poses a challenge of empirical testing since they are not clearly formulated. The pure theory of public expenditure does not seem to support the Keynesian assertion that the optimal level of public expenditure is countercyclical in relation to the general state of economic activity while the theory of fiscal policy tends to be normative since it tends to state what should be done instead of what usually happens in regards to fiscal policy while not being clear on public revenue and spending. The review of economic crises theories indicates that the Minsky's theory was developed in the context of a domestic economy hence the challenge of applying it on the perspective of an international economy considering that financial crises involving the international financial system can develop in various ways while the theories of coordination games may not clearly indicate a unique prediction about the outcome of a strategic interaction thus having multiple outcomes/equilibria hence this can lead to severe outcomes. This requires the need for macroeconomic policy that can be applied across an economy.

## References

- [1] R. A. Musgrave, "The Theory of Public Finance," New York: McGraw-Hill, 1959.
- [2] H. Bhatia, "Public Finance," Vikas Publishing House PVT Ltd, 26 Ed, 2008.
- [3] M.S. Kimenyi, and G.M. Mwabu, "Policy Advice during a Crisis," KIPPRA Discussion Paper, 2004, No. 44.
- [4] Y. Ishihara, "Quantitative Analysis of Crisis: Crisis Identification and Causality," World Bank Policy Research Working Paper, 2005, No. 3598.
- [5] J. Taylor, "The Lack of an Empirical Rationale for a Revival of Discretionary Fiscal Policy," American Economic Review: Papers and Proceedings, 90(2), 2008, pp 550 – 555.
- [6] O. Svante, "Public Finances and Monetary Policy," 2010, <http://www.bis.org/review/r100428d.pdf>.
- [7] O. Blanchard, "Lessons of the Global Crisis for Macroeconomic Policy," IMF Working Paper, Research Department, 2010.
- [8] E. Truman, "Lessons from the Global Economic and Financial Crisis," Keynote Address, at the Conference G20 reform initiatives: Implications for the Future of Regulation, co-hosted by the Institute for Global Economics and the IMF, Seoul, Korea, 2009.
- [9] S.W. Lewis, "Macroeconomic Policy in Light of the Credit Crunch: The Return of Counter-cyclical Fiscal Policy?" Oxford Review of Economic Policy, 26(1), 2010, pp 71 – 86.
- [10] C. Borio, and P. Disyatat, "Global Imbalances and the Financial Crisis: Link or no Link?" BIS Working Paper, 2011, No. 346.
- [11] J. Aziz, F. Caramazza, and R. Salgado, "Currency Crises: In Search of Common Elements," IMF Working Paper, 2000, WP/00/67.

- [12] J.D. Sachs, and W. T. Woo, "Understanding the Asian Financial Crisis," in Woo, Wing Thye, Jeffery D. Sachs and Klans Schwab (Eds.), 2000.
- [13] IMF, "World Economic Outlook," IMF: Washington, DC, May 1998.
- [14] F.M. Mwega, "Global Financial Crisis Discussion Series," Overseas Development Institute, 111 Westminster Bridge Road, London, 2010.
- [15] G. Kirori, and T.W. Kiriti-Nganga, "Global Economic and Financial Crisis and Trade: Kenya's Experience," AERC Conference Paper, 2009.
- [16] EC, "Public Finances in EMU – 2009," European Economy 5/2009.
- [17] IMF, "World Economic Outlook: Sustaining the Recovery," IMF: Washington, DC., 2009.
- [18] UNCTAD, "World Investment Report 2009," New York and Geneva, 2009.
- [19] M. Horton, M. Kumar, and P. Mauro, "The Stage of Public Finances: A Cross-Country Fiscal Monitor," IMF Staff Position Note, 2009, No. 09/21.
- [20] M. Brownbridge, and S. Canagarajah, "How Should Fiscal Policy Respond to the Economic Crisis in the Low Income Commonwealth of Independent States? Some pointers from Tajikistan," World Bank Policy Research Working Paper, 2009, No. 4970.
- [21] Z. Brixiova, "Africa in the Post-crisis Global Economy: Turning the Recovery into Strong, Sustained and Shared Growth," The Committee of Ten Policy Briefs (C-10 PB), 2010, <http://www.afdb.org>
- [22] K. Staehr, "The Global Financial Crisis and Public Finances in the new EU Countries from Central and Eastern Europe," Bank of Estonia, Working Paper Series, 2010, No. 2.
- [23] B.M. Misra, "Global Financial Crisis and Monetary Policy Response: Experience of India," Regional High-Level Workshop, Dhaka, Bangladesh, 2009.
- [24] UNCTAD, "The Financial Crisis, Macroeconomic Policy and the Challenge of Development in Africa," Geneva, 2010.
- [25] A. Wagner, "Grundlegung der Politischen Ökonomie," 1863.
- [26] M. Henrekson, "Wagner's Law: A Spurious Relationship?" *Public Finance*, 48(2), 1993, pp 406–415.
- [27] A. Peacock, and J. Wiseman, "The Growth of Public Expenditure in the United Kingdom," Princeton University Press, Princeton, 1961.
- [28] O. Henry, and N. Olekalns, "The Displacement Hypothesis and Government Spending in the United Kingdom: Some New Long-Run Evidence," The University of Melbourne Working Paper, 2000, No. 750.
- [29] J. Diamond, "Econometric Testing of the Displacement Effect: A Reconsideration," *Finanzarchiv*, 35(3), 1997, pp 387 – 404.
- [30] P. Samuelson, "The Pure Theory of Public Expenditure," *The Review of Economics and Statistics*, 36(4), 1954, pp 387 – 389.
- [31] R. Holcombe, "A Theory of the Theory of Public Goods," *Review of Austrian Economics*, 10(1), 1997, pp 1 – 20.
- [32] L. Johansen, "Public Economics," Amsterdam: North Holland Publishing Co., 1965.
- [33] V. Tanzi, "Fiscal Policy: When Theory Collides with Reality," CEPS Working Document, 2006, No. 246.
- [34] P. Bell, and H. Cleaver, "Marx's Theory of Crisis as a Theory of Class Struggle," *The Commoner*, 2002, <http://www.thecommoner.org>
- [35] T. Evans, "Marxian and Post-Keynesian Theories of Finance and the Business Cycle," University of Applied Sciences, Berlin, 2001.

- [36] H.P. Minsky, "John Maynard Keynes," New York: Columbia University Press, 1975.
- [37] M. Wolfson, "Minsky's Theory of Financial Crises in a Global Context," *Journal of Economic Issues*, 36(2), 2002, pp 393 – 400.
- [38] H.P. Gray, and J.M. Gray, "Minskian Fragility in the International Financial System," In *New Perspectives in Monetary Macroeconomics*, edited by G. Dymksi and R. Pollin. Ann Arbor: Universities of Michigan Press, 1994, pp 143 –167.
- [39] P. Krugman, "A Model of Balance of Payments Crises," *Journal of Money, Credit and Banking* 11, 1979, pp 311 – 325.
- [40] R. Flood, and P. Garber, "Collapsing Exchange Rate Regimes: Some Linear Examples," *Journal of International Economics* 17, 1984, pp 1–13.
- [41] D. Henderson, and S. Salant, "Market Anticipations of Government Policies and the Price of Gold," *Journal of Political Economy* 86, 1978, pp 627 – 648.
- [42] M. Obstfeld, "Rational and Self-fulfilling Balance of Payments Crises," *American Economic Review*, 76(1), 1986, pp 72 – 81.
- [43] G. Calvo, "Balance of Payments Crises in a Cash-in-advance Economy," *Journal of Money Credit and Banking* 19, 1987, pp 19 – 32.
- [44] M. Obstfeld, "Models of Currency Crises with Self-fulfilling Features," *European Economic Review* 40, 1996, pp 1037 – 1047.
- [45] B. Eichengreen, and R. Hausmann, "Exchange Rates and Financial Fragility," NBER Working Paper, 1999, No. 7418. Cambridge, MA.
- [46] D. Diamond, and P. Dybvig, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy* 91, 1983, pp 401 – 419.
- [47] O. Canuto, "Fiscal Policy in Developing Countries: Implications from the Current Crisis," 65th Annual Congress of the International Institute of Public Finance (IIPF), Cape Town, South Africa, 2009.
- [48] A. Alesina, and G. Tabellini, "Why is Fiscal Policy often Pro-cyclical?" National Bureau of Economic Research Working Paper, 2005, No. 11600.
- [49] S. Takagi, "The Global Financial Crisis and Macroeconomic Policy Issues in Asia," Asian Development Bank Institute, Research Policy Brief, 2009, No. 32.
- [50] ODI, "The Global Financial Crisis and Developing Countries," Phase 2 Synthesis, Overseas Development Institute 111 Westminster Bridge Road London SE7 1JD, 2010.