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Financing Sovereign Developmental Activities Through Non-Interest Bearing Instruments

Syed Mizanur Rahman[a], Salman Siddeeque Ali[b], S. Nazim Ali[c]

[a]*Indian Institute of Management, and Vee Em Infocentre Pvt. Ltd., India*
[b]*Indian Institute of Management, India*
[c]*Center for Islamic Economics and Finance, Hamad Bin Khalifa University, Doha, Qatar*

Abstract

It is well established that countries require investments in infrastructure, education, healthcare and institutional development for long term growth in income levels. However, due to the positive externalities associated with these sectors and issues such as non-excludability and non-rivalry, participation from private sector in these areas is generally inadequate and it becomes necessary for the state to intervene for optimal capital allocation. Generally, the quantum of funds required for nationwide developmental programs exceeds the resources that states can generate through one-time taxation and shortfalls are usually sourced from debt markets. Sovereign borrowing has recently attracted attention given the deteriorating credit quality of some nations resulting from heightened borrowing during the financial crisis. From an Islamic perspective, interest based borrowing is classified as a transaction based on riba, and therefore forbidden, by an overwhelming majority of scholars. This paper attempts to understand developmental activities pursued by governments and to explore alternative approaches to finance such activities without resorting to interest bearing instruments. Such alternatives include public-private partnerships, tax incentives, developing Corporate Social Responsibility (CSR) programs, auctioning scarce resources, and sovereign divestments.

Keywords: Private Public Participation, Sovereign Funds, Financing for Development, Corporate Social Responsibility, Socio-economic development

1. Introduction

In the present era of highly monetized societies, the powers to tax economic activity and to borrow on behalf of the public have become some of the most important manifestations of sovereign authority. Governments – democratically elected or otherwise – routinely borrow funds from local or foreign sources to arrange the necessary finances to function and to carry out their mandates. A substantial part of the resources generated by governments is spent in the pursuit of social and economic development of the society. For example, sources estimate that of the total $6.3 trillion federal and local government spending in the U.S. for the year 2012, about 33% will be spent on health, education and welfare (Chantrill, 2012).

The term 'development' has been used in a fairly broad sense in the realm of economic studies and social sciences. Generally speaking, development is used to refer to economic progress, an increase in productivity and improvements in the quality of life. Therefore, developmental activity can technically encompass an infinitely wide range of institutional and independent efforts that could potentially result in economic benefits and facilitate value generating transactions for a given target population. The question of financing developmental activity gains prominence because a substantial number of the prerequisites for economic development are not economically viable and hence come under the prerogative of governments and other organizations that have a social mandate to generate funds to function and implement such plans.

An objective study of welfare and development would necessitate defining the measurable parameters for a robust and practical understanding. A majority of the literature in economics substitutes quality of life and wellbeing for the per capita income. While questions have been raised over the rationale behind such a direct relation (Bozionelos & Nikolaou, 2010; Kenny, 2005), adopting this line of thinking

simplifies our problem as we look at development as long-term growth in income levels. Neoclassical economic models list population growth, physical capital investments and level of schooling as the prime drivers of economic growth (Mankiw, Romer, & Weil, 1992). Studies have also linked a country's infrastructure, healthiness of its population, the dependency ratio and the size of government to its ability to sustain long term growth (Sala-I-Martin, Doppelhofer, & Miller, 2004). Research also lists some fundamental factors to economic growth including institutional quality, economic integration, geography and ethno-linguistic fractionalization (Acemoglu, Johnson, & Robinson, 2005; Alesina & Wacziarg, 2003; Frankel & Romer, 1999; Gallup, Sachs, & Mellinger, 1999). Human and social capital is also seen as a key driver of long term growth (Knack & Keefer, 1997). It is clear that governments have a huge role to play in influencing the factors that are understood to result in economic growth. In addition, efforts to improve the quality of healthcare and to improve infrastructure are capital intensive and the scale of projects generally forces governments to tap into debt markets to generate the finances required to carry them out.

Moving forward, this paper looks at the economic justification for government involvement in certain sectors such as infrastructure development and education to forward the cause of economic progress. The paper will then look at the different aspects of sovereign borrowing, sovereign debt default or restructuring, and elaborate on some recent strategies, policies and devices employed by governments to stimulate private investments in developmental activity to limit deficit spending.

2. Role of the State in Development

It is well established in economic theory that purely market-based outcomes do not result in optimum allocation of capital for development efforts (Rittenberg & Tregarthen, 2012). Such under-allocation of capital may be due to a variety of reasons. For the purpose of this study, four major reasons are identified here. First, the appropriation of the benefits of certain welfare efforts may be low. For example, while the total benefit derived by a society from complete literacy may be high, it is difficult for private players to capture this benefit and hence, private participation in mass literacy programs could be lower than the optimal level (Rittenberg & Tregarthen, 2012). Second, a related concept is that of positive externalities. Certain activities such as higher education and R&D spending by firms, apart from the benefits to the parties directly involved, may have positive effects on the overall economy. In such cases, government action is warranted to optimize investments in such activity. Conversely, negative externalities such as pollution, discharge of industrial wastes and so on should also be addressed by the government through taxation and other legislation (Rittenberg & Tregarthen, 2012). Third, non-excludability and non-rivalry or the problem of the commons may present an issue. In general, when it is not possible to exclude economic entities from the benefits of a certain resource, there is no incentive for these entities to invest in such resources leading to their deterioration in the long term. Infrastructure such as city roads, defense forces etc. suffer from such a problem. In such cases a government is necessary to tax the general population for the optimum investments in such shared resources (Rittenberg & Tregarthen, 2012). And fourth, financial markets have a limited 'time horizon' and since the pay-back in certain sectors such as infrastructure projects may exceed the time horizon of markets, and therefore governments have to step in and act as intermediaries by generating funds from the market through short and medium term bonds and invest the money in long term projects(Frischmann, 2012).

Because of all these factors, investment in developmental activity generally requires intermediation by governments which generate revenues through taxation and uses the money to create and maintain common resources such as infrastructure and on welfare programs. There are also other related roles a state has to play. Such roles as Keynesian economics recommend that the government steps in to prop up spending during a business down-cycle to help the overall economy avoid a spiral decent into a recession (Arthur & Sheffrin, 2003). In addition, sovereign spending in investments and in infrastructure can bring economies of scale (Karayalcin, McCollister, and Mitra, 2002).

As stated above, governments are necessary for the optimum allocation of capital to certain sectors. In the course of their functioning, governments routinely face revenue shortfalls as expenditures exceed their income. The situation is further exacerbated when nations face large one-time expenses in events such as war, natural disasters, infrastructure expansion, etc. To make up for the shortfall, governments tap into

debt markets regularly. Many governments are faced with a perennial deficit problem, as short term oriented leadership pushes costs (especially of populist measures) to the future through deficit funding. It is therefore important to look at alternatives to the dominant but unsustainable route of deficit financing of government projects.

Notwithstanding the Islamic aversion to debt, from an economic perspective also, the need for flexibility in raising finance is vital. The ongoing European Debt Crisis is a strong indication that countries ought to think twice about engaging debt finance as the only solution to sovereign deficits. Historically, countries have followed a boom and bust cycle of sovereign borrowing and debt default or restructuring over the last few centuries (Reinhart and Rogoff, 2008). Such defaults or restructuring of debt always come with not just an economic price but with heavy political consequences too(Kamalodin, 2011). It would be wise for a nation to operate within its financial limits and prevent itself from falling into such frailties. In this paper, we shall look into several options available for sovereigns to fund their deficits apart from relying on debt markets.

3. Sovereign Borrowing

For several centuries, sovereign borrowing has been one of the most accepted forms available to nations to cover their deficits. Historically, as nations had passed through several cycles of distress and duress, the kings or rulers were forced to borrow from the public, especially from religious institutions that stockpiled own treasuries(Winkler,1933 as cited in Sturzenegger and Zettelmeyer, 2007). In the event of a natural calamities or wars, rulers usually appealed to the public to fund the state treasury in order to address the short and medium term deficits, as solutions like additional taxing always came with a lag.

Modern economists regard sovereign borrowing as a necessity for enhanced growth and development. They assert that a nation should not lose the opportunity to raise funds while borrowing, because such funds could be utilized for developmental activities that could drive the growth of the economy; i.e. if a nation were to refuse such an option, it would be denying itself the prospects of growth and development. Further, it has also been argued that sovereign investments in infrastructure leads to the emergence of economies of scale, and that therefore a nation ought to strive for such an outcome by taking on sufficient debt levels (Karayalcin, McCollister, and Mitra, 2002). The focus here is on debt contracts that are incentive compatible. To take full advantage of such economies of scale, researchers argue that public and private financial institutions may need to lend amounts above some threshold to force the borrowing sovereign to take full advantage of any economies of scale that may be present(Karayalcin, McCollister, and Mitra, 2002). As low levels of lending may or may not result in default, sufficiently high amounts of lending may be needed to ensure repayment and may prove to be mutually beneficial.

It is now very common that even if a country is running a budget surplus allowing it to easily repay its sovereign debt, it might still continue to run a deficit (The World Factbook, CIA, 2012). For instance Saudi Arabia which is running a budget surplus of 14.7% of GDP still has a public debt of 9.4% of GDP (Exhibit 1 shows sovereign debts of nations as a percentage of their GDP). However, some scholars have empirically tested and asserted that nations should pay off their debts instead of holding reserves (Alfaro and Kanczuk, 2009). Alfaro and Kanczuk (2009) argues that the optimal policy is not to hold reserves at all and they claim that their findings are robust even while tested for interest rate shocks, sudden stops, contingent reserves and reserve dependent output costs.

Modern banking has played a great role in making sovereign borrowing an integral part of a nation's monetary policy. At present, almost every single nation in the world is indebted irrespective of whether it consistently produces a surplus or deficit budget. Modern banking systems ensure that at the very outset governments are indebted to their respective reserve banks through the bonds they issued that are bought by the reserve banks at a cost plus lending rate. Although most developed nations borrow from the public by issuing bonds, securities or other bills, less credit-worthy nations directly borrow from other nations or other international monetary organizations like the World Bank, International Monetary Fund, or other financial institutions.

4. Sovereign Debt Default and/or Debt Restructuring

Sovereign default or debt restructuring by nations are as old as sovereign borrowing itself. The first recorded default is tracked back to 4th century B.C. when ten out of thirteen Greek municipalities in the Attic Maritime Association defaulted on loans from the Delos Temple (Winkler, 1933 as cited in Sturzenegger and Zettelmeyer, 2007). Nations mostly resorted to currency debasement – inflation or currency devaluation – as the most preferred method to avoid a debt default or restructuring. However, from the nineteenth century onwards even this became increasingly difficult and the debt crises or defaults or restructuring exploded both in terms of numbers as well as geographical impact. This was due to the increase in cross-border transactions and debt flows, newly independent governments, and most importantly their relations to the modern financial markets (Sturzenegger and Zettelmeyer, 2007).

Historically, sovereign borrowing and default has followed a cycle of boom and bust (Exhibit 2 shows the pattern of debt defaults during 1900-2006) (Reinhart and Rogoff, 2008) In the last couple of centuries there were hundreds of defaults and restructurings across the world, that could be attributed to the turbulent political history of the period, including wars, revolutions, and civil conflicts, as well as economic downturns such as the one witnessed in the recent past. These phenomena have made the debtor governments either unwilling or unable to pay their debts (Sturzenegger and Zettelmeyer, 2007) (Exhibit 3 shows list of major sovereign defaults during 1820-2004). The macro-economies of debtor nations are destabilized by the borrowing boom and later bust, especially as the busts have led to austerity (Lindert and Morton, 1989).

From an economic perspective, there are countering arguments on either sides not just on whether a nation should continue its deficit policies, but also on whether to default or not. On one hand economists argue that countries should avoid default at any cost, as it might come with spiraling pitfalls affecting growth of trade, credit-worthiness, access to new credit, increment in borrowing, and so on. To make things worse, this delay in default would actually end up in a more grievous ending(Alfaro and Kanczuk, 2009). However, there are others who argue that the economic costs are actually negligible especially from a long-term perspective and that countries should default at certain stages rather than prolonging the process, which could engender more severe repercussions(Guembel and Sussman, 2009).

The decision to default is therefore taken by a sovereign after weighing the costs and benefits of a default. The main benefit of a default or restructuring is the reduced repayment burden, which is often called a 'haircut' for creditors. There are many facets of the costs of a default, such as loss of reputation, loss of access to current and future private market capital, and so on(Irwin and Thwaites, 2008). However, despite the perspective of either school of thought, it is unanimously agreed upon that a sovereign default leads to serious political turmoil (Kamalodin, 2011). These events often end with the parties in power being overthrown, especially in a democratic environment, and this is one of the major reasons why politicians delay defaults to their best possible ability.

The most preferred method by sovereigns to delay or even bypass a possible default has been through currency debasements. Some economists have pointed out that nations, unlike individuals, have the luxury to print currencies on will to pay their deficits. A prominent example of this power was the decision of Nixon Administration to unilaterally cancel the direct convertibility of US Dollars for gold, thus repatriating the Bretton Woods system of international foreign exchange. Although the printing of currencies is/was accompanied by currency devaluation and inflation, sovereigns are/were still able to cover at least a portion of their deficits via such measures. However, in modern times, the increase of cross-border transactions as well as the flows of external debt and the advancement of modern financial markets have left sovereigns with much less leeway in such regard . To make matters worse, countries in the Eurozone could not use such measures at all, as they are unable to print their currencies individually. These countries, therefore, lost the flexibility to monetize their debt unlike other sovereign nations such as the U.S. and the U.K

There have been differing arguments on whether a government default has a minor or major impact on future debt credibility. According to some scholars 'debts which are forgiven will be forgotten', and this has significant incentive for moral hazard (Bolow and Rugoff , 1949). Other scholars argue that sovereign defaults are among the main conditions for subsequent borrowing and creditors will seriously take into

account their previous losses (Cruces and Trebesch, 2011). In any case, unlike in the past, it is expected that any present of future default will have significantly more international repercussions, and that the risk that one nation's default may create a world-wide financial and economic crisis are very high due to the complex inter-linkages in current markets(Wroblowsky, 2011).

Sovereign borrowing has come under much scrutiny recently with the debt crisis in Europe and the ratings downgrade issued by the S&P to U.S. Debt in 2011(Washington Post, 2011) The global slowdown in 2008 prompted governments across the world to indulge in massive stimulus measures that resulted in the deterioration of their fiscal positions. The fallout in the credit markets first hit countries such as Greece and Ireland but is expected to affect the borrowing costs for larger economies such as Italy and Spain. Governments are being forced to cut down on welfare and infrastructure spending as they adopt austerity measures to check their deficits. While the problem of high government debt is endemic to many developed economies, countries in the Euro Zone have been affected disproportionately because of the lack of flexibility to monetize their debt.

Several countries, in particular Greece, Ireland, and Portugal, spiraled into crisis as their governments were facing an imminent debt default in addition to their inability to raise more funds from the market. Although the European Union temporarily bailed them out from an embarrassing total default, in which some of the private investors were forced to write-off up to 50% of their investments, the political unrest that followed shows that troubles are far from over, as the negotiated austerity measures were not well-received by the public(BBC, 2011). Moreover, this temporary bailout doesn't insure the medium and long term financial situations of the countries involved and they will definitely be forced to look out for more alternatives.

As the recent downgrading of US credit rating by S&P and other rating agencies shows, it could only be a matter of time for such crises to hit any other developed nation. As such, it is imperative that nations think beyond debt instruments to cover their budget deficits.

5. A Look at Emerging Alternatives

Throughout the recent past, countries have started to adopt alternative models to finance projects in infrastructure, welfare and development. This is especially the case in the developing world where borrowing costs are high and governments have to spend massive resources to meeting bludgeoning demand for basic infrastructure as populations continue to grow and economic growth rates remain high. Public Private Partnership (PPPs henceforth) have become an extremely popular form of finance for infrastructure projects in countries such as India and it is expected that they will become more prominent in the near future. Tax incentives on the other hand are popular in developed countries that use such measures to drive investments into sectors like renewable energy. With necessary modifications, these alternatives can also be adopted to drive private participation into health care, education, sanitation, etc. while avoiding interest bearing debt.

An important aspect in channelling private investments into public projects is the development of means to capture the benefit resulting from such undertakings. For example, it is easier to involve private players to develop highways than to improve city infrastructure because the use of highways can be more easily monitored and the benefit can be captured by imposing a suitable toll. It is more challenging to come up with mechanisms through which private investments can be directed towards city roads because it is more difficult to monitor their usage and to collect a fee from individual users. However with improvements in technology, such challenges can be overcome. For example, in the city of London, a high-tech automatic number plate recognition system is used to monitor the vehicles that enter and exit traffic areas in the city and drivers are charged according to their daily usage of the streets in the 'Congestion Charge Zone' (Symonds, 2003). This way, developments in monitoring technology and contract structuring can help increase the scope of private participation in public infrastructure and utility projects.

6. Public Private Participation

In general, project financing can be subdivided into three categories according to the degree of involvement of the public sector or the government. Some projects are financed completely through government funding while others are financed by the private sector. The third category of projects involves the participation of both public and private players and is becoming more and more common. Also, we must distinguish between participation along two aspects:

- Involvement in terms of financing the project, which can be through various routes such as equity, loans and other participating methods
- Involvement in terms of designing, constructing, operating and maintaining the project.

Keeping these aspects in mind, several possible alternatives to the funding and operation of infrastructure projects emerge. In this paper, we are mostly concerned with private sector participants financing as well as operating projects, which is a relatively new concept (Regan, 2009). One of the prerequisites for such infrastructure projects is that the state should provide a commitment to allow private players to enter and operate in fields that are normally considered to be exclusively in the public sphere. Governments and private players can negotiate a variety of contracts to establish the rights and responsibilities of the investors, who agree to fund a project, and develop and maintain it in return for the charges levied on the users for a certain duration of time. Governments may also agree to compensate these investors in case the fee collected fails to provide them with a reasonable rate of return on their investments.

A number of different types of pubic private contracts have emerged over time as the route has gained popularity in developing as well as developed countries. The simplest contracts are known as Build, Operate, and Transfer (BOT) contracts, in which the private investor agrees to build a project by generating the required funds and operates it for a fixed duration, which generally ranges between 20 to 30 years. After the end of the duration, the project is transferred to the government. In certain other contracts the private players may not have to transfer the project to the government (Build – Own – Operate – BOO, The National Council for Public-Private Partnership). There are also contracts where the public body will retain ownership of the assets but will contract the maintenance and operations to a private player in return for fees.

PPPs have benefits other than providing ways to reduce the debt burden of governments. PPPs allow for private management of crucial infrastructure project, thereby limiting inefficiencies that can plague public sector monopolies (Harris 2013). PPPs can also help governments expand infrastructure facilities rapidly by inviting private and foreign capital, which minimizes the impact of funding bottlenecks. PPPs also help in attracting the required management expertise and can help improve the performance of public sector monopolies. Cost savings and improved efficiencies can also be achieved through proper structuring of contracts. Developing countries such as India, Cameroon and Niger are pushing forward with private participation in infrastructure as a possible solution to the investment shortages in the country. The Indian government for example is inviting private participation in a number of sectors including roads, power, telecom, railways, ports and tourism (Department of Economic Affairs, Government of India, 2011).

A shift towards private participation in infrastructure may however lead to some issues including cases of corruption and overcharging for necessary utilities such as water and electricity. PPP projects may also do no more than shift the debt load from the public domain to private individuals. The long payback period in infrastructure projects and government guarantees acts as an incentive for private players to increase their return on investments by leveraging debt. For example, in India, 68% of the cost for an average PPP project was financed by debt while only 26% of the funding was met through equity and the rest of the costs were financed by sub-debt and government grants (Frost & Sullivan, 2012). Despite these disadvantages, if PPPs are designed and executed with certain safeguards, their usage can result in easing of the financial burden on the government and also result in higher quality of service and effective delivery of the service to end consumers and citizens (Carbarjal, 2012).

7. Tax Incentives

Tax incentives are another possible mechanism that governments can use to direct private investments into specific sectors. This is especially suitable for education and health care services as governments can encourage the social responsibility initiatives of private firms to invest in rural programs. In the United States for example, the federal government has a program through which tax credits are offered to homeowners who invest in solar panels (Richards 2009). Tax incentives are also offered to corporations that invest in renewable energy projects. Governments also offer tax breaks to fund research projects or scholarship programs (Mueller). Programs to direct investments in renewable energy resources have been particularly successful (Clement, Lehman, Hamrin, & Wiser, 2005). Tax incentives have also been used as an incentive to direct investments to risky sectors such as oil exploration (Energy Capital Group, 2013).

Tax incentives can help governments' direct corporate activity into certain sectors such as research and development. Some industry voices also push for tax cuts to boost local employment so that companies are attracted to set up manufacturing plants in a given location (CCI calls for tax cuts to boost local manufacturing, 2011). Tax incentives are seen as an important tool to contribute to economic welfare if used wisely (Michigan Policy Network, 2011). They can also help governments channel private investments into important sectors and thus avoid direct investments and spending in certain cases.

Despite certain advantages, the use of tax incentives suffer from certain disadvantages and have been seen as inferior to direct subsidies according to some research (Surrey, 1970). Tax based incentives are less equitable as their benefit is skewed towards persons in the higher tax brackets. Targeted tax incentives, provided to specific entities also suffer from the problem of lack of equity (Brunori, 1997). Regardless, from the perspective of reducing sovereign debt, tax incentives have been used successfully by governments to direct private investments to certain sectors (Clement et al, 2005). Without such options, governments would have to generate and direct public resources into preferential sectors, possibly resorting to debt and creating inefficiencies associated with public undertakings (Ruggiero, 1995).

8. Routing CSR Activities

Governments can also route the corporate social responsibility activities of private players into much-needed infrastructure or developmental activities. In India, there are several companies that route their CSR funds to child education, providing sanitation facilities in rural areas, healthcare programs, and so on. If governments can properly incentivize such activities by enhanced tax deductions or mandate such initiatives depending on the need of particular areas, it could have a positive impact on society. CSR efforts have gained traction in recent years as the social role of businesses has been put under scrutiny. The interdependence between businesses and society forms the fundamental basis of viewing CSR as a vehicle for social welfare.

UNESCAP has highlighted four essential reasons for governments to promote CSRs as a part of their agenda (UNESCAP, 2013). The first is that CSRs have been found as effective tools in promoting sustainable and inclusive development. The second reason put forth by the study is the high degree of correlation between responsible competitiveness and overall growth competitiveness. Responsible competitiveness takes into account social, economic and environmental performance of businesses. Improving the responsible competitiveness of businesses by increasing their role in social welfare, is therefore a crucial tool to promote growth competitiveness. In addition to this, the study also highlights the present fiscal deficit crisis as another reason for governments to increase the role of CSR in their framework for social welfare. In addition to this UNESCAP also tasks the government with directing CSR activities, which are largely social into broader strategic directions and promoting the practice by providing a conducive environment for businesses to take part in these efforts.

9. The Islamic Finance Alternative

Interest based borrowing and lending is regarded as impermissible by a majority of Muslim scholars. While some scholars have granted an exception to government debt, this is still not the accepted position of the majority. Most noticeably, Egyptian scholar Shaykh Muhammad Sayyid Tantawi declared that

interest on government investments did not constitute *riba*(Farooq 2005). His position was rejected by a number of traditional religious scholars and others, who saw the ruling as a way to appease the then Mubarak government (Graham, 2010). Nevertheless, despite scholarly opposition to interest bearing bonds, governments in Muslim nations continue to use debt instruments as a quick way to balance budgets. The banking systems in these countries are just as dependent on sovereign bonds as it is in any other country. This should potentially be a major avenue for Islamic Finance as alternative instruments to sovereign debt will also carry forward the positive aspects of government bonds such as the comparatively low risk, the large volumes and high liquidity.

While alternate models to finance government deficits are coming to the fore in some countries, it still remains to be seen if sizable ventures of a similar nature can be implemented in Islamic nations. It must also be pointed that an interesting history of sovereign borrowing in the early years of Islam can be found in the paper 'An Overview of Public Borrowing in Early Islamic History' by Prof. M. N. Siddiqi(Siddiqui, 1992).

9.1 Auctioning of Scare Resources

Governments can generate funds through the auctioning of scarce resources such as spectrum bandwidth and mineral resources. In these cases the government imposes a one time or repeat fee on the use of the exploitation of a national resource such as spectrum bandwidth used in mobile communications. Governments can also auction rights to mine resources to private corporations. These auctions help governments monetize their assets and use the resources to develop infrastructure or engage in general welfare activities.

10.2 Sovereign Disinvestments

Disinvestment of stakes held in public sector corporations is another route that governments can take to generate funds to finance its expenditures. Governments can dilute their stake in these corporations and use the money they generate in the process to reduce deficits. Disinvestments help reduce the inefficiencies that are endemic to public sector corporations and allow corporations tap into private capital markets to finance expansion.

10. Conclusion

After analyzing the broad role played by debt in financing government activities, it seems imperative that alternatives to sovereign debt be discussed, evaluated and brought to practice. While interest bearing debt is abhorred in Islam, the sovereign debt crisis has also highlighted the need to look at these alternatives even in a secular framework. Our study throws light on some already existing strategies and instruments that have been used as alternatives to finance government efforts to provide better infrastructure, promote social welfare and generate resources to finance other developmental activity.

Our findings indicates that while instruments such as Public Private Partnerships (PPPs), tax incentives and Corporate Social Responsibility practices exist, their use must be closely monitored to avoid pitfalls. PPPs are gaining popularity among developing countries to meet the growing demand for infrastructure. Tax incentives and CSR policies are vehicles to promote investment and activity in certain sectors and social welfare efforts. Governments can also reduce reliance on debt by the monetization of existing resources.

It is inferred that different instruments have uses in separate spheres of public policy. PPPs are more useful in infrastructure development while CSR seems to be suited for community development and education. A well balanced policy that can utilize all these instruments and social/financial initiatives across different sectors to reduce dependency on public debt. The feasibility of employing these alternatives is case dependent, ever changing and innovations in contracting and technology are expected to increase the scope of applicability of many of these options over time.

We also see that apart from reducing the burden of public debt, these alternatives can have other positive aspects as well such as fostering growth in the private sector and improving efficiency (PPPs),

powering inclusive growth (CSRs) and spurring innovation (tax incentives). These practices are already gaining popularity in recent years and the trend is expected to become stronger in the future. The sector also holds promise for Islamic Finance as there is a growing interest for genuine interest free options. IFI can also look to some of these options and see if variants can be imported to the private sector.

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Exhibit 1

Countries ranked according their sovereign debt as a percentage of their GDP
Source: The World Factbook, CIA, 2012

Country Comparison: Public debt

This entry records the cumulative total of all government borrowings less repayments that are denominated in a country's home currency. Public debt should not be confused with external debt, which reflects the foreign currency liabilities of both the private and public sector and must be financed out of foreign exchange earnings.
Authors' note: The US debt-GDP ratio according to Eurostat report is 102% for 2011 est. as against the CIA World Factbook which rates as 69.40% for 2011 est. This is because the CIA World Factbook does not include the state debt issued by individual US states and intra-government debt (with amounts owed to the Medicare and Social Security funds being the largest portion of "intra-government" debt).

Rank	Country	% of GDP	Date
1	Zimbabwe	230.8	2011 est.
2	Japan	208.2	2011 est.
3	Saint Kitts and Nevis	185	2009 est.
4	Greece	165.4	2011 est.
5	Lebanon	137.1	2011 est.
6	Iceland	130.1	2011 est.
7	Antigua and Barbuda	130	2010 est.
8	Jamaica	126.5	2011 est.
9	Italy	120.1	2011 est.
10	Ireland	109.2	2011 est.
11	Barbados	103.9	2011 est.
12	Portugal	103.3	2011 est.
13	Sudan	100.8	2011 est.
14-20	Belgium; Singapore; Egypt; France; Belize; Canada; Germany	(99.70) – (81.50)	2011 est.
21-40	United Kingdom; Bhutan; Sri Lanka; Dominica; Saint Lucia; Hungary; Bahrain; Israel; Austria; United States; Spain; Malta: Cyprus: Cote d'Ivoire; Morocco; Netherlands; Nicaragua; Jordan; Croatia; Mauritius	(79.50) – (60.20)	2011 est.
41-75	Albania; Malaysia; Guyana; Poland; Vietnam; Brazil: El Salvador; Switzerland; Tunisia; India; Philippines; Uruguay; Finland; Pakistan; Kenya; Norway; Denmark; Aruba; Seychelles; Colombia; Thailand; Slovenia; Ukraine; Latvia; Costa Rica; Slovakia; Bosnia and Herzegovina; United Arab Emirates; Mozambique; Argentina; Turkey; Ethiopia; Panama; Serbia; Montenegro	(59.40) – (40.00)	2011 est.

76-111	Czech Republic; Ghana; Bolivia; Lithuania; Mexico; Yemen; Tanzania; Sweden; Malawi; Bangladesh; Dominican Republic; South Africa; Cuba; Taiwan: Syria; Romania; New Zealand; Senegal; Venezuela; Mali; Trinidad and Tobago; Australia; Honduras; Guatemala; Namibia; Zambia; Macedonia; Ecuador; Uganda; Indonesia; Angola; Korea, South; Papua New Guinea; Peru; Luxembourg; Botswana	(39.90) – (20.30)	2011 est.
112-	Moldova	19.3	2011 est.
113	Gabon	18.3	2011 est.
114	Nigeria	17.6	2011 est.
115	Bulgaria	17.5	2011 est.
116	Paraguay	17.4	2011 est.
117	China	16.3	2011 est.
118	Cameroon	16.2	2011 est.
119	Kazakhstan	16	2011 est.
120	Iran	11.6	2010 est.
121	Hong Kong	10.1	2011 est.
122	Saudi Arabia	9.4	2011 est.
123	Chile	9.4	2011 est.
124	Qatar	8.9	2011 est.
125	Russia	8.7	2011 est.
126	Uzbekistan	7.7	2011 est.
127	Gibraltar	7.5	2008 est.
128	Kuwait	6.8	2011 est.
129	Algeria	6.6	2011 est.
130	Estonia	5.8	2011 est.
131	Wallis and Futuna	5.6	2004 est.
132	Equatorial Guinea	5.5	2011 est.
133	Libya	4.7	2011 est.
134	Azerbaijan	4.7	2011 est.
135	Oman	3.8	2011 est.

Exhibit 2
Countries ranked according their budget surplus/deficit as a percentage of their GDP
Source: The World Factbook, CIA, 2012

Country Comparison: Budget surplus (+) or deficit (-)
This entry records the difference between national government revenues and expenditures, expressed as a percent of GDP. A positive (+) number indicates that revenues exceeded expenditures (a budget surplus), while a negative (-) number indicates the reverse (a budget deficit). Normalizing the data, by dividing the budget balance by GDP, enables easy comparisons across countries and indicates whether a national government saves or borrows money. Countries with high budget deficits (relative to their GDPs) generally have more difficulty raising funds to finance expenditures, than those with lower deficit.

Rank	Country	% of GDP	Date
1	Macau	30.3	2011 est.
2	Kuwait	20.5	2011 est.
3	Iraq	18.8	2011 est.
4	Qatar	17.8	2011 est.
5	Saudi Arabia	14.7	2011 est.
6	Norway	13.5	2011 est.
7	Palau	9.3	2008 est.
8	Iran	8	2011 est.
9	Saint Lucia	7.6	2010 est.
10	Angola	7.5	2011 est.
11	Gabon	7.5	2011 est.
12	Dominica	7.4	2011 est.
13	Micronesia, Federated States of	5.6	FY07 est.
14	Mongolia	5.4	2011 est.
15	United Arab Emirates	5	2011 est.
16-44	Congo, Republic of the; French Polynesia; Solomon Islands; Brazil; Liechtenstein; Equatorial Guinea; Korea, South; Gibraltar; Hong Kong; Bolivia; Seychelles; Guernsey: Faroe Islands; Cook Islands; Switzerland; Vanuatu; Oman; Isle of Man; Sweden; Chile; Turkmenistan; Russia; Papua New Guinea; Singapore; Anguilla; Peru; Saint Kitts and Nevis; British Virgin Islands; Tonga	(4.60) – (0.00)	2011 est.
45-80	Central African Republic; Uzbekistan; Korea, North; Jersey; Paraguay; Tajikistan; Nicaragua; Suriname; Liberia; Curacao; Madagascar; Luxembourg; Estonia; Indonesia; Belarus; Comoros; Mauritania; Bahrain; Cameroon; Gambia, The; Uruguay; Turkey; Fiji; Falkland Islands (Islas Malvinas); Germany; Finland; Kosovo; China; Monaco; Djibouti; Argentina; Ethiopia; Moldova; Greenland; Guinea-Bissau: Guinea	(-0.10) – (-5.00)	2011 est.

81-131	Algeria; Brunei; Kiribati; Philippines; Panama; Haiti; Kazakhstan; Malawi: New Caledonia; Rwanda; Mexico; Bahamas, The; Australia; Trinidad and Tobago; Poland; Guyana; Dominican Republic; Taiwan; Macedonia; Laos; Hungary; Togo; Thailand; Bulgaria; Israel; Bosnia and Herzegovina; Guatemala; Puerto Rico; Nigeria; Belize; Malta; Albania; Italy; Sudan; Austria; Colombia; El Salvador; Cuba; Netherlands; Denmark; Canada; Georgia; Bangladesh; Armenia; Honduras; Ukraine; Sao Tome and Principe; Mali; Belgium; Romania; Zambia	(-2.10) – (-4.20)	2011 est.
132	World Average	-4.2	2011 est.
133-179	Benin; Mauritius; Czech Republic; Burma; Portugal; Serbia; San Marino; Vietnam; Tuvalu; Northern Marian Islands; Montenegro; Burkina Faso; Antigua and Barbuda; Bhutan; Slovakia; India; Costa Rica; Aruba; Slovenia; Croatia; Grenada; Jamaica; South Africa; Venezuela; Mozambique; Latvia; Ghana: Lithuania; Kenya; Ecuador; Barbados; Cote d'Ivoire; France; Morocco, Iceland; Botswana; Uganda; Kyrgyzstan; American Samoa; Tanzania; Cambodia; Spain; Senegal; Congo, Democratic Republic of the; Sri Lanka; Pakistan; Sierra Leone	(-4.30) – (7.00)	2011 est.
180	Cyprus	-7.4	2011 est.
181	Syria	-7.5	2011 est.
182	Cayman Islands	-7.6	2011 est.
183	Niger	-7.7	2011 est.
184	Nepal	-7.7	FY11 est.
185	Malaysia	-7.8	2011 est.
186	New Zealand	-7.9	2011 est.
187	Burundi	-8.1	2011 est.
188	Japan	-8.5	2011 est.
189	Tunisia	-8.5	2011 est.
190	United Kingdom	-8.8	2011 est.
191	United States	-8.9	2011 est.
192	Yemen	-9.5	2011 est.
193	Afghanistan	-9.6	2011 est.
194	Greece	-9.6	2011 est.
195	Namibia	-9.7	2011 est.
196	Lebanon	-9.8	2011 est.
197	Chad	-10	2011 est.
198	Ireland	-10.1	2011 est.
199	Jordan	-10.4	2011 est.
200	Saint Vincent and the Grenadines	-10.6	2011 est.
201	Egypt	-10.6	2011 est.
202	Eritrea	-11.3	2011 est.
203	Swaziland	-12.6	2011 est.
204	Cape Verde	-13	2011 est.
205	Maldives	-13.4	2010 est.
206	Lesotho	-13.7	2011 est.
207	Timor-Leste	-14.3	2011 est.

208	Samoa	-14.4	2011 est.
209	West Bank	-16.3	2011 est.
210	Azerbaijan	-18.7	2011 est.

Exhibit 3
Sovereign External Debt: 1800-2006
Percent of Countries in Defaults or Restructuring
Source: *Reinhart and Rogoff, 2008*

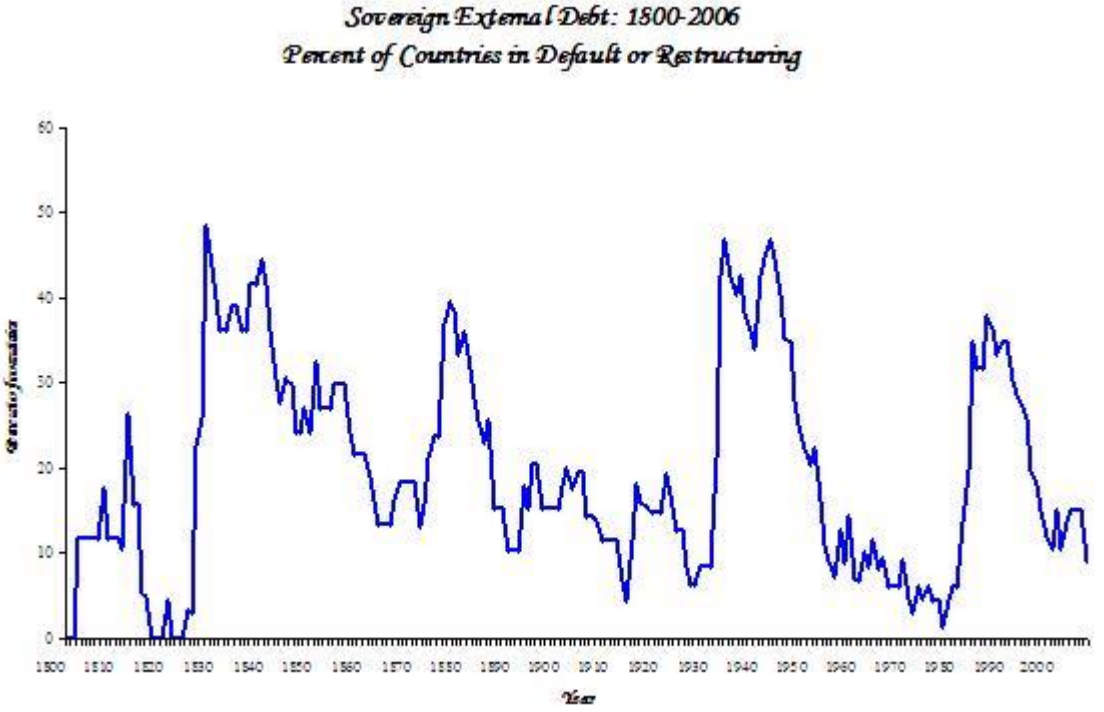

Table 1.1
Selected government defaults and restructurings of privately held bonds and loans, 1820–2004

	Default or restructuring clusters						
	1824–1834	1867–1882	1890–1900	1911–1921	1931–1940	1976–1989	1998–2004
Europe							
Austria		1868		1914	1932		
Bulgaria				1915	1932		
Greece	1824		1893				
Germany					1932		
Hungary					1931		
Italy					1940		
Moldova							2002
Poland					1936	1981	
Portugal	1834		1892				
Romania				1915	1933	1981	
Russia[a]				1917			1998
Serbia/Yugoslavia			1895		1933	1983	
Spain[a]	1831	1867, 1882					
Turkey		1876		1915	1940	1978	
Ukraine							1998, 2000
Latin America and Caribbean							
Argentina	1830		1890	1915[b]	1930s[b]	1982	2001
Bolivia		1874			1931	1980	
Brazil	1826		1898	1914	1931	1983	
Chile	1826	1880			1931	1983	
Colombia	1826	1879	1900		1932		
Costa Rica	1827	1874	1895		1937	1983	
Cuba					1933	1982	
Dominica							2003
Dominican Republic		1869	1899		1931	1982	
Ecuador	1832	1868		1911, 1914	1931	1982	1999
El Salvador	1827			1921	1931		
Grenada							2004
Guatemala	1828	1876	1894		1933		

Table 1.1
(continued)

	Default or restructuring clusters						
	1824–1834	1867–1882	1890–1900	1911–1921	1931–1940	1976–1989	1998–2004
Honduras	1827	1873		1914		1981	
Mexico[a]	1827	1867		1914		1982	
Nicaragua	1828		1894	1911	1932	1980	
Panama					1932	1982	
Paraguay	1827	1874	1892	1920	1932	1986	2003
Peru	1826	1876			1931	1978, 1983	
Uruguay		1876	1891	1915	1933	1983	2003
Venezuela[a]	1832	1878	1892, 1898			1982	
Africa							
Angola						1988	
Cameroon						1989	
Congo						1986	
Côte d'Ivoire						1984	2001
Egypt		1876				1984	
Gabon						1986	1999, 2002
Gambia						1986	
Liberia		1874		1912		1980	
Madagascar						1981	
Malawi						1982	
Morocco						1983	
Mozambique						1984	
Niger						1983	
Nigeria						1983	
Senegal						1981	
Seychelles							2002
Sierra Leone						1977	
South Africa						1985	
Sudan						1979	
Tanzania						1984	
Togo						1979	
Uganda						1981	
Zaire						1976	
Zambia						1983	

Table 1.1
(continued)

	Default or restructuring clusters						
	1824–1834	1867–1882	1890–1900	1911–1921	1931–1940	1976–1989	1998–2004
Asia and Middle East							
Indonesia							1999
Jordan						1989	
Philippines						1983	
Pakistan						1981	1999
Vietnam						1985	

Sources: Lindert and Morton (1989), Beim and Calomiris (2001), and Standard & Poor; news reports.
Notes: Cases shown are defaults and/or debt restructurings (including reschedulings) in distressed circumstances, involving external creditors. Defaults triggered by wars, revolutions, occupations, and state disintegrations are generally excluded, except when they coincide with a default cluster. Payment delays and other technical defaults that eventually resulted in full repayment are also generally excluded. Unless otherwise noted, all restructurings and defaults refer to federal or central government obligations; in particular, defaults of U.S. states in the 1840s are not shown. In the event of a sequence of debt reschedulings, the year listed refers to the initial rescheduling.
[a] Russia also defaulted in 1839, Spain in 1820 and 1851, Venezuela in 1847 and 1864, and Mexico in 1859.
[b] Default at provincial/state level only.