PALGRAVE STUDIES IN ISLAMIC BANKING, FINANCE, AND ECONOMICS

CHALLENGES IN ECONOMIC AND FINANCIAL POLICY FORMULATION

An Islamic Perspective

Hossein Askari
Zamir Iqbal
Abbas Mirakhor

Palgrave Studies in Islamic Banking, Finance, and Economics

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Hossein Askari, Zamir Iqbal, and Abbas Mirakhor

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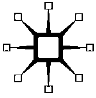

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Preface

Islam is a rules-based religion. Allah (swt) has designed these rules for humans to establish flourishing and prosperous societies with justice as the foundation and scaffolding. To the extent that His divine rules are followed, the need for government intervention and policies are minimized.

Allah has given humans the gift of liberty and freedom of choice. In His wisdom, He has allowed humans to make the crucial choice of their own rule compliance. Humans must graciously accept His gifts of liberty and freedom of choice to select rulers (governments) that have proven their rule compliance. Humans must vigilantly guard and protect the liberty and political freedom that Allah has bestowed on them, as without liberty and political freedom, progress would be impaired on all fronts. On the one hand, if individuals were not rule compliant, then rulers (governments) would need to intervene more obtrusively to steer society back to the indicated path. On the other hand, if rulers are not rule compliant, then society must assert its right and insist on their compliance, or select other rulers. Rules, in turn, define a set of institutions (such as a legal system) that must be effective in supervising, monitoring, and enforcing their mandate in a just fashion.

We believe that a society that internalizes these rules would flourish in every dimension of life on earth; but even in such a society, governments would have to develop policies for national defense, provision of social infrastructure, offsetting economic shocks, and, realistically, compensating for, in instances when individuals and society fail to internalize and adhere to certain rules that then adversely affect society at large. As the needs of society take precedence over individual needs, the state would be called into action when individuals and their collectivity fail. For example, if opportunities are not fair and reasonably equal, the state has to step in and rectify

conditions. If individuals do not pay their mandated contributions or taxes (on wealth, income, and land), then the disadvantaged members of society would suffer; the state would have to step in and collect mandated taxes. Even if individuals pay their mandated taxes and there is still societal need, such as when some individuals hoard wealth and live in luxury while others have no security and exist in poverty, again, the state must intervene to expand opportunities and reduce inequities.

Islam's economic system is a market-based system, but a market-based system that is radically different from the capitalist market system practiced in the United States. In some regions of the Western world where conventional economic thinking reigns supreme, the market is an ideology: something to be placed on a pedestal and worshipped almost as a way of life. In Islam, markets are useful to serve societal needs and not vice versa. Markets are recommended for their efficiency, manifestations of coordination and cooperation, promotion of risk sharing and for their embedded signaling ability to consumers, producers, and governments (supervisors and regulators). However, markets have no sense of fairness, have no conscience, and yes markets do fail, especially under the pressures of human greed and selfishness. The Prophet (pbuh), the supreme interpreter of the Quran, was the first Muslim to recognize this fact, as he designed markets with rules and regulations accompanied by their supervision and enforcement. Thus, governments must devise sound market rules and regulations, with effective supervision and enforcement. Moreover, even under an efficient, fair, and regulated market system, individuals must acknowledge and address the needs of other members of society. Sharing with other members of society is an important hallmark of Quranic rules.

In Islam, the Creator is the ultimate owner of everything in His creation. He has bestowed these gifts on all generations of humans and creatures that inhabit His earth. It is the responsibility of the government to step in and devise policies that protect the rights of generations to come. These policies must be implemented in such a way as to safeguard the rights of all those who cannot directly benefit from these gifts. Thus, the preservation of the environment in its pristine beauty and the exploitation of mineral resources in ways that afford equal benefits to humans of all generations is a moral duty. At the same time, the rights of other creatures in His creation must be respected.

Needless to say, the attainment of all of the above is tall order for a market system without moral rules for guidance and a rule-compliant government to follow through with justice as its moral compass.

This is the approach of Islam for an ideal Muslim community. If individuals and governments (rulers) were fully rule compliant, we believe that such

an ideal society would flourish in every dimension, and with minimal but necessary government intervention. Unfortunately, in 2014, while Muslim countries have these divine rules to follow, they do not, and the dismal state of most Muslim countries says nothing about the Divine rules but speaks volumes about the rule compliance of individual Muslims, Muslim communities, and the policies and practices of their rulers.

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CHAPTER 1

Significance of Public Policy

Introduction

In any economic system, there is a role for the state and for government policy. While the specifics of this role, its mandate, and its extent would differ from one economic system to another, a legitimate government and its policies are, at a minimum, essential for the preservation of security, social harmony, the legal system, and sustained economic prosperity. In the realm of economics and finance, the role of the state is multifaceted and can be minimal to dominant, depending on the system and societal goals.

In Islam, the Creator has given humankind the rules by which they should live their lives on this plane of existence. He demands much of humans, but if humans follow His rules, they could achieve the ideal social and economic system. If humans follow His path, although there would be minimal need for government intervention in the economic system, macroeconomics would help in preserving a stable growth trajectory. Thus, there is an important role for the state in an Islamic economy, but this role may be increasingly reduced as an economy transitions to what might be called the "ideal" economy, where there is full compliance with the prescribed rules of behavior.

In this book we explore when, why, and how a government should intervene in a society and what policies it should use to improve economic and social conditions as recommended in Islam.

Economic Goals and Priorities

In every society and nation state, economic prosperity is the overriding goal. However, policies to achieve this goal are very different from one society to

another. As a result of differing priorities, the target, focus, and the nature of government policies vary significantly across countries.

While the level of GDP and its growth rate are quick and useful indicators of a country's economic success and power, they are dependent upon a country's size, resources, and population, making cross-country comparisons almost meaningless. For comparative purposes, and with humans always making comparisons, per capita GDP or per capita income and its growth rate provide a more meaningful basis for comparisons. However, adopting the highest level of per capita income and its growth as the goal in any society is also quite meaningless. Humans do not live by national economic success alone. They cannot starve while the per capita GDP keeps on growing. They cannot eat the nation's economic success. In short, there are many other dimensions that matter. While a people may take pride in their society enjoying the highest level of per capita GDP on earth, it matters whether an individual's income is above, at, or below the prevailing average. To give an extreme example, it does not make for a flourishing and healthy society if it enjoys the highest per capita GDP in the world but that GDP is only because a few individuals possess an unimaginable income while the rest of society living at a subsistence level! So yes, while income distribution must also be a goal or a priority, societies view its details very differently and government policies can affect and determine the outcome.

Even a high level of per capita GDP and a more or less equitable distribution does not reflect and indicate a society's welfare. Humans are born with dreams. Does society provide those people with the environment and freedom to realize those dreams? Are there real opportunities, with equal access to high quality education, social mobility, and good employment prospects in order for all members of society to realize their full potential? Moreover, what about the disadvantaged members of society who cannot readily avail themselves of existing opportunities? Are the interests of future generations—generations that have no vote or say today—protected when it comes to the environment, the availability of natural resources, and future economic growth rates and prospects? Government and government policies, both directly and indirectly, affect all of these outcomes. But again, the role of the state and its policies are perceived very differently from one society to another, and our focus is the role of public policy in Islam.

The Role of the State

In most states, where you are born becomes the state of your nationality. States, however, change as a result of both internal and external political and military forces. However, if you are born a Muslim, you are a member of all

Muslim countries, at least that is the way it was some 1,300 years ago. In those early days, up until some century and half ago, a Muslim could travel throughout the Muslim world with no papers and expect to be treated as if he or she had been born in the land where they happened to be. How things have changed!

States have monopoly over the levers of coercive power to force compliance. In Islam, Muslims are expected to comply because they are answerable to Allah. Yes, in Muslim societies, states do also have a coercive power, but the expectation is that the state should use its coercive powers sparingly and only when individuals are rule violators or when the use of coercion is in the interest of society. Those interests are, however, not arbitrary; they are defined clearly by the Creator.

The state is the guardian of the legal system and the rule of law. In the absence of laws, their monitoring, and enforcement, a nation-state becomes a veritable jungle—with risk that overwhelms all rational decision-making. The resulting constraints on management of economic, financial, and political risk would in turn impede social and economic progress. In the absence of a supportive legal system and the rule of law, economic actors are unlikely to entertain long-term decisions. Going beyond the legal system, the state can be seen as society's risk manager, especially in the absence of private sector insurance against idiosyncratic risks. Beginning with the obvious—that include external threats, internal security and violence, and unforeseen natural disasters—and stretching to the not-so-obvious—that include broad economic and financial collapse, loss of all employment opportunities, and impairment of the ability to work or losses of asset values beyond the control of individuals—there is an undeniable role for the government in managing society's risk profile. Chapters 5 and 6 will address these issues.

The state plays an important regulatory role that cannot be entrusted to private parties. Sound regulations are at the foundation of business confidence. All economic systems—from any form of market arrangement to command systems—need regulations or rules of the game (or institutions, as we will discuss in Chapters 2 and 3). In the absence of carefully constructed regulations, markets cannot transmit correct signals to consumers and producers for their decision-making. Markets can fail for a number of reasons that include price and output collusion, monopolistic power, asymmetric information, moral hazard, unfair foreign competition and trade practices, and even outright fraud. An important area for government intervention and policy is in dealing with the issue of externalities—negative fallouts, or by-products, of economic transactions. Chemical companies, as a by-product of their industrial processes, emit dangerous pollutants into the air and into the waters. In the normal course of events, they would not

install expensive pollution controls. The companies would invariably prefer to maximize their profits by not paying for the external diseconomies that they cause. The government can establish rules and force companies to clean up their environmental damage and install pollution control equipment. Even in non-market systems, participants must have rules and guidelines for what they can and cannot do. However, regulations and rules are only as effective as their supervision and unbiased enforcement. Again, both supervision and enforcement are difficult to privatize and should be entrusted to a fair and just government.

The government's regulatory role goes further. The state stands to protect society and individuals from predictable harm. Licensing of professionals is important in numerous areas—medicine (doctors and nurses), business, financial institutions, etc. A government agency, such as the Food and Drug Administration (FDA) in the United States, tests and monitors the safety of drugs before they are sold to the public. Accreditation of hospitals and schools is another role for the government. The government plays an important role in certifying the safety of the food chain and the origins and content of whatever is consumed. The government plays a key role in developing safety standards that businesses might not adopt on their own—for cars, airlines, household equipment, etc.

The state has a crucial role in ensuring expansion of economic activity and prosperity. As the world witnessed during the Great Depression and, more recently, in the Great Recession, there is no reason to believe that the economy will be operating at full employment (the natural rate or later restated as NAIRU, the non-accelerating rate of unemployment by Modigliani and Papademos in 1975). In fact, it is highly unlikely that the economy will be humming along at NAIRU for any length of time. There will be periods when aggregate demand is too low (when the aggregate supply is high) and others when it is too high (or when the aggregate supply is low), requiring government intervention to nudge the economy back to the NAIRU level of activity. Stabilization policies—monetary and fiscal (discussed in more detail in Chapter 7)—are crucial in moderating economic fluctuations and maintaining employment, something that is critical to avoid economic hardships for families, and for society in general. However, government's role in stabilization goes beyond monetary and fiscal policies to include industrial policies, trade policy, exchange rate policy, and income policies (such as healthcare and education, that affect incomes).

While government can adopt policies to support economic activity and nudge the economy towards its NAIRU level, it could play an important role in enhancing growth. Sustained economic growth needs supportive policies and institutions to encourage businesses to invest for the long term, for

individuals to get more education to enhance their human capital, and for individuals to forego current consumption and invest for the future. The state is also uniquely positioned to provide the needed infrastructure to support economic growth and development. While the private sector could undertake some infrastructural projects, the investment lumpiness, the long-term payoff, and the myriad spillover benefits of infrastructure investment requires direct government intervention, at least in the form of public-private partnerships. It is not only today's prosperity that matters. A couple of percentage points of additional economic growth for 20–30 years can put a country on a different level of economic wellbeing. Just look at how Argentina has fallen and South Korea has risen!

A series of important, yet controversial, roles of the government deal with allocation of resources—its distribution and re-distribution—or whatever commonly falls under the umbrella of taxation and entitlement programs or might also be referred to as "what, how and for whom." First, and maybe least obviously, is the fact that the government has a significant impact on the allocation of resources because of taxation (reducing a company's, an institution's, or an individual's available resources to affect investment, production, and consumption) and expenditures (increasing the availability of resources for the recipient of these expenditures and affecting the allocation of factors of production to the sectors that produce the goods and services demanded by the government). Second, in most societies, the government in its role as a risk manager of society provides a minimal level of income; in some countries, this is only for a limited period of time, to those that cannot find employment through no fault of their own—unemployment insurance. This program, welfare programs, and some forms of taxation (income and sales taxes) are referred to as "automatic stabilizers," as they tend to cushion the decline in economic activity (demand) and limit the limit its boom. They act automatically in that the government does not take any explicit action for their impact to be felt; and their impact limits economic fluctuations. Third, and as always with very differing application from country to country, societies provide a number of services for the economically unable and disadvantaged who cannot provide for themselves because their ability to access resources has been constrained. While private institutions, NGOs, and individuals do a magnificent job in a number of countries to support the disadvantaged and the economically unable, it is invariably insufficient, and the state must still be the protector of last resort. Fourth, no matter how well the economic system is organized, highly skewed income and wealth distribution has increasingly become a hot-button political and social issue in many countries. On the one hand, governments should be wary of stifling incentives. On the other hand, they should not enable income and

wealth concentration to translate into immense political power to impede economic and social mobility and divide societies into a few "haves," and a preponderance of "have-nots." While some have argued that skewed wealth and income distribution supports more rapid growth, evidence does not appear to support this proposition. As one would expect, income incentives are important up to a point, but beyond that point, they could be a detriment to the participation of the majority in the economic life of a state and not afford any added incentives to others who have amassed fortunes and or have vast incomes. Thus, in most countries, a significant proportion of the population is supportive of the state's adoption of policies to tax income and wealth only beyond a certain threshold level.

No matter the political and/or religious views, there are important roles for the government in the economic and social life of any country. Divisions and disagreements arise over the extent and the specifics of the role and level of intervention. Although our focus is on the role, content, and formulation of economic policies in the context of an Islamic economy, we will continue to make references to policy formulation in the conventional economic system.

Economic Systems and the State

The organizational structure of states could be classified into three main categories. First, there is the monopolistic state—where one or few persons do everything in their own interests. Everything is structured and organized to this end. Those in control of the state create illusions to make the citizenry think that policies have been formulated and implemented to benefit society as a whole, but this is only a mirage. Illusions can be fiscal (taxes collected to be used for the benefit of all, but not so in fact). Just look around—Assad's Syria, Bin Ali's Tunisia, and Peronist Argentina, in all of the oil/gas rich Middle East (not from taxes, but from the oil and gas birthright of all generations), and in most of the other developing countries around the world. Second, we have the individualistic state structure—an aggregation of individual interests. All actions and policies are targeted at individuals. There is no collective interest as such. Individuals are not concerned with collective interests. Here, there is no connection between the individual and society (e.g., when using a public amenity, an individual does not consider the interests of others—leaving public toilets dirty after use). In such a system, the concept of the "free rider" comes into play; with some individuals consuming more than their fair share of a public amenity or not paying the price for the benefit they enjoy. Third, there is paternalistic structure—whereby the interest of society at large is the guide and compass. Divergence

between individual and public interests do arise, but only public interest matters. The state does what it can to bring about a convergence between individual public interests. In this structure, future generations and environmental factors take on great importance—the state comes to their rescue and incorporates their interest into its objective functions and policy goals. While in the individualistic structure, individual interests are summed up to arrive at the public interest, in the paternalistic structure, it is the opposite, with society's interests overriding individual interests. We should not confuse the paternalistic with the dictatorial structure, as the freedom of individual choice exists only in the former system.

An Islamic system structured on the basis of the Qur'an and the Tradition of the Prophet (sawa) doesn't fit neatly into anyone of these three categories. The paternalistic system is the closet to the Islamic structure. In Islam, the paternal figure is the Creator—Allah. In an Islamic system, individuals are first and foremost concerned with the collective interest. The individual lives to serve the interests of all, because therein lies her/his own interests. Essentially, in an Islamic society, public interest is broader than that in the paternalistic structure. Islam, as we will see throughout this book, is a rules-based system to guide humanity in their every action. Muslims are, by definition, those who have submitted their own will freely to that of their Creator, meaning that they are rule compliant. Incentive structures are needed to encourage rule compliance. Regulation is not an absolute necessity in an Islamic economy, but supervision is always needed in every economic structure, including one that is based on Islamic teachings.

Each of the systems—the three just discussed and the Islamic—can use the market system; but the market may be used very differently in each.

The market is a place for exchange. It is an institution. The market mechanism operates to bring supply and demand into balance efficiently. In a pure market system, markets make all the decisions. That is why all markets—labor, resource, goods and services (that include the exchange of property rights), money (short-term instruments), and capital (long-term instruments)—play an overriding role in a pure market system.

The principal strength of the market system is its assumed efficiency—putting in the minimum resources for the maximum output. However, production or technical efficiency does not necessarily mean economic efficiency. For example, the result may be the maximum output, but what if there is no demand for the good that is produced in such abundance? Economic efficiency is the value of output in relation to the value of input. Is market mechanism efficient? Yes and no. For example, alcohol is produced efficiently through the market but it may cause deaths. Furthermore, markets can increase or reduce inequalities. Markets take things as they are

given, and if unfettered markets decide upon everything, the result could be obscene income and wealth inequalities. To state the obvious, markets have no conscience! Adam Smith, the great philosopher and economist, appreciated this seemingly forgotten fact by noting that supervision by the state was invariably needed because of human greed that could lead to adverse results. More importantly, while the world has touted the phrase "invisible hand" that is mentioned only once in his most famous book, *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), it has chosen to neglect the message of his other book, *The Theory of Moral Sentiments* (1759): ethics and morality matter in the proper functioning of markets and, in particular, the love of self should translate into sympathy (empathy) for others as new participants enter the market system. To some, the market is an ideology and to others (as in Islam), the market provides an efficient signaling device and resource allocative system.

Adam Smith's essential idea was that continuous material improvement could be assured of as a result of individual decisions motivated by self-love and moderated by the moral value of "sympathy" for others, among other virtues. Sympathy is the quality that each individual would take to the market as a mechanism that would translate the self-love, or self-interest, of each market participant into concern for others. If individuals entering the market were devoid of sympathy and cooperation, progress would be undermined. The active observing consciousness of the "impartial spectator," the dimension of the self that is a reflective judge of a person's own actions and sense of duty, would create an appropriate balance between the interests of the self and those of others. This guidance by an "invisible hand" would lead to positive economic and social change. The separate self-love of all individuals would be galvanized toward the benefit of all, leading to a stable social order. The economic chaos of the late eighteenth and early nineteenth centuries and the emergence of mass poverty leading to the breakdown of social order in a number of European countries gave birth to compelling ideas; for example, socialism, which, in turn, led to the emergence of totalitarian forms of government, namely, communism in Russia and national socialism in Germany. Underlying this evolution was a set of ethical-moral suppositions that shaped key concepts of development.

Nevertheless, there is more to markets. One problem of society is coordination. Markets can be instrumental and coordinate among individuals and businesses to cooperate. While most observers see the contributions of markets as enhancing competition, markets make a bigger contribution to coordination among market participants: the market signals much information that is indispensable in coordinating activities. Coordination can take place to avoid harm, but also to bring benefits to members of society. Markets do

both—avoid harm and bring benefits. While the benefits of markets are usually stressed, it should be noted that markets could lead to many wasteful activities. The market mechanism may operate efficiently and well, but the market system might still result in waste. For example, there can be widespread poverty, but the market system could still lead to the production of varieties of goods that are demanded but do little to alleviate the needs of the poor. Advertising can induce subliminal demand for products that consumers do not need (where demand for them is created by advertising), while the production of goods that are needed go unfulfilled.

Markets need rules and supervision (to avoid cheating, selling sub-par goods, etc.) to function smoothly and avoid creating inequalities among participants. The assumption is that the state and elected governments should look after interest of the general public; but this is often not so. Regulations and public policy are sometimes used to promote special interests. A market system needs a state; the state needs to establish infrastructure, provide rules, supervise them, and enforce them without bias.

In market capitalism, there are two classes—a capitalist class and a labor class. Market capitalism is very efficient and can produce more goods than any other system. The ultimate goal of capitalists is to accumulate, so they continue to pursue accumulation. In this pursuit, capitalists will endeavor to get more surpluses out of labor and continue to accumulate. Then there is a need to sell what has been produced. So they advertise their product(s). Invariably, these activities do not improve human lives. Thus, there is a need for a supportive ideology: that it is good to accumulate. A capitalist only strives to change money, to output, to more money; or in finance, to exchange money for more money. This is the mentality of a typical market capitalist.

The capitalist mindset is to use available media to send subliminal messages and illusions about the desirability of their wares to consumers. The capitalist transforms money (M) to goods that consumers buy (C) to more money (M'): M' is bigger than M, thus use M, to buy C, then sell C to get M'; or if there is no tangible output but financial interests, from M to M' to M"; spend money today for more money tomorrow; this is the mentality of market capitalism.

To sustain market capitalism, governments must initiate policies that limit the adverse consequences of the operations of the system. Therefore, in a capitalist society, government must pay due attention to the wellbeing of society (social welfare). If this condition is not met, then the system cannot succeed as a whole, which makes it "difficult" to sustain market capitalism. To design policies that best serve the public interest, government utilizes social and economic indicators. These measures tell the government where

the economy is, and then the government uses policies and tools to induce the economy to move to wherever it considers desirable. To achieve this objective, government needs to have power and authority to make policies and implement them. A third need of government is an all-embracing government budgetary system. A fourth need is a cadre of public servants who represent the society and not their own individual or group interests.

An alternative to market capitalism is Central Planning—a system that is plagued by inefficiencies as it replaces the market mechanism with directives or orders. An Islamic economy uses the market process, but does not adopt the capitalist mentality of accumulation. The values upon which market capitalism and an Islamic economy are structured are very different. Islam mandates sharing. As we have said above, markets have no ethics, ideology, or morals (unless, as it has been said, market has its ethics: quid pro quo; if you have the quid you can have the quo). The ideology of capitalists is to view workers as commodities and persuade them that it is good to accumulate. The threat to market capitalism comes from unemployment, inflation, and skewed income and wealth distribution. Governments use policy to avert these threats. However, Islam is different story—it is a way of life. As we shall see, Islam too uses the market mechanism, but yet the economic system it produces is the polar opposite of market capitalism. While market capitalism advocates efficiency at all cost, extracting the maximum surplus from labor, and accumulating wealth by the individual, Islam embraces markets for their efficiency but subjects it to the rules that form the basis for regulations and standards in order to preserve the rights of all members of society. It requires payment of just wages and treating labor with the dignity that the Creator has accorded all humans. Sharing with and redeeming the rights of those who have not been able to access Allah's bounty (those that, for a variety of reason, have been unable to combine their labor and resources to produce income) and participate in the economy, living modestly, and "paying it forward" (sharing further)—after all mandated obligations have been redeemed, so that all members of society are able to support a modest lifestyle with full dignity—are mandated.

In the next chapter, we examine the institutional perspective, that is, the set of rules that define the "rules of the game" in Islam. Rules or institutions are the essence of an economic system as envisaged by Adam Smith. The simple fact that any economy needs rules and rule compliance—the basis for the confidence to save and/or invest—was neglected by the economics profession for nearly 200 years, and was only really rediscovered in the second half of the twentieth century. While Islam is rules-based, its rules and institutions are different from those in the capitalist system.

CHAPTER 2

Institutional Perspective of Islamic Economics

Introduction

Before embarking upon a description of the Islamic vision of human and economic development and its rules and institutional structure, an important difference between an Islamic economy and market capitalism needs to be emphasized. In the pure market capitalist system, the goal is to maximize production and accumulate the resulting surplus—"accumulation is good"—money for goods and services, in turn for more money, and then repeat this cycle, or money for more money through finance. In Islam, the goal is not maximum output and accumulation, but rather, efficient production, just remuneration, and then sharing with other members of society to develop a thriving society that exudes justice.

The Western conception of development was narrow and sterile for the first 70 years of the twentieth century. Development was simply GDP per capita and its growth. It changed with the work of Amartya Sen and Mahbub ul-Haq. As a result of their contributions, the prevailing Western concept of development can be viewed as a return to the traditions of the Scottish Enlightenment, particularly to Adam Smith. Amartya Sen's contributions revived a considerable portion of classical thinking on the progress of societies. Sen changed the content, meaning, and direction of the discourse on development by demonstrating that reasoned arguments in economics could contain an ethical component. He did so by arguing against the neoclassical dogma that sharply separated the "positive" from the "normative," and "facts" from "values," as well as by rejecting the neoclassical position on the "meaninglessness" of value claims. The most devastating charge leveled

against the neoclassical dogma by Sen is the "narrowing" of Smith's view by "the believers in, and advocates of, self-interested behavior."

Support for this narrow view Smith's economic policy is, in fact, unjustified "on a wider and less biased reading of Smith—the professor of moral philosophy and the pioneer economist did not, in fact, lead a life of spectacular schizophrenia. Indeed, it is precisely the narrowing of the broad Smithian view of human beings in modern economics that can be seen as one of the major deficiencies of contemporary economic theory. This impoverishment is closely related to the distancing of economics from ethics."

Islam is a rules-based system, with rules prescribed by Allah (swt). Compliance with these rules guarantees felicity here and in the hereafter. Allah monitors compliance, and there are rewards for compliance and reprimands for non-compliance; there is always full accountability. These rules define the institutional scaffolding of Islam as the way of life.

In this chapter, we endeavor to elaborate on how complying with these rules paves the path to development, as conventional development theories today consider operative rules as the basis of institutional structure, that in turn underpin the path of economic and social progress as well as provide the foundation for macroeconomic policies. We hope to clarify the essential elements of this foundation—the unity of creation, freedom and freedom of choice, economic and human development, economic system and financial practice—and clarify its distinguishing characteristics.

The Reasons for Rules

Douglass North believes that cognition plays a central role in belief formation, which, in turn, affects preference formation, rational decision-making, and institutions.[1] Rules (institutions) have a reciprocal effect on cognition. Beliefs constitute what North refers to as a "mental model." However, whereas North believes that institutions "are clearly an extension to the mental constructs the human mind develops to interpret the environment of the individual," in Islam, rules (institutions) are provided by the Law Giver. For a believer, the "mental model" is formed by these rules (institutions). It is the dense network of rules that reduces uncertainty in individuals and society. When society includes a critical mass of believers, compliance with these rules constitutes the ethos of society. The cognition of the basic structural framework of the belief in Islam forms the "mental model," which then determines rule-compliance, preference formation, decision-making, and behavior. Adherence to the rules promotes solidarity with a reciprocal and mutually synergetic strengthening of trust among the members of society. Uslaner asserts, "Economic equality is the foundation of social

solidarity (generalized trust) and trust in government. Generalized trust leads to greater investment in policies that have longer-term payoffs (education spending) as well as more directly leading to economic growth. A weak state with an ineffective legal system cannot enforce contracts; and a government that cannot produce economic growth and the promise of a brighter future will not be legitimate."[2] Moreover, he suggests that, "Unequal wealth leads people to feel less constrained about cheating others and about evading taxes." and that, "Inequality leads to unequal treatment by courts, which leads to less legitimacy for the government."

Western writers have delineated the reasons for why rules and their observance are important. Their reasoning, though similar to each other, is very different from that the reasoning in Islam.[3] There are numerous reasons for rules in Islam:

i. *Establish social order*. Constitutions are the instruments of establishing social order and embody the structure of rules along with arrangements for their enforcement. In an ideal Islamic Society, the Quran, as explained and interpreted by the one human who received it, i.e., the Prophet (sawa) is its Constitution;
ii. *Delineate for individuals what they can do as opposed to what they wish to do*. Rules guide individuals and provide information about the limit of their conduct;
iii. *Reduce uncertainty and promote predictability*. They make the behavior of individuals predictable, thus reducing the uncertainty normally attached to the lack of knowledge as to how other people behave. Thus, they allow planning for the long term. Assuming that all are rule compliant, individuals do not have to be uncertain as to how others will react to their decisions and actions. This encourages long-term investment planning;
iv. *Reduce the demand on an individual's cognitive ability, which would be required for decision making if there were no rules*;
v. *Allow the appropriate formation of expectations on the part of individuals commensurate with the structure of established rules*;
vi. *Promote coordination*. When individual plans become compatible with one another, they are said to be coordinated. Once individuals are rule-compliant and uncertainty regarding how each will respond to the others' actions is eliminated, cooperation, and coordination are facilitated by reducing errors of judgment on how individuals may behave in response to the decision-action of one another;
vii. *Promote social cohesion*. By complying with rules, individuals integrate into the social order. Integration of individuals into the social

order promotes social cohesion, allows coordination of individual decisions, and achieves society's objectives efficiently;

viii. *Promote efficiency of the economy by reducing transaction costs*. Transaction costs are the costs of all resources required for property rights exchange among participants in the economy. They include costs of information, search and discovery of opportunities for exchange, negotiation and transfer of property rights in exchange, and enforcing contracts;

ix. *Reduce cognitive dissonance among individuals in society*. Compliance with rules that establish society reduces conflict about the objectives of the society, since rule-compliant individuals share the objectives for which the rules of the social order were established;

x. *Promote equal treatment*. Rules are impersonal and reduce the likelihood of application of illegitimate and /or arbitrary criteria as well as avoid conferring benefits or burdens selectively to members of the society;

xi. *Promote human dignity by making it unlikely that individuals will face the indignity of being subject to the whims of the more powerful elements of society*;

xii. *Provide a reference structure against which fairness and justice of individual behavior can be assessed*. Rule violation on the part of an individual is unjust because other rule-compliant members of society have formed their expectations while assuming that the other members of society will be rule-compliant;

xiii. *Promote collective justice in society.* Rule compliance on the part of the individual represents just conduct, because the social contract that establishes social order is aimed at achieving the best for society as a whole. If individual rule violation constitutes injustice, then rule compliance by all members of society results in a just society; and

xiv. *Reduce opportunity for free riding.* When individuals are rule compliant, the likelihood that they would take advantage of others through passing costs (receive a free ride) of their decision-actions to others is very low. The Tragedy of Commons is one example of the consequences of that lack of an appropriate structure of rules.

Social contracts or constitutions establish social order by embodying a structure of rules of behavior with their enforcement characteristics. While ideology is a subjective viewpoint that individuals in a society hold through which they explain the world around them, the strength of ideology determines the strength of rule compliance. Ideology determines individual choice, which in turn determines behavior. The degree of convergence

between individual choice and the ideology explain the strength of rule compliance. Conditions for rule compliance can be summarized as: (1) quality of rules and their consistency; (2) convergence between rules and ideology; (3) the strength of enforcement of rules; and (4) uniformity of application of rules to all members of the society. If an individual's perception of the prevailing ideology in society is that certain rules ought to exist but then finds that they actually do not, the strength of that person's rule compliance will be adversely affected.

The major category of rules in Islam include those that govern: property rights; contracts; trust and full fidelity to terms and conditions of promises, contracts, and obligations that are undertaken; cooperation; consultation; no harm, no injury to others, and no third party damage in bilateral transactions; behavior of market participants; distribution and redistribution of income and wealth; fair and just behavior; and rules imposing the duty to ensure rule compliance and the avoidance of rule violation on all members of society; what may thus be coined as the capstone rule.

The Unity of Creation and Freedom of Choice

There are four fundamental concepts that represent gifts of the Creator to humanity, gifts that cannot be nullified by anyone without incurring the displeasure of the Creator. The first is *walayah,* the unconditional, dynamic, active, ever-present love of the Supreme Creator for His creation, manifested through the act of creation and the provision of sufficient resources to sustain life and flourish during its temporary existence on this earth (there are over 200 verses in the Qur'an relating this concept). Humans reciprocate this Love by extending their love to other humans and to the rest of creation. The core activity of *walayah* is love manifested through knowledge and the upholding of justice. The second is *karamah*, human dignity (see Verse 70, Chapter 17). The Qur'an considers humans to be the crowning achievement of creation, for whose individual and collective development everything else has been created. Humans are endowed with the intelligence to know their Creator, to recognize and appreciate the universe and everything in it, and to understand the reasons for their own existence. The third is the *meethaq*, the primordial covenant in which all humans are called before their Supreme Creator and asked to testify that they recognize in Him the One and Only Creator and Sustainer of the entire breadth of Creation, and all the other implications flowing from this testimony (see Verse 172, Chapter 7). The fourth concept is *khilafa*: agency-trusteeship (see Verse 30, Chapter 2). Jointly, *walayah* and *karamah* provide the basis for *khilafa*. The Love of the Creator endows humans with dignity and intelligence so as to

manifest *walalyah* through the instrumentality of *khilafah*. *To perform this function, humans are* empowered by their Creator through the resources provided to them by the Creator. Full understanding of these fundamental concepts manifests itself in the operationalization of *walayah* through rule compliance. The central anchor-rule of the collectivity of rules, and a powerful enforcement mechanism, is that of actively urging fellow humans to rule compliance and the avoidance of rule violation.

A number of verses of the Quran affirm the unity of mankind (see e.g.,: Verse1: Chapter 4; Verse13: Chapter 49; Verse 28: Chapter 31).[4] These verses, plus those dealing with the availability of resources as well as all endowments the Creator has gifted humans, are the foundation of the legislative framework of rules (institutions) regulating the socio-economic-political behavior of humans. Resources are created for all of humanity. The diversity seen in humans does not—and should not—indicate their disunity. In the primordial covenant, all humans recognize the unity of the Creator as well as their own unity. They also have full cognition of their responsibility to sustain the unity, solidarity, and integrity of creation through their service to humanity and to the rest of creation, while removing barriers to the progress of other humans along the axis of *walayah*.

The autonomy provided by the freedom of choice is exercised through compliance, or non-compliance, with rules (institutions) specified by the Creator that are necessary for a harmonious existence. The most important dimension of the adoration of Allah, *úbudiyyah*, is removing barriers from the path of other humans in order to empower them to perform their own function of *úbudiyyah*. For example, poverty and destitution are barriers to the poor on their path to reach perfection. Removing these barriers from the path of the poor is an act of *íbadah*, adoration of the Creator, the active-dynamic love for one's own kind. In politics also, ensuring that no human being is deprived of the freedom of choice—sharing the risk by standing up for justice—is an act of *íbadah*. Actions taken to ensure the ability of other humans to enjoy the gifts granted to them by their Creator is an act signifying adoration of the Creator. *The Islamic vision for mankind is to achieve unity.*

Institutional Structure (Rules of Behavior)

The availability of resources, technology, and the efficiency of their utilization determines the level of economic development and the rate of economic growth. Technological progress is encouraged in Islam, since this provides the means by which humans can satisfy their material needs and thus remove the economic barriers on the path to their spiritual progress. Moreover, institutions (rules and norms plus their enforcement) have been found to play a

crucial role in determining the Total Factor Productivity (TFP). The closer the compliance of the actions—in production, exchange, distribution, and redistribution—of society with the governing rules, the higher the total factor productivity, the rate of growth, and the level of economic development. We now turn to important Islamic values such as abstinence from hoarding of wealth, and summarize the rules regarding property rights, market behavior, exchange and trade, and contracts and trust.

In terms of participation in economic activities, the rules governing economic behavior in an Islamic economic system, based on the Quran and the life of the Prophet (sawa), are held sacred and binding. Such a system can be defined as a collection of institutions—rules of conduct and their enforcement characteristics—designed by the Law Giver to deal with the allocation of resources, the production and exchange of goods and services, the distribution-redistribution of the resulting income and wealth, and the preservation and transmission of resources to the next generation. The objective of these rules is to achieve justice, to reduce uncertainty for individuals and allow them to overcome the obstacles presented by their ignorance. Rules specify what kind of conduct is most appropriate for avoiding conflict and achieving just results. Since everyone knows the rules, the reaction and response of individuals to each situation results in the clarity of the expectations.[5] The effectiveness of rule enforcement is determined by the degree to which the objective of the system, namely, the establishment of justice, is an integral part of the subjective self.

While there are many biographies of the Prophet (sawa), there is much less scholarly research on his economic policies during his tenure as the temporal authority of the society he organized in Medina.[6] Practices by the Prophet (sawa) operationalized rules of governance, accountability, and transparency; rules regarding property ownership and protection; rules regarding the formation and the structure of the market; rules concerning the role of the state vis-à-vis the market; rules of behavior by market participants; rules regarding distribution and redistribution; rules related to education, technological progress, and society's infrastructure; and rules regarding sources of government income and its expenditures. These were all promulgated during the ten years of the Prophet's life in Medina.

The central axis of design and operation of these rules is justice. In expounding the rules prescribed by the Creator, the Messenger (sawa) taught us the rights and responsibilities of the individual aw well as the collective. He particularly emphasized the equality of individuals before the law. The first and the most important of the his efforts was the formation of a society based on Islamic teaching; this he achieved with the assistance of the critical mass of his followers who had migrated with him to Medina. It was

first necessary to create peace, social stability, and the means of defending that nascent society from external threats. The social contract with the inhabitants of Medina constituted agreed-upon procedures for administering society as well as procedures for mutual support and defense (see, John Andrew Morrow, 2013). Next, the Messenger (sawa) implemented the rules of conduct prescribed in the Qur'an. The next section discusses these rules, beginning with property rights.

Before looking at the rules governing property rights, it may be instructive to get a precise understanding of what property means. It may be defined as a bundle of rights, duties, powers, and liabilities with respect to an asset. In the Western concept, private property is considered the right of an individual to use and dispose of, along with the right to exclude the access of others. Even in the evolution of Western economies, this is a rather new concept of property that has accompanied the emergence of the present form of free market economies. Before that, however, property rights did not include the right to dispose of an asset or to exclude others from its use. For example, a grant of property rights over a parcel of land, a corporate charter, or a monopoly granted by the state gave its possessor the right to the revenues accruing from those grants, but excluded the right to dispose of the asset. It was thought that the free market economy required a revision because the restriction on the ability to dispose of a property was incompatible with a free market economy. In Islam, however, limitations on the disposal of an asset, for example, rules against waste, destruction, and opulence, are retained without diminishing the role of the market.[7]

Property Rights

Property relations are governed by a set of rules regarding rights and obligations. The first rule governing property relations is that everything in creation, including humans, is the property of the Creator. He has created natural resources for the benefit of all of mankind. The second rule asserts the rights of the human collective to these resources: *He it is who created for you all that is in the earth* [29:2]. This verse, and a number of others, establishes the right of access to these resources by all humans. The third rule establishes that once the property is accessed and combined with work by individuals, a full right of possession of the resulting product is established for the individual without either the Creator losing His original property right, or the collective losing its initial right, over these resources. The fourth rule recognizes only two ways in which individuals gain legitimate property rights: (i) through their own creative labor, and/or (ii) through transfers—via exchange, contracts, grants, or inheritance—from others

who have gained the title of property rights to an asset through their own labor. Fundamentally, therefore, work is the basis of the acquisition of the right to property. Work, however, is not only performed for the purpose of satisfying one's desires, it is considered a duty and an obligation. An important corollary to the importance of work is a fifth rule that forbids gaining instantaneous property rights without having worked to earn them, with the exception of lawful transfer. This rule prohibits property rights gained through gambling, theft, earning interest on money, bribery, or, generally, from sources considered unlawful [188:2; 29:4]. Although Islam prohibits interest-based contracts, it embraces a contract of exchange that allows risk sharing and consumption smoothing [275:2; 29:4].

Just as work is a right and obligation of all humans, so is access to and use of the natural-physical resources provided by the Creator for producing goods and services. If an individual, for whatever reason, lacks the ability to work, it does not deprive him of his original right to resources granted to every human. Therefore, the rule of the "immutability of property rights" constitutes the sixth rule of property relations. Before any work is performed on natural-physical resources, all humans have an equal right and opportunity to access these resources. When individuals apply their creative labor to resources, they gain a right to priority in the possession, use, and exchange of the resulting product without nullifying the original property rights of the Creator or the rights He granted to all humans in the final product or the proceeds from its sale; This is the justification for the rule of sharing [33:4; 180:3; 36–37:4; 5–11:92]. The duty of sharing the product or the income and wealth proceeding from its sale constitutes the seventh rule of property relations, which relates to property ownership rights as a trust. This rule is operationalized through the ordained duties imposed on income and wealth, which must be paid to cleanse income and wealth from the rights of others. This is perhaps the reason why the Quran refers to these duties as *zakat*, from the root word meaning cleansing, purification, and growth, akin to tree pruning that simultaneously rids the tree of its undesirable parts and allows its further growth. The eighth rule of property relations imposes limitations on the right to dispose of property—a right that is presumably absolute in the Western concept of property rights. In Islam, individuals have a severely mandated obligation not to waste, squander (israf), destroy (*itlaf*), or use toward opulent (*itraf*) or unlawful (*haram*) purposes such as bribery. Once the specified property obligations are appropriately discharged, including that of sharing in the prescribed amount and manner, property rights over the remaining portion of income, wealth, and assets are held sacred and inviolate, and no one can force their appropriation or expropriation. While these eight rules strongly affirm mankind's

natural tendency to possess—particularly products resulting from individual labor—the concomitant property obligations promote interdependence and cohesion among the members of society. Believers are persons in a relationship of reciprocity. Private initiative, choice, and reward are recognized, protected, and acknowledged as legitimate, but are not allowed to subvert the obligation of sharing.

Market Behavior

The Quran fully acknowledges the important contribution of markets and places great emphasis on contracts of exchange (*bay'*) and trade (*tijarah*). The Messenger (sawa) implemented a number of policies to enhance the market mechanism and to encourage the expansion of trade. While Medina had its own existing market, the Messenger (sawa), with the advice of the leading merchants, selected a location for a new market for Muslims. Unlike in the existing market in Medina, the Messenger (sawa) prohibited the imposition of taxes on market entry and on transactions and/ or individual merchants. He also implemented policies to encourage trade among Muslims and non-Muslims by creating incentives for non-Muslim merchants in and outside of Medina. The rules included, inter alia, and in addition to those mentioned above, no restrictions on international or interregional trade (including no taxation of imports and exports); the free spatial movement of resources, goods, and services from one market to another; no barriers to market entry and exit; free and transparent information regarding the price, quality, and quantity of goods, particularly in the case of spot trade; the specification of the exact date for the completion of trade whenever trade was to take place over time; the specification of the property and other rights of all participants to every contract; guaranteed contract enforcement by the state and its legal apparatus; the prohibition on the hoarding of commodities and of productive resources for the purpose of pushing up their price; the prohibition on price controls; a ban on sellers or buyers harming the interests of other market participants, for example, by not allowing a person to interrupt negotiations between two parties in order to benefit from one of the parties; and a ban on the shortchanging of buyers, for example, by not giving full weight and measure. Moreover, sellers and buyers were given the right of annulment of a deal: (i) before leaving the location in which it was taking place; (ii) in the case of a buyer who had not seen the commodity and after seeing it found it unacceptable; (iii) if either the seller or the buyer discovered that the product had either been sold for less than, or bought for higher than, it was worth; (iv) if the buyer discovered that the quality of the product was not as expected; (v) if side conditions were specified during the negotiations which

were unfulfilled; (vi) if a delivery period was specified but the product was not delivered on time; and (vii) when the subject of the negotiations were pack animals, the buyer had the right to return the animal up to three days after the deal was finalized. These rights of annulment ensured that market participants were protected against a lack of, or faulty, information.

The moral-ethical foundation of market behavior prescribed by the Quran and implemented by the Messenger (sawa) was designed to minimize risks as well as transaction costs for participants, and increase the efficiency of exchange. Moreover, rules specified in the Quran regarding faithfulness to the terms and conditions of contracts and the knowledge of their enforcement increased the certainty and reduced the cost of contracts.

From the earliest period of operation of the Medina market, the Messenger (sawa) appointed market supervisors whose assignment was to ensure rule-compliance. He ranked honest market participants with prophets, martyrs, and *awlia'* (plural for a *waliyy or a lover*) of Allah, because like prophets, they follow the path of justice, like martyrs they fight against heavy odds (fighting their own greedy impulses), and, like the true lovers of Allah, they are steadfast in their path to perfection. The Messenger (sawa) would advise the participants to go beyond mere rule-compliance and to treat their fellow humans with beneficence (ihsan). While justice in the market would be served by rule-compliance, which limits and controls selfish behavior, beneficence rises higher by actually sacrificing one's self-interest for the interests of others.

During his life in Medina, the Messenger (sawa) laid the foundation for a public treasury. He devised an efficient system not only for collecting prescribed dues, which the Quran had ordained as the rights of the members of society to each person's income and wealth, but also for rents and dues on public lands used by private producers and for the per capita dues paid by non-Muslims for benefits derived from public services (called Jazyah, in lieu of dues paid by Muslims), accruing to the state treasury for redistribution to the needy (this section draws on K. Sadr). He established a means of defense against external threats, an education system, and procedures for the adoption of new technologies and infrastructural investments. He insisted on the participation of all members of society in its affairs, he encouraged education, he supported the adoption of technologies from neighboring states and people, and he encouraged the expansion of the social infrastructure. His emphasis on health and hygiene was so strong that he considered it a religious duty. He emphasized productive work, and while he would use the public treasury to alleviate destitution and poverty, he would strongly discourage reliance on handouts to the able-bodied. To encourage hard work, one of his policies was to enforce risk-reward sharing in production and in

trade. He urged his wealthier followers to invest in public infrastructure projects, for example, in water wells, for the benefit of society. He discouraged the hoarding of wealth, which is prohibited in the Qur'an [34:9].

The Messenger (sawa) emphasized that it is always the rich, powerful, and the opulent who are the exploiters of other humans, who, in order to amass wealth, are the source of the persecution and suffering of the prophets and their followers.[8] The Prophet is constantly reminded in the Qur'an that the crucial aspect of his own mission, and that of the prophets before him, was to establish justice. In practical terms, the Qur'an is clear that this means creating a balanced society that avoids extremes of wealth and poverty; a society in which all understand that wealth is a blessing afforded by the Creator for the sole purpose of supporting the lives of all members of society. While the rich consume opulently, the poor suffer from deprivation because their rights to the wealth of the rich are not redeemed.[9] Islam ordains that what is left over after one has achieved a modest standard of living must be returned to the less able members of society as an act of redeeming their rights [7:57]. Therefore, while Islam ordains hard work, the development of the earth and natural resources provided by the Creator, and the use of those proceeds for the satisfaction of the needs of all humans, it prohibits the concentration of wealth in the hands of a few.[10] Operationally, such an economy can be defined as: the collection of institutions, that is, the rules of conduct and their enforcement, to deal with the allocation of resources, the production, and the exchange of goods and services, and the distribution and redistribution of the resulting income and wealth to establish balance and justice in society.[11]

As mentioned earlier, the Qur'an does not see scarcity as the problem; instead, it considers that selfishness, the misuse of resources, and human greed that cause scarcity, poverty, misery, and destitution are the real problems. Societies that reject divine law have institutions and power relations that allow significant inequalities in accessing created resources, which, in turn, lead to the inequality of income and wealth. It is the institutional structure of society that allows a pattern of wealth accumulation, creating abundance for some and scarcity for many. This is what creates social divisions, not natural scarcity. It is the institutional structure of society that determines the resource endowments of its members, which, in turn, determine the structure of their preferences and ultimately, their economic behavior. Such an institutional structure combined with a poorly functioning process of self-development provides no opportunity for the self to transcend the focus on "me and mine." Self-development is necessary to transcend selfishness. The Qur'an clearly states the need for a revolution in the orientation of the "self" [11:13]. The revolution, as defined comprehensively throughout the Qur'an, is a change toward compliance with the rules of just conduct for

the individual. The "ethos of justice" is created in society by a critical mass of those whose behavior fully complies with the prescribed rules.

Distribution and Redistribution

We now turn to the rules covering access to resources, production, exchange, distribution, and redistribution. Although the Qur'an acknowledges that in His Wisdom, the Lord has created human beings with differences, it also emphasizes that these differences are only apparent, skin deep, and that all human beings are essentially the same. In a society that suffers from poverty amidst plenty, the roots of inequality must be traced to distortions in the pattern of resource endowments, in the workings of the exchange, and/or distribution mechanisms, and/or in the redistributive framework. The most fundamental among these is the pattern of resource endowment. This pattern determines the formation of individual preferences, which, in turn, determine behavior in the rest of the economy and in society. Individual preferences are not only influenced by the pattern of resource endowment, but also by the "ethos" of society. The ethos of society, in turn, is influenced by individual beliefs. The feedback processes between the pattern of resource entitlement, belief, ethos, and preference formation are complex, and distortions in these processes are highly consequential for the emergence of poverty, economic inefficiencies, and reduced economic growth and development.

Allah has ordained equally free access to resources by all humans and instructed that the resulting income and wealth, which, by implication from the earlier principle, are also His blessings, must not be hoarded, but must be shared with those who are less able to access the initial resources.[12] This expenditure is over and above the mandatory portion of net income and wealth collected by the legitimate authority.[13] These charges are referred to as *sadaqat* (singular: *sadaqah*) from the root word meaning truthfulness and sincerity. Their faithful discharge indicates the strength of the sincerity of a person's belief. These expenditures are essentially the repatriation and redemption of the rights of others in one's income and wealth. It is for the good of the person paying them that they are ordained.[14] Since these expenditures are the repayment of what is the right of those who were unable, or less able, to access the natural-physical resources that the Creator has made available to all humans, they are considered as the repayment of a debt, without which one's wealth would be soiled. Redeeming these rights is a manifestation of one's belief in the essential axioms of the oneness of the Creator and His creation. When one is granted the mental-physical capacity by the Creator to access more of these resources, it means others less able or unable to use these resources are in fact one's partners, whose rights in the final

post-production, post-market proceeds have to be redeemed. The Qur'an affirms that because these are rights to be redeemed rather than charity, extreme care must be taken of the recipient's human dignity.

Risk Sharing

As mentioned, Islam recognizes only two legitimate means of acquiring claims to property rights and prohibits transactions that create instantaneous property rights.[15] It is possible to distinguish transactions that create legitimate property right claims from others by reference to a verse in the Quran in which two types of contract are identified: exchange (*al-bay'*) and usury (*al-riba*) [275:2]. *The first is permitted and the second is prohibited*. An example of an *al-riba* contract is one in which rent is collected for the use of an amount of money for a set period of time without the transfer of the property rights of the money from the owner to the borrower. Exchange (*bay'*) is a contract, a mutual transaction in which a bundle of property is exchanged for another. Since *al-bay'* is a contract, so must be *al-riba*; except that the latter is forbidden.

The foundation of the belief that an Islamic financial system facilitates real sector activities through risk sharing has its epistemological roots firmly in the Quran, specifically, verse 275 of chapter 2 (Mirakhor, 2011b; Mirakhor and Smolo, 2011). This verse, in part, ordains that all economic and financial transactions be conducted via contracts of exchange (*al-Bay'*) and not through interest-based debt contracts (*al-Riba*). The necessary condition (*al-Bay'*) and sufficient condition (no *riba*) must be met for a contract to be considered Islamic. Classical Arabic Lexicons of the Quran define contracts of exchange (*al-Bay'*), as contracts involving exchange of property, whereby there are expectations of gains and the probability of losses (Mirakhor, 2010), implying that there are risks in the transaction. By entering into contracts of exchange, parties improve their welfare by exchanging the risks of economic activities, thus allowing division of labor and specialization. Conceptually, there is a difference between risk taking and risk sharing. The former is antecedent to the latter. An entrepreneur has to first decide to undertake the risk associated with a real sector project before financing is sought. In a non-barter exchange, it is at the point of financing where risk sharing materializes, or fails to do so. The risk of the project does not change as it enters the financial sector seeking financing. Not clarifying this distinction has led to a confusion that the two concepts are one and the same.

In the contemporary economy, at the point of financing, risk may be shared, but it can also be transferred or shifted. The essence of financial intermediation is the ability of financial institutions to transfer risk. All

institutional arrangements within the financial sector of contemporary economies are mostly geared to facilitate this function. Another related confusion is between an underlying real sector contract and the instrument that financially empowers that contract. All contracts (*'uqud*) that have reached us originate in the real sector and that are all permissible risk-sharing contracts (Mirakhor, 2010). However, a given instrument designed to finance any one of these contracts may be permissible from the *fiqh* point of view, in that it meets the sufficient condition of no *riba*, but fails to meet the necessary condition of risk sharing.

Contracts and Trust

The next set of rules to be understood and internalized by individuals is those governing contract and trust. John McMillan suggests that, "Any successful economy has an array of devices and procedures to enable markets to work smoothly. A workable platform has five elements: information flows smoothly; property rights are protected; people can be trusted to live up to their promises; side effects on third parties are curtailed; and competitions are fostered."[16] Earlier discussion should confirm that Islam provides a strong "platform" of "devices and procedures to enable markets to work smoothly." The key to market operation is decision-making autonomy. "Participation in exchange is voluntary; both buyers and sellers are able to veto any deal." He is, however, quick to add that the choices of buyers and sellers "are not completely free though: they are constrained by the extent of their resources and by the rules of the market place."[17] The collection of devices that organize and support transactions—channels for the flow of information; laws and regulations that define property rights and enforce contracts; and the informal rules, norms, and codes that help markets self-regulate—he calls market design. A design that allows markets to keep transaction costs low, he calls "a workable" market design. Appropriately, he argues that high transaction costs render a market dysfunctional.[18] Two elements on which McMillan focuses as key to workable market design are the free flow of information and trust, both of which reduce transaction costs.[19]

The rules prescribed by the Law Giver and explicated and implemented by the Messenger (sawa) were intended precisely to reduce transaction costs. As observed in the rules developed for the market of Medina, the propagation of the rules of market behavior ensured that there would be no interference with the free flow of information regarding the quantity, quality, and prices of goods and services in the market, and this to the point where the Messenger (sawa) forbade a previous common practice of middlemen meeting trade caravans outside the city and purchasing their supplies before the

caravans entered the market. Market supervisors (Muhtasib), appointed by the Messenger (sawa), ensured that there was no fraud, cheating, withholding of information, or other practices that could lead to the malfunctioning of the pricing mechanism. As the markets evolved in the middle ages of Muslim economic history, each physical segment of the market was specialized with respect to products. Prices were determined by competition among suppliers and every market was supervised not only by a *Muhtasib*, but supplemented by guilds of each profession and trade.[20] Supervisory devices were based on the rule-enforcement mechanism of commanding rule compliance and forbidding rule violations.

These enforcement devices were fortified by the physical architecture of bazaars, which were constructed in such a way that a grand mosque was located at the center of the bazaar. Every market participant, particularly the sellers, had an opportunity to attend at least two of the five daily prayers at the mosque: noon and afternoon. This was an opportunity for market participants to be reminded of their Creator, of their obligations to Him and to other humans, and of their accountability on the Last Day. Throughout the legal history of Islam, a body of rules, based on the Quran and on the traditions of the Prophet, has constituted a general theory of contracts. This body of rules covering all contracts has established the principle that any agreement not specifically prohibited by law is valid and binding on the parties to that contract.

In a very important tradition, the Messenger (sawa) says: "Three (behavioral traits) if found in a person, then he is a hypocrite even if he fasts, prays, performs bigger and small pilgrimages, and says 'I am a Muslim': when he speaks, he lies; when he promises, he breeches; and when trusted, he betrays."[21] There is a strong interdependence between a contract and trust; without trust, contracts become difficult to negotiate and conclude, and costly to monitor and enforce. When and where trust is weak, complex and expensive administrative devices are needed to enforce contracts. Moreover, it is well known that complete contracts—ones that foresee all contingencies—do not exist. Thus, trust is an important element of a well-designed market. When and where property rights are poorly defined and protected, the cost of gathering and analyzing information is high and trust is weak, it is difficult to clearly specify the terms of contracts and enforce them. In these cases transaction costs—that is, search and information costs, bargaining and decision costs, contract negotiation and enforcement costs—are high. Where and when transaction costs are high, there is less trade, fewer market participants, less long-term investment, lower productivity, and slower economic growth. As North has pointed out, when and where there is rule-compliance and enforcement, there is an increase in the

likelihood that property rights will be protected and contracts honored. Under such conditions, individuals are more willing to specialize, invest in long-term projects, undertake complex transactions, and accumulate and share knowledge.

Keefer and Knack argue that: "In fact, substantial evidence demonstrates that social norms prescribing cooperation or trustworthy behavior have significant impact on whether societies can overcome obstacles to contracting and collective action that would otherwise hinder their development."[22] The last decades of the twentieth century sparked considerable interest in the importance of trust and cooperation.[23] While trust is necessary for the proper functioning of the market, it is even more essential for social solidarity. In fact, Uslaner equates social solidarity with generalized trust. Among the conclusions that Keefer and Knack draw from their empirical cross-country research on trust is that: (i) the levels of trust and trustworthiness vary significantly across countries, and (ii) both trust and trustworthiness "have significant effect on economic outcomes and development." Moreover, they assert that "social norms that produce trust and trustworthiness can solve the problem of credible commitment," which, where and when it does not exist, causes disruption to economic, political, and social interactions among human beings. The problem of credible commitment arises when the parties to an exchange cannot commit themselves—or believe others cannot commit themselves—to carrying out the contractual obligations. Where this problem exists, long-term contracting will not be widespread and parties to exchanges will opt for spot-market transactions. Knack and Keefer have found that per capita economic growth increases by nearly one percentage point per year for every ten-percentage point increase in the number of people who express trusting attitudes. They explain:

> the larger the fraction of people in a society who share norms prescribing cooperative or trustworthy behavior in collective action setting, the more likely is the society to have overcome problems of credible commitment in the economic, political and social spheres . . . contracting parties can dispense with costly monitoring of performance . . . Individuals have more resources available for innovation and investment, as they can devote fewer resources to protecting themselves—through tax payments, bribes, or private security services and equipment—from unlawful (criminal) violations of their property right. Norms of civic cooperation reduce enforcement costs by leading individuals to internalize the value of laws and regulations even when the probability of detection for violation is negligible . . . Norms prescribing cooperation and trustworthiness enhance governmental effectiveness.

They conclude: "Evidence is fairly clear that income equality and education are linked to trust and other development-promoting norms."[24]

While in rule-based societies, rule-violation is always an option, it has consequences. On one hand, if rule-compliance monitoring is effective and the probability of exposure and sanction is high, everyone in society would expect that others will take decisions "within the set of permitted and required action," and the social order will be stable. On the other hand, when monitoring is ineffective and the probability of exposure and of being sanctioned is low, rule-compliance will be weak and social order unstable. All the prescribed precepts discussed here are those that are ordained by the Creator. Even if these precepts are not codified as the law of a given society and are not enforced, they are commands of the Creator requiring compliance; the non-compliant, both individually and/or collectively, are sanctioned. The rule of "commanding the good and forbidding evil" is perhaps the most important of all enforcement devices within the Islamic framework. The Messenger (sawa) indicated the dire consequences to society and its members for non-compliance: "Comply with the rules of commanding the good and forbidding evil, for if you do not, the most evil among you gain sovereignty over you. Then you pray (for relief from oppression) and your prayers will not be answered."[25] The only recourse for society is to *change what is in their self* and comply [11:13].

Throughout the ages, one of the most important questions confronting mankind has been: on what basis should economic resources be distributed? The answer depends on the underlying concepts of justice and fairness, which, in turn, depend on the belief system. The concept of justice for humans is simple and unambiguous: justice is obtained when all things are placed where intended by the Creator! How are humans to know where the right (just) place is for everything? The answer: follow the rules prescribed by the Creator.[26] By the instrumentality of His *Walayah*, the Loving Creator has provided all that is necessary for humans to achieve perfection of the human state. He has clearly designated the path-to-perfection and has marked it with rules of behavior in all facets of human life. Rule-compliance assures justice, which assures balance for individuals and for society. Compliance with rules, however, does more than create a balance; it guarantees that humans draw near to their ultimate objective, namely, their Creator. Morality, therefore, is a result of just behavior.

Human and Economic Development in Islam

As mentioned earlier, the prevailing Western concept of development can be viewed as a return to the traditions of the Scottish Enlightenment, in

particular, to Adam Smith. In his book, The Theory of Moral Sentiment, Smith expressed his insight regarding rules of conduct. Economists have largely ignored these rules and have focused on the champion of self-interest—the basis for utility and profit maximization for the individual consumer and producer, whatever the cost to society, even if it means the impoverishment and exploitation of fellow humans. Smith makes clear that while compliance with the rules prescribed by the Creator is a must, compliance with the rules of the market, an instrument for achieving the greatest good, is also a necessity. Smith clearly shares some of the scaffolding of Islam: belief in the One and Only Creator; belief in the accountability of the Day of Judgment; belief in the necessity of compliance with the rules prescribed by the Creator; and belief that justice is achieved if there is full compliance with the rules. Smith also considers the internalization of the rules, being consciously aware of the ever-presence of the Creator and acting accordingly, as crucial to all human conduct.

The concept of development in Islam has three dimensions: individual self-development called *rushd*, the physical development of the earth called *isti'mar*, and the development of the human collective, which includes both. The first specifies a dynamic process in the growth of the individual during the process of actualizing the full human potential. The second specifies the utilization of natural resources to develop the earth to provide for the material needs of humanity. The third concept refers to the progress of the human collective toward full integration and unity. Fundamental to all three is the belief that the Supreme Creator has provided the ways and means to facilitate the achievement of all three dimensions of development. The process of self-development requires self-purification, which begins with self-awareness: the first sign that the self does not have an independent existence without its Creator and His creation. This awareness starts an interactive process in which Allah empowers the self along the path to full consciousness of the Creator. Progress is also indicated by further advancement in the recognition and knowledge of the unity of the Creator and His Creation. For example, the degree of sensitivity the person experiences in feeling the pain and suffering of the "other" is an indication of the progress of purification.

Summary

Islam recommends that the conduct of economic, social, and political affairs should have, as it compass, the goal of removing barriers to the progress of all humans and in full compliance with rules, including those governing property rights, market behavior, exchange and trade, and contracts and

trust. Knowing that they are responsible and accountable, individually and collectively, they invest their allegiance in a legitimate authority to carry out their affairs, with the legitimacy of the authority established by the strength of rule-compliance. The rule "commanding the good and forbidding evil," applicable to individuals and society, assures the full and active participation of all in the affairs of society.

These rules and institutions are the foundation of Islamic economics and finance. While conventional economics assumes scarcity of resources, Islam acknowledges scarcity only at the micro level, and this is due to the maldistribution of income and wealth resulting from non-compliance with the rules of conduct. While conventional theory adopts the market and assumes that consumers maximize their own utility and producers maximize profits, the Islamic vision, although embracing the market-based system and proposing rules that enhance its functioning, includes a spiritual and moral foundation that attaches overriding importance to the welfare of society and of each and every individual in this and future generations. Risk sharing is important in and of itself, as it promotes trust, brings humankind closer together—in support of the Unity of Allah's Creation—and affords a number other potential benefits if fully developed, including financial stability.

Given the rules governing property rights, work, production, exchange, markets, distribution, and redistribution, it is reasonable to conclude that in a rule-complying and Allah-conscious society, absolute poverty could not exist. It can be argued that justice is the most important concept in Islam. The Qur'an and the traditions of the Messenger (sawa) consider the existence of poverty as an injustice, and place the responsibility to eradicate it on the shoulder of of individuals as well as society. The Messenger (sawa) considered the existence and acceptance of poverty as being very close to "kufr," that is, rejection of the existence and the unity of the Creator, and hold that poverty is worse than murder.[27] It can be considered axiomatically that in any society in which there is poverty, Islamic rules are not being observed. It means that the rich and wealthy have not redeemed the rights of others to their income and wealth, and that the state has failed to take corrective action.

CHAPTER 3

Economic and Social Justice: The Policy Objective in Islam

Introduction

Throughout the ages, one of the most important questions confronting mankind has been, "on what basis should economic resources be distributed?" The answer depends on the underlying concept of justice and fairness, which, in turn, depends on the belief system. In Islam, the concept of justice for humans is simple and unambiguous: justice is obtained when all things are placed where intended by the Creator and when everyone is given their rightful due.[1] How are humans to know where the right (just) places is for everything and what is the rightful due for everyone? The answer: follow the rules prescribed by the Creator.[2] By the instrumentality of His *Walayah*, the Loving Creator has provided all that is necessary for humans to achieve perfection of the human state. He has also clearly designated the path-to-perfection and has marked it with rules of behavior in all facets of human life. Rule-compliance assures justice, which assures balance for individuals and for society. Compliance with rules guarantees that humans draw closer to their ultimate objective, namely, their Creator. Morality is a result of just behavior, that is, rule-compliant behavior. Undoubtedly, justice is seen as a supreme virtue: "*O you who believe, be upright for Allah, and (be) bearers of witness with justice!...*" (Quran 5:8) And "*...the Word of your Lord has been fulfilled in truth and in justice. None can change His Words.*" (Quran 6:115) And: "*O you who believe! Stand firmly for justice, as witnesses to Allah, even if it be against yourselves, or your parents, or your kin, and whether it is against the rich or the poor...*" (Quran 4:135) And in

passages from the Qur'an, Allah Confirms that He has sent His prophets to establish justice on earth: "*We sent Our Messengers with clear signs and sent down with them the Book and the Measure in order to establish justice a people!*" (Qur'an 57:25).

In this chapter, we begin with a brief and cursory look at the contemporary views of justice and then examine justice in Islam and conclude, as to be expected, that all policies must be designed and implemented according to the prescribed rules. A major objective of policy would be to strengthen rule compliance in the society. By being rule compliant, policies will be just and that will promote social and economic justice.

Some Contemporary Theories of Justice

In contrast, those whose thinking is not theocentric consider justice as a moral issue that entails rights, fairness, and equality. These systems must find ways in which a consensual agreement is reached on the concept of justice and fairness according to which, goods and services produced can be distributed. To do so, they must first devise moral theories that provide reasons to justify a particular distributional system.

One theory that is not based on divine doctrines is utilitarianism, which recommends a distributional criterion. In utilitarianism, the right thing to do is that which produces the most goods and services. The goal of life is happiness and happiness comes from more. This is the Greatest Happiness Principle. However, where is morality and fairness? Should it not be utility and fairness (i.e., some notion of morality)? John Stuart Mill saw six instances of injustice in utilitarianism: depriving individuals of what they have a legal right to, a moral right to, what they deserve, breaking faith with others, being partial (favoring one over another), and treating people unequally. Utilitarianism avoids concerns with justice, but bases itself on morality. An action is considered justified if it increases utility for all—utility being defined as happiness. Accordingly, there is only one moral issue involved in a course of action or social policy: does it achieve the greatest total utility for all? This is a criterion by which not only individual and social actions are judged, but one according to which various societies are compared. There is much criticism of utilitarianism. Two stand out. First, this system of thought permits the sacrifice of innocent individuals and their interests if it means increasing the utility of the whole, even if it means serving totalitarian objectives. Second, it weighs the happiness of all individuals equally, without regard as to differences in their contribution to society. Moreover, utilitarianism takes the existing pattern of distribution as well as the preferences of individuals as a given.

In principle, it is assumed in economics that a free market that operates on the basis of the self-interest of its participants promotes the general interest of all. Based on the utilitarian concept, welfare economics developed the analytical position that, in such a system in which prices were determined by the free interplay of supply and demand, all factors of production would receive rewards commensurate with their marginal contribution to the production of goods and services. Thus, the Marginalist School could argue that all factors received their just reward. One of the members of this school, Wilfredo Pareto, analytically showed that in such a system, "social welfare" would be optimal. Pareto's notion was utilitarian, but with a difference. He said that you cannot measure utility in a cardinal manner and you cannot distribute goods and services on the basis that it means more to the rich than to the poor. He used an ordinal ranking plus the condition of Pareto optimality (if there is no alternative state that makes one person better off without making another person worse off). Beyond this point, any attempt to increase rewards for any factor of production would be sub-optimal. Therefore, when in equilibrium, actions or policies to move away from such a market solution could be justified if, and only if, at least one person were made better off without anyone else being made worse off. This simplified version of the Pareto rule is, in effect, the criterion of just distribution based on utilitarianism. Again, it is important to note that here, too, initial resource endowments as well as the preferences of individuals are taken as a given.

Unhappy with utilitarianism, the renowned philosopher John Rawls searched for an alternative principle of distribution by relying on the concept of the social contract, or a *Contractarian* approach to justice. Equating justice with fairness, Rawls attempts to find principles of just distribution with which members of society, with different concepts of good and just, all agree. Everyone can agree with the concept of justice as fairness. To Rawls, distributive justice is a matter of public rather than private choice, although he assumes that citizens are just. Therefore, his principle of justice applies only to the social institutions he refers to as the "basic structure." He uses a device that he calls "a Veil of Ignorance" to ensure fair results. Assuming that people in society are ignorant of all of their particularities, including race, color, creed, social status, and where they would land up in the schemes of things, they would come together to choose a rule of distribution that would then govern all members of society. First, they choose basic liberties that are not compromised upon for social and economic benefits. Therefore, equal liberty must be the first principle of justice. Rawls concludes that under this arrangement, and in this initial position, people would choose a rule according to which all "social values—liberty and opportunity, income, wealth, and the basis of self-respect—are to be

distributed equally unless an unequal distribution of any, or all, of these values is to everyone's advantage." From this principle, referred to as "the difference principle," three other principles are deduced. First, that each individual in society has "equal right to political liberty; freedom of speech and assembly; liberty of conscience and freedom of thought; freedom of the person along with the right to hold (personal) property; and freedom from arbitrary arrest and seizure, as defined by the concept of the rule of law. These liberties are all required to be equal by the first principle, since citizens of a just society are to have the same basic rights." The second principle requires that if there are to be inequalities, they are (a) to everyone's advantage, and (b) "attached to positions and offices open to all." Third, because people do not know to which generation they belong (again, the veil of ignorance), they require that one generation does not waste resources, so for Rawls, there is a just savings principle also.

These principles are to apply sequentially to the "basic structure" of society. Sequential order is necessary for Rawls to rule out the possibility that a departure from the first principle of equal liberty could or would be compensated by greater economic advantages; these principles apply to the "basic structure of the society," defined as the bifurcation of social institutions: one set of institutions "define and secure the liberties of citizenship" and the other "specify and establish social and economic equalities." Rawls assumes that citizens are rational and self-interested agents who want certain "primary goods," namely, rights, liberties, powers and opportunities, and income and wealth. Under the veil of ignorance, a fair allocation of these primary goods would be the ones that members would agree upon before ever they know which position they would occupy or what share of the allocation they would receive.

Rawls argues that the difference principle would lead citizens to choose that allocation that maximizes the opportunities for that group of citizens with the minimum advantage. Assuming a veil of ignorance, the logic of this choice is clear. Since no one knows whether or not they will end up being a member of the least privileged group, and since all are rationally self-interested, they would agree that all opportunities should be distributed equally unless unequal distribution would benefit the least advantaged. This principle then allows comparisons between societies with respect to their distributive justice. A society is just if the least advantaged in the society are at least as well off as they would be in any other alternative. In a sense, Rawls is maximizing the minimum because (veil of ignorance) I don't know my own race, color, sex, birth etc., and where I will land up. This insures moral purity and fairness to Rawls. Rawls' theory of justice touched off debates for more than three decades. There are those who agree with his basic idea that

justice means equality in the allocation of "primary goods" to all people, but who differ about how to compensate those who are disadvantaged; among these are Dworkin, Roemer, Gomberg, and Sen.

Dworkin proposes that economic resources should be equal to the point where any remaining inequalities are due to individual choices; meaning society should compensate those who are disadvantaged because of factors not under their control. To arrive at an initial distribution of external resources, each person is given an equal amount of currency to engage in trade until no position can be improved. Once an equal initial distribution of resources has been achieved, Dworkin proposes that a tax be imposed on the income of those that are more able to compensate those that are disadvantaged by deficiencies they could not have controlled. Roemer, influenced by Dworkin, distinguishes between "autonomous" action-choices, for which a person can be held responsible, and those of "circumstances," for which the person cannot be held accountable. His focus is on the latter, arguing that government policy should assist people from groups with different circumstances to equalize advantages and to create "a level playing field." He especially emphasizes government allocation of educational resources to young people in different "circumstances" to achieve equal opportunity and to overcome the unfairness created by the "circumstances" of a person.

Gomberg adopts a contributive approach to justice and criticizes the positions of Dworkin and Roemer, as well as others who base their concept of justice centrally on what they consider to be the "morally significant difference between the effects of chance and those of choice." He argues that in this view, "a society would minimize the rewards and penalties of chance, but allow us to suffer (at least some of) the consequences of our own choices." He believes that this approach is intended basically "to sanctify the social order by assuring us that there was nothing wrong with the society and that anyone in a worse-off position was there as a result of his own choice and, hence, had only himself to blame." Thus, such proposals are intended to cover up the deficiencies in the social order. Gomberg argues that social outcomes in a society (e.g., employment in high or low paying jobs) are explained by two factors: a person's autonomous choices and the way social institutions are organized. If people have advantaged positions in a society of "equal opportunity," it is, then because of their own "autonomous" choices, and this would also be the case for those who are in disadvantaged positions. To Gomberg, the only way to make opportunities equal and achieve justice is to sacrifice what traditional economics has taught, division of labor, and create a society where everyone gets to perform the high-valued tasks as well as those of low value—a surgeon doing surgery as well as cleaning the operating room and the toilet.

Gomberg's criticisms of Rawls, Dworkin, and Roemer (and Sen) are that they all take market economies as a given, but each market has its own norms. They are "normatively individualist. Their norms exaggerate the separateness of persons and underestimate our interconnectedness." One reason for this is a Hobbesian tradition of separation between morality and self-interest, which became the foundation to present-day economics. This separation of morality with its normative values from, presumably, non-normative self-interest, Gomberg argues, is not only fundamental in economics, but "has become part of a certain common sense. But it is surely wrong. We subtract our normative concept of who we are from our notion of self-interest, there is little left. There is something; survival, health, and physical comfort are strongly non-normative. Still, most of what we see as our self-interest, whether fulfilling responsibilities as spouses, parents, friends, teachers, or neighbors, or, more broadly, sustaining dignity as contributors to society, is normative." Market norms developed on the basis of this separation are individualist values. In societies where social relations are market-based, "pursuit of economic self-interest is, thereby, accepted as good... Rewards fairly earned are deserved... Those who have disproportionate wealth and power are deserving and, because wealth and power are goods, they are superior (in a way relevant to having wealth and power). Prestige and the sanction of morality attach to economic success. So markets necessarily spawn individualist values as fundamental morality."

Another critic of Rawls, Nozik, argues that the justice of a distribution framework must focus on the processes rather than outcomes; since the outcome is the result of the process, the justice of a particular outcome depends on the processes that led to it. If the process is just, the outcome is just. People are entitled to their wealth if it is obtained through fair processes and procedures, regardless of whether or not they deserve it. This principle of entitlement would have absolute priority, even above the needs of the most deprived members of society. This absolute right of entitlement to wealth that is obtained through fair procedures gives the wealth-holder the right to reject any attempt at redistribution, say, through taxation. Nozik too takes the market and its norms as a given. Therefore, it is subject to the criticisms of Gomberg, as are other market-based distributive schemes, such as those of Rawls, Dworkin, Roemer, and Sen. Sen's "capabilities and functioning" approach shares much in common with Rawls; but a major difference is that Sen argues that all goods, including those that Rawls considers "primary goods," are inputs to a person's functionings. These are the set of actions and states a person performs and enjoys. Equality for Sen means equalizing the "capability set:" the set of functionings from which a person chooses. The key difference between the functionings/capabilities approach and the

contractarian (Rawls) is in their basic theoretical structure. Rawls constructs a procedure with adequate fairness and impartiality, whereas capabilities approach goes to the end result.

Gerald Cohen argues, akin to Gomberg, against Rawls' conclusion that a society in which the difference principle is satisfied displays strong "fraternity" in the sense that people in such a society would not want "to have greater advantages unless this is to the benefit of others who are less well off." Cohen argues that since Rawls takes markets as a given, he must also accept "the self-interested motivation of market maximizers." Secondly, Rawls argues that in a society governed by the difference principle, people who are worse off will accept their position with "dignity" because they know that their position cannot be made better off by an alternative principle. In other words, a janitor would accept his position with dignity because he knows that under any other arrangement (other than satisfaction of the difference principle), he would be worse off. Cohen, however, asks why a person should accept a very inferior position with dignity if he knows that it is because of the workings of the market norms and "unlimited self-seekingness in the economic choices of well-placed people?" Thirdly, Cohen takes issue with Rawls' claim that in a just society (one that meets his principles of justice) people will live their daily lives in accordance with the principles because they fully realize that, as moral persons, this will promote the individual and collective good. Again, Cohen raises the question of consistency. Since Rawls takes markets as a given and accepts that people are primarily motivated by self-interest, Cohen asks: "how can they, without a redolence of hypocrisy, celebrate the full realization of their natures as moral persons, when they know they are out for the most that they can get in the market?"

The upshot is that Rawls' justice cannot deliver the "ideals of dignity, fraternity, and full realization of people's moral nature." Cohen suggests that Rawls not apply his difference principle "in the century of the self-seeking choices of high-flying marketers, choices which induce an inequality that, so I claim, is harmful to the badly off" since the difference principle applies to the social institutions that compose the basic structure, it does not apply "to the choices, such as those of self-seeking high fliers that people make within such institutions." The problem is that, on the one hand, Rawls takes markets and self-interested motives of participants as a given and, on the other, he requires that the citizens of a just society "willingly submit to the standard of just society embodied in the difference principle." Cohen is not altogether opposed to Rawls, but importantly, he argues, "*for inequality to be overcome, there needs to be a revolution in feeling or motivation, as opposed to (just) in economic structure*."

Islam and Justice

The above discussion on some contemporary ideas on distributive justice afford a perspective on Islam's position on what is a just distribution and, thus, just government policies. An important central difference between Islam's position and those discussed above is the role of the market. All the above ideas apply to "market economies." In Islam, markets also play a crucial role, but with one major difference. Epistemologically, the difference lies in the conceptualizations of the market: being an ideology in one and an instrument in the other. This difference is profound. In societies known widely as "market economies," market norms are central to social relations. Market norms are determined by self-interest, which dictates "rational" behavior as maximizing what interests the self, narrowly labeled as satisfaction (utility or profit). Market norms, in turn, determine the pattern of preferences of individuals. As Gomberg argues, market norms, and preference patterns, are individualist, not communal. They have self-seeking orientations.

In Islam, by contrast, the market is an instrument. It is not an organism that determines the rules and norms of behavior, not even those of its own operation. Rules that determine the pattern of preferences of participants are determined outside the market. Participants internalize them before entering the market. The behavior of consumers, producers and traders, informed by their preferences, are subject to rules determined outside the market. Rules such as no waste (*itlaf*); no over-consumption or over-use (*israf*); no opulence or extravagance (*itraf*); no harm or injury (*la dharar wa la dhirar*) to anyone; faithfulness to contracts, covenants, and promises as well as trustworthiness are general rules of behavior that are internalized by consumers, producers, and traders before ever they enter the market. Moreover, there are rules specific to the exchange taking place in the market, such as no fraud, no cheating, no shortchanging of weights and measures, no interference with the flow of supply, no hoarding of commodities in the expectation of price increase, and no restriction on the flow of information. All these rules permit the free and unrestricted interplay of demand and supply. Moreover, there are rules governing the legitimacy and permissibility of sources of income, demand and supply, because not all sources of income, not all demands for goods and services, and not all supplies are permissible. Income from *riba*, bribery, theft, gambling, and the usurpation of others' income are not permissible, as are not the demand and supply of certain goods and services.

In a market where there is full rule-compliance, the price that prevails for goods, services, and factors of production is considered just. The resulting incomes are considered justly earned. Therefore, the resulting distribution is just. However, participants will not keep their full earnings simply because

their income and wealth was justly earned. There are rights and entitlements of others in the resulting market distribution of income and wealth that must be redeemed. This is the function of post-market redistribution, which is governed by its own set of rules. There are levies on income (*khums*) *and on* wealth (*zakat*) that must be paid. However, redistribution does not end here. There are a number of other instruments of redistribution including *infaq fee sabilAllah*, (expenditures in the way of Allah), *qard hassan* (non-interest loans), *sadaqaat* (payments to redeem others' rights and to demonstrate the veracity of one's claim to Islamicity), and *waqf* (designated assets whose underlying income flows are used to support building and maintaining public infrastructure as well poverty alleviation). Any wealth that is accumulated is broken up at the end of the person's life and distributed among a large number and categories of beneficiaries spanning at least four generations, according to the rules specified in the Qur'an. This is designed to avoid the concentration of income and wealth in the hands of a few.

The second major difference between distributive justice in Islam and contemporary views, some of which were presented above, is that the latter require government intervention to correct unjust patterns of distribution resulting from the operations of the market. From Rawls to Sen, all theories of distributive justice require intrusive and comprehensive government intervention on a continuous basis to ensure the desired outcome. Even the most libertarian of these ideas, for example, Nozik's, requires government intervention if the processes and procedures are determined to be unjust. In an Islamic society, the state's role is one of administrator, supervisor, and protector of society. It is the responsibility of all the members of the society to ensure that justice prevails. Given the rules governing property rights, work, production, exchange, markets, distribution, and redistribution, it is reasonable to conclude that in a rule-complying and Allah-conscious society, absolute poverty could not exist. The Prophet said that poverty is near disbelief and that poverty is worse than murder. It is axiomatic that in any society in which there is widespread poverty amidst plenty, Islamic rules are not being observed. It means that the rich and wealthy have not redeemed the rights of others in their income and wealth and the state has failed to take corrective action. In Islam, such societies would be classified as unjust.

The concept of justice in Islam has spiritual meaning. Imam Ali ibn Abi Talib (sa) defines justice as putting things in their proper place, meaning the place intended for it as prescribed by Allah (swt).[3] In other words, the essence of justice is to arrange affairs according to the prescribed rules in such a way that one arrives at an equilibrium point from which one does not wish to move. Injustice is equated with imbalance; when something is jarred from its proper place, the ethos is thus one of immediate rectification. In the

Islamic paradigm, one cannot be just in their relations with other people if one is unjust in their relations between the soul and Allah. The imperative, first and foremost, is for every human being to first put things right between themselves and Allah.[4] The very word Islam comes from the Arabic verb *aslama*, which is related to the word meaning "peace." *Aslama* is achieving serenity by the action of making peace between one's soul and Allah willfully, and with full freedom of choice, by submitting to the will of the Creator as expressed in His prescribed rules. This leads to a state of serenity and peace with the rest of Creation. Thus, the commandment of Imam Ali "Be just with Allah, and be just with the people,"[5] is written in an order to one of his commanders. This spiritual paradigm provides more than just a dictionary definition of justice—it offers a course of correction for injustice upon the earth. If one is unjust, by the Islamic model, it necessarily follows that one is not being just with Allah. Thus, the roots of healing injustice upon the earth are always spiritual. If one wishes to rectify their actions and become more outwardly just, one must first and always attend upon spiritual justice, meaning that one must become fully rule compliant.

Allah commands mankind to behave in a fair and just manner—to protect the rights of others, to be fair and just with people, to be just in business dealings, to honor agreements and contracts, to help and be fair with the needy and orphans, and to be just even in dealing with enemies. Allah commands humanity to establish just societies, its rulers to be just leaders, and for the people to stand up for the oppressed against their oppressors. It is for these reasons that it is said that justice is at the heart of Islam. In the same vein, the state (policies) must step in to restore justice whenever and wherever individuals fail to comply with divine rules; government intervention must enhance justice.

As said before, there are four basic concepts that support the rule-based system of Islam: *Walayah* (the unconditional, dynamic, active, ever-present Love of the Supreme Creator for His Creation), *karamah* (human dignity), *meethaq* (the covenant recognizing Him as the One and Only Creator and Sustainer of the entire creation), and *khilafa* (agent-trustee). The Love of the Creator endows humans with dignity and intelligence so as to manifest *Walayah* through the instrumentality of *khilafah*. *Khilafah* is the empowerment of humans by their Creator as agent-trustee to extend *walayah* to one-another, materially through the resources provided to them by the Creator, and non-materially through the manifestation of love for their own kind as well as for the rest of creation.

The first principle manifestation of *walayahh* occurs in the *shahadah*: the witnessing of Allah as the One and Only Creator, Sustainer, and Cherisher of the creation, and the witnessing of the Messengership of Mohammad

(sawa). The fullest exposition of this principle appears in verses 13–17 of Chapter 3 of the Qur'an: *Allah Has Witnessed that there is no ultimate source of Walayah except for Him; so have the angels and those who have knowledge, standing through mutual-interrelational justice (Qist). There is no ultimate source of Walayah except for Him, the Exalted, the Wise. Surely the Deen unto Allah is Islam (deliverance of oneself into the safety and security of Allah).* Here, there is an interconnectedness between the categories of those who deliver *shahadah* (witnessing and testifying) and the establishing of Islam (delivering oneself to the safety and security of Allah) as the *deen*. Therefore, it follows from these verses that to be a Muslim (deliver oneself into the safety and security of Allah) one *must have knowledge and stand for justice*. Since knowledge and justice are at the heart of *shahadah*, and *shahadah* is the manifestation of *walayahh*, it follows that knowledge and justice constitute the central manifestation of doing *walayah*. In the first of these verses, the specific action tied to knowledge is *qist*—mutual and interrelational justice among humans and between them and the rest of creation. *Qist* is a gerund signifying "acting mutually-interrelationally just." The importance of *qist* is so crucial to Islam that the Quran declares its establishment as one of the justifications of the missions of all prophets and messengers (sa). In Verse 25, Chapter 57, the Quran says that: *verily we sent our Messengers with clear proofs, and sent with them the book and the scale, so that humans may stand forth (establish themselves) with qist. Qist* refers to justice in action. It means that humans, in dealing with one another and with the rest of creation, must make justice manifest.

The Quran uses two words for justice: *qist* and *ádl*. The first is the chief characteristic of appropriate human relations and of human relations toward the rest of creation. Some of the root meanings of the word *qist* are equity, fairness, correctness, fair in distribution, balance, and scale. *Ádl*, on the other hand, is a feature of Allah's Actions that manifests itself in the perfect balance of the cosmos; it characterizes the Action of Allah to place everything in its rightful place. Some of the root meanings of *Ádl* are fairness, equity, counter-weight, evenness, non-discrimination, and the sense of justice. In a human being, *ádl* is the inner balance of the human self toward which one strives. *Qist*, ideally, is the manifestation of the individual human being's inner balance (*ádl*) reflected in dealings with other human beings and the rest of creation. Any injustice perpetrated by the individual against other human beings and against the rest of creation is ultimately an injustice to the self: *They did no injustice to Us; rather they were doing injustice to themselves* [57:2]. The Quran makes clear the importance of justice: *Say (O Prophet): My Cherisher Lord has commended me to qist* [29:7]. Allah loves justice; it is a central part of His universal *walayah*. The response of

creation to universal *walayah* must mirror the Justice of Allah. *Qist (*and *ádl)* displayed by humans is a fundamental manifestation of positive w*alayah* oriented toward Allah. Indeed, manifest justice is a criterion by means of which one may determine whether positive *walayah* is truly directed toward Allah. *O you who have found safety and security in the sanctuary of Allah (YA ayyohalladheena Aamanu) be those who stand for qist (mutual, interrelational justice), witnesses for Allah, even if it be against yourselves, your parents, or your close relatives; be they rich or poor, for Allah has greater walayah (than anyone else) with them. And do not follow your personal whim (desire) lest you deviate from dong ádl (inner personal balance and justice). And, if you swerve or turn away (from qist), then surely Allah is well informed of all that you do* [135:4].

The same basic idea is that (i) those who are active believers must, in no uncertain terms, establish and sustain *qist* (mutual-interrelational justice) even if it is against their own interests or those of their relatives; (ii) that Allah is both best informed about the interests of the self and others, and that He is best in protecting these interests because of His active and dynamic love; and (iii) that *ádl* (inner personal balance and justice) drives *qist*.

The Law Giver has provided rules of behavior for human beings and their societies, and these rules correspond to the primordial nature of humans. Since the human being is composed of the physical body and spirit, these rules cater to both. They guide individual human beings toward their perfection while assuring justice within the collective. To ensure rule-compliance, the Law Giver has provided, on the one hand, an incentive-based system of reward and punishment on this plane of existence as well as in the Hereafter and, on the other hand, has made supervision and enforcement of rule-compliance a duty of every member of society as well as the legitimate authority. The preservation and enforcement of the Rule of Law upholds justice (in all its dimensions) and guarantees social solidarity. It is for this reason that the Qur'an places so much emphasis on the duty of commanding the good (rule compliance) and forbidding evil (rule non-compliance) for the rulers and the ruled. Indeed, in a number of clear and terse verses, the Qur'an imposes a more severe duty of rule-compliance on the rulers than on the ruled. It leaves those in authority no degree of freedom in the implementation of the Rule of Law. *Whosoever does not rule in full concordance with what Allah has sent down are disbelievers(rejectors of the Truth)... wrongdoers... transgressors* [44, 45, 47:5]. No state can legislate a law in contradiction to those of the Law Giver. This, however, does not mean that within the context of the law, the rules and procedures that provide a framework for the material progress of society cannot be legislated. Indeed, as was pointed out earlier, learning useful knowledge has been made incumbent upon those who surrender to the love and the rules of the Law Giver. So long as new knowledge, new

technology, and new ways of organizing production, exchange, and distribution do not conflict with these rules, attaining them is not only recommended, but is also required.

Institutions (rules) proposed by Islam relating to governance, social solidarity, cooperation, and justice are designed to achieve economic development and growth. The central axis of design and operation of these rules is justice. As it was the case for all the prophets and messengers before him, the Prophet Mohammad (sawa) well-appreciated the essential objective of his selection, appointment, and message to be to encourage and induce the establishment of justice in human societies as the Qur'an emphasized: *Verily We sent Our Messengers with clear proofs, and revealed with them the Scripture and the Balance in order for the humanity to establish (interpersonal) justice* [25:57]. The Prophet taught the responsibility of the individual, the collective, and the state. He particularly emphasized the equality of individuals before the law, and that all rules that are incumbent upon individuals and their collective must be more strictly observed by those in positions of authority. Thence his famous saying that *authority may survive disbelief but not injustice.* Insistence on justice became the hallmark of the institutional scaffolding of governance, a structure with full transparency and accountability.

Authoritative and scholarly biographies of the Messenger (sawa) and books of traditions (*ahadeeth*) reporting his actions and words are replete with examples of how freely accessible he was to all citizens and how easily he fielded questions regarding the Qur'an, Islam, and his own behavior. There are numerous examples of how aggressively and directly he was addressed and questioned about his own action-decisions as the temporal, political, and administrative authority, and how he patiently, tolerantly, and comprehensively responded by giving full account of his behavior. Often, these discussions became occasions for revelations that provided the authority for his behavior. Because his words and actions were framed within the rubric of the practical implementation of prescribed rules—themselves at the level of abstraction—they became part and parcel of the model for the practical formation of policies and the management of an Islamic society.

There is exhaustive evidence from the life of the Prophet to underline the fact that he saw his primary duty, both as a temporal and spiritual authority, to be the promotion of justice in society by upholding the equality of everyone before the law. During his life in Medina, he ensured that the rights of every citizen, regardless of belief, were protected. He laid the foundation for a public treasury. He devised an efficient system not only for collecting prescribed levies, which the Qur'an had ordained as the rights of members of society to each person's income and wealth (*khums* and *zakat*), but also for taxes and rents on public lands used by private producers (*kharaj*) and

the per capita dues paid by non-Muslims for benefits derived from public services (this was paid in lieu of dues paid by Muslims), which accrued to the state treasury for redistribution to the needy.

As mentioned earlier, the vision of development in Islam has three dimensions: self-development, physical-material development, and the development of society. Balanced development is defined as balanced progress in all three dimensions. The objective of such balanced development is for all humans to achieve progress on the path-to-perfection through rule-compliance. The progress is balanced if it is coupled with justice, both in its general (*'adl*) and in its interpersonal (*qist*) dimensions. The concept of justice in Islam is not static. Allah commands humanity to actively promote and establish justice. Thus, government policy that aims to ameliorate adverse economic conditions must always be just in its objective as well as its implementation.

Enforcement of the prescribed rules is accomplished by an internal and an external mechanism. The former is determined by the degree of consciousness of the Creator within each human being. Here, each action-decision is made with full awareness of the ever-presence of the Creator (*taqwa*). The external mechanism operates through the rule of *commanding the good (rule compliance) and prohibiting evil (rule violation)*. The *walayah* of humans for one another is a part of their adoration of the Creator, and each human being is responsible to ensure that others are rule-compliant. It is also the duty of the state and its apparatus to enforce rule-compliance. The governance structure envisaged in Islam requires full transparency and accountability by the state, and full participation in societal affairs by all members of society.

The Qur'an clearly states the need for "a revolution in feeling or motivation:" *Lo! Allah does not change the condition of a folk until they (first) change that which is their selves* [11:13]. The change suggested in this verse and, as defined comprehensively all throughout the Qur'an, is a change toward compliance with the rules of just conduct for the individual. The "ethos of justice" is created in society by a critical mass of those whose behavior fully complies with the prescribed rules. Finally, the Qur'an states emphatically that the result of such behavior and the existence of such "*believing*" leads to the creation of a balanced, just, and growing economy [96:7].

There are rules regarding justice in access to resources, production, exchange, distribution, and redistribution. Many verses of the Qur'an and the sayings and practices of the Messenger (sawa) make it clear that inequalities, whatever their source, must not be allowed to lead to extremes of wealth for the few and poverty for the many. While human beings are created with different abilities, which may lead to different levels of resource endowment, and thus, different levels of wealth and income, this should not lead to gross wealth accumulation. Allah has ordained equally free access to resources by

all human beings. He has also ordained that the resulting income and wealth, which, by implication from the earlier principle, are also His blessings, must not be accumulated and must be shared with those who are less able to access and use the initial resources. *To those who accumulate gold and silver and do not spend it in the way of Allah unto them give tidings of a painful doom* [34:9]. Expenditure "in the way of Allah" is described as: *they ask you what they shall spend*: say: *That which you spend for good (must go) to parents and near kindred and orphans and the needy and the wayfarer. And whatsoever good you do, Lo! Allah is aware of it* [215:2]. This expenditure is *over and above* the mandatory portion of net income and wealth collected by the legitimate authority. These charges are referred to as *sadaqaat* (singular: *sadaqah*) from the root word meaning truthfulness and sincerity. Their faithful discharge indicates the strength of the sincerity of a person's belief. The recipients of these amounts are designated as: *verily the sadaqaat are for the poor and the needy, those who collect them, those whose hearts are to be reconciled (with Islam), to free the captives, for (helping) those who have gone bankrupt and must repay their debt, and for the cause of Allah, and (for) the wayfarer: a duty imposed by Allah* [60:9]. The source of these expenditures, namely, income and wealth, must be from permissible economic activities not from unlawful sources: *O you believers! Spend of the good things which you have earned, and of which We bring forth from the earth for you, and do not resort to unlawful sources (of income and wealth) of which to spend when (that which) you yourselves would take for yourselves (you would do so) only with disdain* [267:2].

These expenditures are essentially the repatriation and redemption of the rights of others to one's income and wealth. It is for the good of the person paying them that they are ordained. *And whatsoever good you spend, it is for yourselves and you are not spending it other than to seek the countenance of Allah, therefore, whatsoever good thing you spend, it will be repaid to you in full and you will not be wronged* [272:2]. Since these expenditures are the repayment of what is the right of those who were unable, or less able, to access the natural-physical resources that the Creator has made available to all humans, it is as repayment of a debt without which one's wealth would be soiled. Redeeming these rights is a manifestation of one's belief in the essential axioms of the oneness of the Creator and His creation, a recognition and affirmation that Allah has created resources for all human beings, who must thus all have free access to those resources.

When one is granted the mental-physical capacity by the Creator to access more of His resources, it means others less able or unable to use these resources are in fact one's partners, whose rights in the final post-production, post-market proceeds have to be redeemed. The Qur'an affirms that because these are rights to be redeemed rather than charity, extreme care must be

taken of the recipient's human dignity. The recipient too is fully conscious of the necessity of protecting human dignity: *(Sadaqaat) are for the poor who are in dire straight in the way of Allah, who are unable to use the land (either for traveling in search of trade or to farm the earth). The ignorant (unthinking) think them wealthy because of their restraint and modesty (in revealing their poverty). You will know them by their mark: they do not beg from the people, covering (their poverty). And whatsoever good things you spend, lo! Allah knows it* [273:2]. Because they recognize the human dignity granted to them by their Creator, the poor are reluctant to reveal their poverty. To preserve their dignity, the Qur'an recommends that payments be made in secret: *If you make the payment of sadaqaat (redeeming the rights of others in one's wealth) known to others, it is well, but if you hide it (give in secret without revealing to others) while giving to the poor, it will be better for you, and will atone for some of your transgressions. And, Allah knows well what you do* [271:2].

Because the payment of *sadaqaat* is the redemption the rights of the less able and because of its concern for human dignity, the Qur'an forbids that these rights be redeemed either reproachingly, or accompanied by ill treatment of the recipient or with annoyance on the part of the person making the payment. *Those who spend their wealth for the cause of Allah and do not accompany (that expenditure) with reproach and (hurting the feelings of the recipient with) annoyance and ill treatment, their reward is with their Cherisher Lord and no fear and grief shall come upon them. A kind word with forgiveness is better than a sadaqah given with reproach and ill treatment. And Allah is Absolute, Clement. O you who believe, do not destroy (the reward of) your sadaqaat by reproach and ill treatment (of the recipient), like the one who spends his wealth only to be seen (to show off) by other humans while he does not (really) believe in Allah and the Last Day. His Giving is like that of dust settling on a solid rock, when the rainstorm hits it (the rock) and washes it (the dust) away leaving the rock cleansed and bare. These people have no control over what they have gained. And, Allah does not guide the disbelieving folk. (On the other hand), the likeness of those who spend their wealth only to seek the pleasure of Allah and to strengthen their self (to develop the self), is as the likeness of a highly placed garden; (when) the rainstorm hits it (the garden) brings forth its fruit twofold. And if it is not a rainstorm that hits it, then it will be a shower (that pours on it). And, Allah is All-seeing of what you do* [262–265:2]. Paradoxically, then, when the rights of others to one's wealth are redeemed, it increases rather than decreases one's wealth, confirming that the awareness of Allah accompanying rule-compliance triggers the activation of *barakaat* (plural of barakah: increasing return), namely, blessings, as stated in Verse 96 of Chapter 7.

CHAPTER 4

Risk-Sharing Finance and the Role of Public Policy

Introduction

Analysts suggest that sound public policy and strengthened institutional framework in developing countries can go a long way to reducing risk. Examples of policy improvements include better governance to reduce damage from household mismanagement and policies to achieve and sustain economic and political stability and encourage the development of the financial sector. In terms of institutional framework, clear and secure property rights, contract enforcement, trust among people and between the government and people, as well as other institutions, can reduce risk, uncertainty, and ambiguity, strengthen social solidarity, bring private and public interests into closer harmony, and ensure coordination to achieve risk sharing (Mirakhor, 2009, 2010; North, 2005). Public policy could also help to mobilize the savings of poor households, and thus reduce vulnerability to income shocks. The policies of Bank Rakyin Indonesia, the Safe Save Program implemented among poor households in the slums of Dhaka in Bangladesh, and microfinance programs in Asia, Africa, and Latin America are all sighted as successful programs that have mobilized savings among poor households (Morduch, 1999; Rutherford, 1999). Bencivenga and Smith (1991) suggest a strong relationship between deposit mobilization, efficiency enhancement, and economic growth. Public policies to forge integration and support savings mobilization in developing countries reduce risk and build resilience to shocks.

Turning to systematic or aggregate risk such as exposure to financial crises and/or fiscal or commodity price shocks, the nature of shocks, availability

of institutions that shape risk sharing within or outside each economy, and the resilience of the domestic economy all determine how well the economy copes with shocks. The serious dissatisfaction with and the subsequent public protests driven by a strong perception of response to recent shocks, which appear to have had privatized benefits of financial crises and socialized subsequent losses, highlight the response to the fundamental question of how risk should be shared or allocated across society *ex-ante*, and what criteria should determine the outcome. Arrow (1971) demonstrated that in a competitive market economy, with complete markets and Arrow securities (whose pay offs are state-contingent), it would be Pareto optimal if participants shared risk according to their ability for risk bearing (Mirakhor, 2010). In the absence of complete markets, which includes all possible future contingencies, the efficiency of risk-sharing mechanisms will depend on the institutional structure, the degree and intensity of informational problems, and the policies that are intended to render the economy resilient to shocks (Mirakhor, 2010). Because, in Western thought, risk-sharing procedures and objectives are perceived to involve trade-offs between efficiency and fairness, the distributional impact of ways and means of risk sharing are considered important. These trade-offs are thought to be particularly acute in case of policies that allocate the burden of adverse macroeconomic shocks within society and its institutional structure. For example, a society can *ex-ante* decide, on the basis of equity, efficiency, or both, to allocate the burden of a shock to those who either benefit the most from, or exacerbate, the shocks by their behavior. Shocks may be so large and their consequences so serious that even if such a policy were accepted *ex-ante*, institutional considerations (e.g., limited liability) and political economy forces (powerful lobby) may not only prevent a fair and efficient distribution of costs *ex-post*, but also the assignment of residual costs after the initial costs of the shocks have been socialized. It is difficult to conceive of any known criterion of fairness and/or efficiency in Western thought that could be satisfied by the resolution (non-resolution) of the consequences of the 2007/2008 global financial crisis.

Why Risk Sharing?

The concept of risk and its perception have evolved dramatically over time. The etymology of “risk” can be traced to maritime trades of the fourteenth century Italian city-states in search of opportunities to profit from adventurous trade with Middle East and Asia. These ventures were financed by “sea loans” and *commenda*. Historians have traced the development of *commenda* to be borrowed from the concept of *mudharabah* used by the Muslims (Mirakhor, 2003; Udovitch, 1962, 1967, 1970a, 1970b). While the

"sea loans" were basically a contingent debt contract, the traders transited from it to *commenda* as soon as the state was able to develop ways and means of verifying the outcome of contracts. It is generally understood that one of the primary reasons for the existence of debt contracts is because of how costly verification generally is, and if the state were able to verify contract information at no cost to traders, contracts would be optimally be risk sharing in nature. The Italian city-states, such as Venice in the late medieval period, were able to enhance their ability to verify information regarding the outcome of ventures financed by contracts of risk sharing (*commenda*) contingent on verifiable information. The state played the role of information transmitter as well as enforcer of contracts. This development allowed finance to transit from loan contracts (sea loans) to the first of the best risk allocations: risk sharing via *commenda*. Historians have also recorded how crucially important this transition was to the growth of not only the maritime trade, but also to the economic, social, and political progress of the region at that time (Lopez, 1976; Yadira Gonzalez de lara, n.d.). Recently, Brouwer (2005) traced the origins of the risk-sharing clauses utilized in venture capital contracts in the Silicon Valley to the medieval Italian city-states and the use of *commenda*.

The perception of risk and its fallout has also progressed from one of resignation to fate to one of assessing, managing, and mastering it. The change in perception of risk from danger to be avoided to, as it is now, a calculated behavior that conceives risk in terms of its accompanying opportunities for gains, is considered a characteristic of modernization (Bernstein, 1996; Schmidt, 2005). Over the last few decades, the view toward risk has evolved further from a perception that risk is mostly an individualistic responsibility to that which envisions risk management also as collective, social, and moral opportunity to strengthen social solidarity. The number and intensity of crises in the last two decades have sharpened the focus on "social risk management," emphasizing that social solidarity requires heightened sensitivity to what each person owes to other members of the community, not only in terms of prevention and mitigation, but also in terms of the sharing of risk (Ericson and Doyle, 2003; Holzman and Jorgensen, 2000). In this perception, public policy plays a crucial role in creating an effective incentive structure to promote risk sharing.

People face two types of risk: systematic (market risk, aggregate risk, or un-diversifiable risk) and unsystematic (idiosyncratic risk, specific risk, residual risk, diversifiable risk). The first relates to risk that is posed by general economic conditions dependent upon macroeconomic factors such as the growth of the economy, fiscal and monetary policies, and other elements of the macro-economy such as interest rates and inflation. Such risks are

un-diversifiable, therefore, uninsurable. However, sound macroeconomic policies that strengthen economic fundamentals, effective international policy coordination, and the stability of the domestic and financial system can mitigate such risks to a significant degree. Unsystematic or idiosyncratic risk, on the other hand, relates to risks that are specific to individuals or firms. Such risks are diversifiable, therefore, insurable. High correlation between consumption and an individual's employment income means that sickness, accidents, and layoffs all pose idiosyncratic risks that can be mitigated through risk-sharing arrangements that reduce dependence on wages as the only source of income, thus weakening the correlation between income and consumption. In other words, through risk sharing, individuals "smooth" their consumption pattern.

Risk can be shared among the members of society and between its member states. Both in the industrial and developing economies, people find ways and means of sharing risks to their livelihood. In particular, they use coping mechanisms to increase the variability of their income, relative to their consumption. In more developed financial systems, the coping mechanism is investing in financial assets or in acquiring insurance to mitigate personal risk. In developing countries, with weak financial markets, people rely on informal insurance, borrowing, or saving to cope with idiosyncratic risks. In such societies, theory suggests that perfect informal insurance is possible if communities fully pool their incomes to share risks. Then, each member of the community could be assigned a level of consumption dependent upon the aggregate level of income and not on that of the member. This arrangement would assure perfect risk sharing (Morduch, 1999) to mitigate idiosyncratic risk so that household income would not affect consumption. However, empirical studies in India (Ligon, Thomas and Worall, 1997; Revallion and Chaudhuri, 1997; Townsend, 1994), Thailand (Townsend, 1995), China (Jalan and Revallion, 1997), Indonesia (Gertler and Gruber, 1997), Ivory Coast (Deaton, 1997), Philippines (Fafchamps and Lund, 2003), and elsewhere indicate that perfect risk sharing through income pooling is not supported fully by data, although in a number of countries, it plays a crucially important role. Empirical studies broadly suggest that in low-income countries, saving, borrowing, the use of buffer stock, working longer hours or taking a second job, gift exchange, and private transfer of cash and clothing are some of the mechanisms used in risk sharing (Cox, 1998; Cox and Jimenez, 1997; Deaton, 1992; Kipnis, 1997; Kochar, 1999; Lim and Townsend, 1998).

The degrees to which any economy can absorb shocks and cope with its consequences depend on available domestic and international risk-sharing mechanisms. One of the most important arguments advanced in favor of

globalization was that improved risk sharing would bring people across the world closer, to create a "global village." On theoretical grounds, expecting a much greater degree of risk sharing between and among economies—resulting from greater freedom of movement of resources, the advent of technological advances, and information super highways and advances in financial innovation—was realistic. After all, these advances would have meant progress toward market completion—a condition of optimal risk sharing posited in Arrow's conception; or, at least, progress could be expected toward the design and widespread use of Arrow Securities, that is, those whose pay-offs were contingent upon the performance of the underlying asset, for example, equity-based securities with close links to the real. Much of the progress in information technology and economic liberalization, however, led to the development and innovation of risk-shifting and risk-transfer instruments with increasingly more tenuous relation to the real sector and the almost complete decoupling of financial and real sector developments (Epstein, 2006; Menkoff and Tolkorof, 2001; Mirakhor, 2010).

The perception that globalization has not improved international risk sharing, despite considerable potential welfare gains, is supported by voluminous research (Baxter and Jermann, 1997; Imbs, 2006; Lee and Shin, 2008; Tesar, 1995; van Wincoop, 1999). This literature examines the relationship between each country's volatility in income or consumption with that of corresponding variables in the rest of the world (or the rest of the region). By and large, the empirical research concludes that there is very limited international risk sharing, and that globalization has not contributed much to enhance it. Indeed, even in one of the most economically vibrant regions of the world, the Asia Pacific Rim, risk sharing among and between countries has not been significant (Gaston and Khalid, 2010; Hall et al., 1998; Kim et al., 2003, 2006; Kim and Sheen, 2004; Lee and Shin, 2008). Given the poor state of development of international risk sharing, Shiller has long suggested that much progress could be made in exploiting the considerable potential in international risk sharing through macro-market instruments (Mirakhor, 2010; Shiller, 1993, 2003, 2004, 2005). These instruments can be developed within each country, to be traded on the international capital markets to diversify each country's exposure to macroeconomic and income shocks, and to promote consumption smoothing (see also Borenzstein and Mauro, 2002, 2004). The reasons given for the failure to adopt sovereign risk-sharing instruments are informational problems, policy commitment and credibility, governance, international contract enforcement issues and, in general, moral hazard. In the absence of macro-market securities that could improve international risk sharing, it would be expected that international institutions mandated to help ensure global financial stability

through risk sharing would have developed effective mechanisms to protect countries against severe shocks. Such has not been the case thus far, although the recent development of the Flexible Credit Line (FCL), with qualifying restrictions, is a promising start for promoting further progress in international risk sharing. Perhaps improvements in governance and improved representations in these international institutions could accelerate the strengthening of international risk sharing.

Given the slow pace of appreciation of macro-market instruments of risk sharing, sovereigns are left to develop institutions that mitigate or spread risks. These include developing policy credibility, reputation for fiscal prudence, low debt-to-GDP ratio, low fiscal deficits, monetary policies that leave room for flexibility while highly credible with anchoring inflation expectations, macro-prudential regulations, and structural policies that allow rapid adjustment in wages and prices. All these measures afford countries a strong degree of resilience and capacity to absorb and cope with, at least, temporary shocks. This was demonstrated in the emerging markets' response—after the lessons of the 1997–1999 crises—to the 2007/2008 global financial crises (Sheng, 2009). Countries can also attempt to spread their exposure to shocks by developing strong equity markets open to foreign investors, limiting external borrowing to denominations in the domestic currency, accumulating substantial foreign reserves and developing ways and means of investing them in foreign asset markets via active institutions such as sovereign wealth funds to allow diversification of sources of income, trade openness, encouraging long-term foreign direct investment, and maintaining exchange rate flexibility. Countries, especially small open economies, can also form monetary unions. Membership in such unions can help strengthen resilience to a number of shocks. However, such gains come with a trade-off in loss of flexibility in policy making (particularly monetary policy). This constraint may at times be unhelpful to countries facing shocks, as has been demonstrated lately by the dire circumstances a number of the members of the European Monetary Union found themselves in.

Government Policy and Risk Sharing

Government is the ultimate risk manager in any society. It could well be argued that in contemporary societies, risk management is the central role of government. The span of this function covers risks to international and domestic security to the risk of contagion from communicable diseases. This spectrum of government risk management policy could be considered as a series of responses to shortcomings on the part of the market and nongovernmental sector to correct risk-related failures. If one considers the

catalogue of a government's risk management responsibilities, a great many would be in response to this kind of failure, pervasive in contemporary "free-market" economies. As noted above, neoclassical theory suggests that in well-functioning free market economies with complete contingent markets or with complete Arrow securities, risk would be optimally shared among market participants according to their risk-bearing ability. Such an economy would develop markets where all kinds of risks would be traded. Government would play a minimal role in a society with such a well-functioning economy. In the absence of such attributes, however, risk-related failures can render economic relations and transactions dysfunctional. In contemporary "free market" economies, even in some of the richest, complete markets for risk do not exist. For example, while a homeowner may buy insurance against the risk of fire damage to a residential dwelling, there is no market for trading the risk of a decline in home prices. Nor is there a market to trade risk to allow the purchase of protection against unforeseen shocks to income and livelihood. The fact that well-functioning markets—for these risks, and a wider array of others—are unavailable signals that the collective wellbeing of societies may be much less than its full potential.

Appreciation of the distinction between risks that are specific to an individual consumer, household, or firm (idiosyncratic risks), and those that are highly correlated across all participants in the economy (systematic risk, aggregate risk), is crucial for risk management. Sometimes, what is an idiosyncratic risk for one individual or firm may be systematic for another. What would be an idiosyncratic risk to a major internationally active bank may become systematic for a small bank in a given locality in the same country. For a firm operating in a local community as the only monopoly employer, its idiosyncratic risk will be systematic for the community. Various types of market failure make the private market for risk bearing less than optimal. In principle, government interventions could potentially increase market efficiency. In practice, however, there are cases where intervention in the form of insurance against risk raises the possibility of government (on behalf of the public) assuming the risk of losses and private sector capturing the gains. Such is the case, for example, of deposit guarantees in a fractional reserve banking system. It is thought that, aside from the famous moral hazard problem and the "too big to fail" issue, there is also the distributional impact of such interventions. Deposit insurance—intended to reduce the risk of bank runs and protect the payment system—raises more questions about redistribution than it implies its efficiency. It is argued that it is "the managers and stockholders of high-flying deposit institutions that force deposit insurers into funding their plays at subsidized interest rates, and politicians and government officials whose jobs are made more comfortable" (Kane, 1989, p. 177 quoted in Wright, 1993).

In addition, deposit insurance, it is argued, "favors large depositors (the old and/or the rich) over taxpayers to the extent that it increases yield on insured deposits. To the extent that it lowers the costs of loans, deposit insurance is presumably capitalized in the value of fixed and quasi-fixed assets financed, such as existing houses, land, other real estate, and other capital. Those who own such assets when government policies become more generous—generally citizens who are older and richer than the average taxpayer—profit from the shift. These are also the persons with the greatest political clout per capita. The government should be active in protecting the public. Governments set and enforce fire codes, teach fire safety, and prosecute arson. They should perform similar functions in banking." However by providing deposit insurance, "government has accomplished the equivalent of relaxing the fire codes by subsidizing insurance and encouraging people to play with matches" (Wright, 1993); words that were written 15 years before the onslaught of the global financial crisis.

In most economies, governments play a major role in bearing risk on behalf of their citizens. For example, governments provided social safety net measures and insurance for a variety of financial transactions. The justification for government intervention spans more than a century, as economists attempted to explain the role as necessitated by the divergence between public and private interests. Some six decades ago, Arrow and Debreu (1954) focused on finding the precise conditions under which public and private interests would converge, as envisioned in a conception of Adam Smith's invisible-hand conjecture. The result was the elegant proof that competitive markets would indeed have a stable equilibrium, provided some stringent conditions were met. It was clear, however, that even under the best of prevailing conditions, markets did not perform as envisioned by either Smith or Arrow-Debreu. Consideration of violations of the underlying conditions spawned voluminous literature on the theory and empirics of market failure. This concept became the starting point of analytic reasoning that justifies a government's intervention in the economy to protect the public interest (Stiglitz, 1993). The reason that contemporary societies implement social safety nets, such as social security, health care, public unemployment insurance programs, etc., is that individual households face substantial risk over their lives, which include mortality risks, wage and other income-wide risks, and health risks. Because private insurance markets do not provide complete insurance against all risks, there is said to be a market failure, and government intervention is called for to correct it. What has become clear in the wake of the global financial crisis is that even in the most advanced industrial economies, the existing social safety nets were incapable of coping with the adverse consequences of the crisis. Not only has the crisis shaken

the previous level of confidence in markets, but it is also relevant to note that nearly all analyses attribute it to market failure, in one dimension or another. This has intensified calls for government interventions to counter the adverse effects of the crisis on income and employment, to strengthen social safety nets, and to reform the financial sector. The most important lesson learnt from the crisis has been that people at large carry too large a risk of exposure to massive shocks originating in events that are beyond their influence and control. Hence, attention has been focused on ways and means of expanding collective risk sharing.

Heretofore, it has been assumed that government intervention, in the form of activities, such as providing social safety nets, public goods, and deposit insurance, was solely for the purpose of addressing various kinds of market failure. While this is a crucial justification for intervention, there is an important dimension to a government's role that has not attracted much attention. Much of these activities in the provision of a social safety net, from a minimal amount in some countries to substantial amounts in welfare states, are also about collective risk sharing. This dimension has been particularly neglected in the analysis of government provision of social insurance and services, in which the sole focus has been on the issue of the trade-off between equity and efficiency; the issue at the heart of state intervention vs. market debates. In this debate, the focus is on the distortions caused by taxation to finance these activities and analyses neglect to consider what the taxes are financing in a particular society. One important risk-sharing use of taxes is in the area of transfer payments or automatic stabilizers intended to provide a cushion to citizens' consumption, should they be affected by the adverse consequences of shocks. Automatic stabilizers work without any discretionary government decisions. For this reason alone, there is no automatic way these safety net measures can differentiate between temporary or persistent (permanent) shocks. While the former tends to help stabilize the economy, the latter can create fragility in the fiscal positions of government in the medium or long term. This places an emphasis on the appropriate design, eligibility criteria, and the alternative ways and means of addressing the consequences of more permanent shocks.

Some have argued that government risk-sharing schemes to mitigate the adverse effects of shocks to income are akin to insurance, and as such, they raise the issue of moral hazard. Additionally, it is argued, they have adverse incentive effect, in that they reduce the labor supply. The standard argument is that while more equity can be achieved through redistribution using taxes and transfers, it comes at the cost of reduced efficiency because it will adversely affect the incentive to work. A number of studies (Andersen, 2008, 2010, 2011; Hoynes and Luttmer, 2010; Sinn, 1995, 1996) argue that this

is too simplistic. Consider a simple example where the tax system imposes a proportional tax on income. The tax then is used to provide a lump-sum transfer. In this example, those earning high income are taxed to finance lump-sum transfers to low-income earners. This is an *ex-post* redistributive system but is an *ex-ante* income-risk reduction device to the potential recipients. This implies that a tax-redistribution risk-sharing scheme has an insurance effect that runs counter to the incentive effect, raising the possibility that such a scheme may lead to a larger, rather than smaller, labor supply as the former may dominate the latter (Andersen, 2011). One of the strongest risk-sharing programs in welfare states is investment in human capital through free education financed by taxes. These programs allow the society as a whole to share the risk involved in educating its younger members. Investment in human capital through education is known to have two important characteristics. First, since human capital is an important driver of growth, there is a substantial pay-off to society in the medium to long term, in terms of tax payment and higher productivity. Second, it is also known that this pay-off is at least as large as, if not larger than, investment in equity markets (Judd, 1997). Since in the absence of free education some households, if not most, will be resource constrained to finance higher education, private financing may mean that the society's potential human capital is not utilized efficiently, leading to lower productivity, and thus, a lower average income.

The theoretical literature suggests that in most economies the potential for risk sharing within, between, and among countries remains under-exploited, leading to substantial loss of welfare. Much of the financial activities are interest rate–based, thus forcing financial transactions into a credit-debtor relationship with its own peculiarities, requirements, and constraints. Hence, a large portion of productive activities remains finance constrained; examples are small and medium size firms, rural poor and non-banked communities everywhere, as well as individuals and very small firms in the informal economy. These segments of the economy are exposed to idiosyncratic and systematic risks largely due to the nonexistence or incomplete availability of insurance. In case of SMEs (microfinance discussed earlier), finance constraint is one among a number of others—such as access to markets, regulations that, for the most part, are designed for incorporated businesses that have access to capital markets, and taxation codes. However, so long as the financial constraint is binding, resolving other issues, while important, would be of little help. The major source of finance for SMEs is the banking system that provides external funding for these firms (Levitsky, 1986; World Bank, 2010). Banks, however, prefer to deal with large transactions because of high costs of risk appraisal, processing, and monitoring. It is also argued that because SMEs do not provide sufficient information and their operations

tend to be opaque, there is a risk of moral hazard due to information asymmetry, which leads banks to charge a high-risk premium (Beck, 2007). On the other hand, substantial benefits are claimed for encouraging relaxation of financial constraints for these firms. These include social benefits that accrue due to growth, entrepreneurship, private sector development, job creation, and improved income and wealth distribution (Beck 2007; Levy, 1993). A number of government policies and instruments have been used to create an improved risk-sharing environment for SMEs. These measures have been targeted to the supply and demand side of the market as well as to the financial sector (Duan, Han, and Yang, 2009; Helmsing, 1993; Klein, 2010; Levy, 1993; Tan, 2009; World Bank, 2008; World Bank, 2010).

In the course of the last three decades, there has been increasing concern as to the ability of governments to cope with severe fiscal constraints. Concerns have also been expressed regarding the relative efficiency of governments in providing public services. The pressure has been exerted on governments to find alternative ways and means of delivering public services through partnerships with the private sector. Outsourcing is one example where government's traditional functions of procurement, provision of public goods, and provision of services have been relegated to the private sector. A risk-sharing instrument that has been popular with many governments over the last two decades has been Public-Private Partnerships (PPPs). This concept refers to a cooperative venture between governments and the private sector in which risks and returns are shared through a long-term contract whereby "the private sector becomes involved in financing, designing, constructing, owning or operating public facilities or services" (Hodge, 2004). In every one of these functions, there are risks (Hombros Bank, 1995). The effectiveness of a given PPP depends much on the degree to which risks are shared. Case studies have demonstrated that, in a number of projects throughout the world, risks have been shifted to one side, mostly to governments, or transferred rather than shared (see, for example, Ball et al., 2003; Berg et al., 2000; Bracy and Moldovan, n.d.; Canadian Council for PPPs, 1997; Collin, 1998; Greve, 2003; Hodge, 2002; Ishigami, 1995; Jacobson, 1998; Lawson, 1997; Osborne, 2001; Perrot and Chatelus, 2000; Savoie, 1999). When there is no risk sharing and there are losses, the government bears the costs but the gains accrue to the private sector. Provided that risk-sharing contracts are designed such that risks are allocated consistent with both the market conditions and expectations, and are transparent and flexible to allow both the government and private sector partners to deal with external shocks, PPPs have the potential to benefit the parties as well as society at large. These benefits may well include, efficiency gains, improved value for money, and greater government fiscal discipline.

Islamic Finance and Risk Sharing: Role of Public Policy

Up to this point, we have discussed risk sharing within the conventional environment of finance, but now we turn to the role of government in conducting public policy, particularly monetary and fiscal policy, in promoting risk sharing, and, simultaneously, increasing the effectiveness of monetary policy while creating greater fiscal space and a more stable macroeconomic environment (Askari et al., 2010, 2011; Debrun and Kapoor, 2010; Duval et al., 2006). As mentioned earlier, empirical evidence suggests that the vast potential opportunities for risk sharing existing within, between, and among countries remains un-exploited, suggesting a lower level of human welfare. A government can do much to improve this situation, as it has powers not available to the private sector. For one thing, in its capacity as the risk manager for society and as its agent, it can promote risk sharing broadly by removing many of the barriers impeding it. It can reduce informational problems, such as moral hazard and adverse selection through its potentially vast investigative, monitoring, and enforcement capabilities.

Through its power of implementation of civil and criminal penalties for non-compliance, a government can demand truthful disclosure of information from participants in the economy. It can force financial concerns—that would attempt to appropriate gains and externalize losses by shifting risks to others—to internalize them by imposing stiff liabilities or taxes. Using its power to tax and to control the money supply, a government has the significant ability to make credible commitments on current and future financing. It can use its powers of taxation to create an incentive structure for intergenerational risk sharing, whereby the proceeds from taxation of the current income-earning generation is redistributed to reduce risks to human capital formation of the youth of the current and future generations. Without government intervention, individuals are unable to diversify the risk to their most valuable asset: their human capital. The young have significant human capital but insufficient financial capital. For the old, on the other hand, the case is the opposite. As Robert Merton (1983) suggested, a trade is possible between these generations but laws prohibit trade in human capital (except through wage employment), the young cannot make a credible commitment of their human capital through private contracts. There is no possibility for private contracts to commit future generations to current risk-sharing arrangements. This, in effect represents another case of commitment failure. Using its powers of taxing and spending, unparalleled monitoring and enforcing capabilities, and its control over the money supply, government can effectively address these issues. No private entity can credibly commit not to default on an obligation as government can.

One of the most promising instruments that would allow governments to improve risk sharing is the category of instruments called "macro-market" securities that can allow people to mitigate risks to their income and countries to enhance international risk sharing. Shiller (1993) proposed these securities. While there are now ways and means available in many economies that allow protection against idiosyncratic and systematic risks, evidence suggests that much of individuals' incomes are still exposed to considerable risk. Even in rich economies where a wide array of instruments of risk mitigation is available, the most important instrument of risk sharing is the equity market instrument, a significant portion (about 90% in the USA) of "an average person's income is sensitive to sectoral, occupational, and geographic uncertainty" (Athanasoulis et al., 1999).

Moreover, these macro-market instruments could be used to hedge risks of a country's economy by investing in other nations' macro-market instruments. For example, in a macro-market for a given economy, an investor could buy a long-term claim on that economy's national income. Such an instrument would represent a claim much like a share in a corporation. Prices of these instruments in the macro-markets would fluctuate as new information about national and international economic developments become available, similar to what happens when new information regarding corporate profits becomes available in equity markets (Athanasoulis et al., 1999; Shiller, 1994, 2003). These instruments can be effective means of improving inequalities of income within and among nations and allow faster international convergence. They would also facilitate inter-generational risk sharing. Such instruments issued by governments can also have the benefit of replacing government debt instruments that, while advantageous in terms of risk sharing, have an adverse impact on income distribution because they mostly benefit already wealthy bondholders (Folden, 2000).

Risk sharing serves one of the most important desiderata of Islam: the unity of mankind. Islam is a rules-based system in which a network of prescribed rules governs the socio-economic-political life of society (Mirakhor and Hamid, 2009; Mirakhor and Askari, 2010). Compliance with these rules renders the society a union of mutual support by requiring humans to share the risks of life (Mirakhor, 2010). Risk sharing intensifies human interaction. This was a powerful argument in favor of globalization. It was asserted that trade and financial integration increase interaction among peoples, resulting in a greater degree of familiarity, which facilitates risk sharing. Feedback processes triggered by integration create a virtuous cycle leading ultimately to a "global village." As mentioned earlier, however, empirical research provides evidence of the failure of financial integration to achieve the hoped-for degree of risk sharing. The dizzying pace of financial innovations of

several decades prior to the crisis created opportunities and instruments of risk shifting—where risks were shifted to investors, borrowers, depositors and, ultimately, to taxpayers (Sheng, 2009)—rather than risk sharing. The financial sector became increasingly decoupled from the real sector with the growth of the former outpacing that of the latter by double-digit multiples (Epstein, 2006; Mirakhor, 2010; Menkoff and Tolksorf, 2001). The emergence of a crisis was inevitable since it was the real sector that had to validate the mountain of debt sitting on top of a relatively small hill of real output. Ultimately, much wealth was destroyed, many people became unemployed, and substantial fiscal costs were imposed on governments and taxpayers the world over. The slow progress of conventional finance to promote risk sharing provides Islamic finance with a valuable opportunity to demonstrate its use as an alternative on the global level.

For Islamic finance to achieve its objectives, development of medium-to-long-term risk-sharing instruments is an imperative. Given the track record of the industry thus far, it appears unlikely that the industry will produce such instruments by itself. This is a clear case of market failure justifying government's affirmative action to motivate progress. Earlier discussion focused on the enormous and unique power of government as society's agent and risk manager. If and when convinced of the need to intervene, government action can generate enough incentives to kick-start a process of energizing the private sector's progress toward adopting risk-sharing instruments. Government itself has substantial incentive to do so. As a first step, government could design medium-to-long-term instruments of risk sharing to finance its own development budget. A typical emerging market or developing country devotes 30 to 40 percent of its budget to development expenditures financed by taxes and/or domestic and external borrowing. Domestic government debt, something that could serve risk-sharing purposes, has an adverse impact on income distribution. Externally funded government debt represents leakages out of the economy, worsens income distribution, and exposes the economy to the risk of "sudden stop." Issuing an equity instrument on the portfolio of domestic development projects has none of these problems and it has the added advantage of improving domestic income distribution. Provided that these instruments are issued in low denominations sold in the retail market, these instruments can serve households and firms in their attempts to hedge their idiosyncratic risks. In essence, they would be macro-market instruments similar to those proposed by Shiller. These instruments could anchor the development of the high end of the spectrum.

Government could also develop a second risk-sharing instrument to finance the remainder of the budget. This instrument could be a perpetual

security (consol) whose rate of return would be a function of the growth of the national income of the country or tied to the rate of return in the real sector of the economy. Government as an agent of the citizenry could commit on their behalf to service such an instrument. They again would have the same beneficial effects, provided that these securities are also in low denomination and sold in the retail market. Moreover, a government could use these securities, which would resemble equity shares in a corporation, to convert its debt into what are risk-sharing instruments, thus achieving a far greater fiscal space. Importantly, these securities could be utilized as instruments of monetary policy replacing interest rate-based government bonds. Since banks and financial institutions anchor the asset and liabilities sides of their balance sheet on the central bank's overnight rates, so long as these rates are determined by interest rates, the portfolio of the banking system, as well as the rest of the financial sector, are anchored to interest rates even if the entire banking system becomes Islamic. Elsewhere, it has been argued that using the described instruments to signal the private sector can invest significant potency in monetary policy and its transmission mechanism. There are other benefits of these instruments (Mirakhor, 2010). These instruments can also be utilized in improving international risk sharing as other governments and investors buy them to diversify their own risks. Such securities will also provide greater vitality to equity markets. As part of governance structures of issuance and use of proceeds of these instruments, strengthened legislative or parliamentary oversight could enhance the credibility of these instruments.

Conclusions

The financial crisis of 2007/2008 has had a serious impact on economies across the world. Its effects are still reverberating in the economies of Western Europe and North America, threatening the economies of emerging markets and developing countries. The aftermath of the crisis has created events that only a few years ago would have been thought unlikely, including the downgrading of the highly coveted triple A rating of the United States, threats to the Eurozone, Brazil's suggestion that emerging markets and developing countries should help bail out Western economies, China's reported interest in buying Italian debt, Switzerland trying to convince the rest of the world that its currency is not as strong as believed in order to ward off the rush to the Swiss franc as a safe haven currency, and, most importantly, the growing possibility of sovereign debt default in a number of Western European economies, with dire predictions of catastrophic consequences. While analysts have suggested a number of reasons for the crisis, the most important seems to be

the growing uncertainty regarding the regime of interest-based debt financing that has been the centerpiece of the conventional financial structure.

Islamic finance is in a unique position to present an alternative to the present interest rate-based debt-financing regime that has brought individual and global economies to the verge of collapse. The core principle of Islamic finance is risk sharing. Although still a young industry that deserves much praise for its accomplishment thus far, it has not managed to develop truly risk-sharing instruments that would allow individuals, households, and firms, as well as whole economies to mitigate systematic and un-systematic risks. Nor is there any sense of direction that could compel an expectation that such developments are on the horizon. It appears, therefore, that this situation has all the hallmarks of a market failure justifying government intervention. We suggest that governments could issue macro-market instruments that could provide their treasuries with a significant source of non-interest rate-based financing while promoting risk sharing, provided that these securities meet three conditions: (i) they are low denomination; (ii) they are sold on the retail market; and (iii) they have a strong governance oversight. Moreover, given that evidence across the world suggests that monetary policy's transmission mechanism appear to be impaired, it is suggested that these government issued securities for monetary policies could impart significant potency to monetary policy (Mirakhor, 2010). Finally, consider also the present problem facing Europe and the global economy. At the moment, much of the debate regarding solutions to this problem is focused on "haircuts" for the private sector banks and "bail out" resources from the European Central Bank as well as the countries of Western Europe. As many observers have noted, this will only "kick the can down the road" and add more debt to the global economy. Could a macro-market instrument such as those discussed above help mitigate the risk of sovereign default threatening the global economy at the moment? Consider the possibility of a macro-market instrument that could be issued jointly by the IMF, World Bank, and the European Central Bank—with additional resources provided by some members of the G-20—with its rate of return tied to the growth of the global GDP. This could give immediate relief to the countries at risk of sovereign default, allow the economies of these countries fiscal and growth spaces, and remove the threat to the global banking and financial system.

CHAPTER 5

Lessons from Financial Crisis: A Policy Failure?

Introduction

The industrial economies are in a serious crisis not seen since the Great Depression. Dubbed as the "Great Recession," an aspect of the crisis that began in 2007/2008 has recently become the subject of intense debate: credit. While credit has been a source of many crises in various parts of the world for a long time, analysts have focused on it as a crucial dimension of the current crisis only recently. The idea that debt (credit) may be the most important source of financial crises began in 2009 with the report of the excellent and painstaking research of Reinhart and Rogoff (2009). The central message of this research was that financial crises over the last few centuries have all been debt (credit) crises no matter what label (such as currency or banking crises) they carried at the time. This includes all the crises over the last half century, including the emerging markets' crisis of the years from 1997 to 2000.

The last couple of years, since the onset of the crisis, represent an intellectual ferment not only analyzing the "what happened" and the "why" of the credit crisis but questioning the whole edifice of economic and financial theories of the past half-century. Particularly in the last 3 to 4 years, influential research has emerged resulting in new insights regarding the foundational role of interest rate-based debt financing and the structure and architecture of its associated financial system. Extensive research has provided empirical support for the views of Keynes and his ardent follower, Minsky, that debt financing creates instability in the form of cyclical behavior of boom and bust. What is unique about the present phase of the evolution of financial

capitalism is the growing sense of "regime uncertainty": uncertainty regarding the benefits, costs, and sustainability of the regime of debt financing.

Ever since the crisis began, various explanations have been advanced as to its causes. An Islamic perspective points to the root cause: the interest rate-based debt finance system. While the dots remain to be connected, current trends in empirical and theoretical research is converging to the idea that the interest-based fractional reserve banking system, with its potential for facilitating high leverage, constitute the root cause of financial crises in contemporary market capitalism.

Typical Conventional View on the Financial Crisis[1]

The early explanation for "why" the crisis occurred saw the emergence of the idea that the crisis was a consequence of large global macroeconomic imbalances and large savings held by the emerging markets. The latter was itself a consequence of the financial crisis of 1997–2000 in the emerging markets. These economies experienced firsthand, at the time, the absence of an effective and representative global lender of last resort that could provide balance of payment support fairly and adequately during the crises. Consequently, these countries embarked on protecting themselves against future occurrence of crises by accumulating large reserves, a significant portion of which were invested in government bonds issued by industrial countries, especially the United States. This, in turn, led to low medium-to long-term interest rates, a huge expansion of credit and debt, and rapid expansion of liquidity in a ferocious search for yield. Increased liquidity led to an aggressive incentive structure for the promotion of financial innovations and engineering of complex, opaque instruments. The design of instruments and their packaging were engineered such as to create an illusion that they possessed risk–return characteristics more attractive than the risk exposure attributes of their underlying assets. This process encompassed the entire spectrum of activity, design, origination, packaging, trading, distribution, wholesale, and retail.

Increased global demand for financialized assets led to increasing prices for these paper assets that had little or no connection to the real sector of the economy, thus validating expectations of ever-increasing asset prices (Tobin, 1984). Higher prices of these assets in every turn validated expectations of ever-increasing asset prices and the creation of a full-blown asset bubble was well on its way. This followed the collapse of asset prices in the real estate market in the United States. Interconnected international asset markets ensured the rapid spread of the US-originated crisis rapidly and globally through the contagion process.

Alternative Perspectives

Keynes-Chicago Plan-Minsky

Evidence surveyed in many studies showed that every economic and financial crisis was preceded by an expansion of credit (e.g., Fisher, 1933). A number of influential scholars, in the past, proposed reforms that would abolish the credit system and replace it by an equity-based investment system. Among celebrated reforms was the plan formulated in the University of Chicago, the "Chicago Memorandum" in 1933, which called for 100 percent reserve money and for an equity-based investment system. In the modern banking system, a bank can simply create credit *ex-nihilo* by simply crediting the account of its customer for the amount of credit. Such credit becomes deposits for the borrower, on which it may issue orders for payments. Since, every bank does the same thing, viz, it credits its client for the amount of a loan, credit expansion can be very fast, and credit far exceeds real savings in the economy. Credit creates deposits.

The alternative perspective maintains that crises are endogenous and endemic in market capitalism served by a debt-dominated financial system. This view echoes a number of arguments from the Islamic perspective against interest and unbridled speculation. The alternative explanations of financial crises view them as internally-generated instability episodes that inevitably arise from the basic debt–credit–interest rate relation. In contemporary financial capitalism, debt and credit contracts overwhelmingly dominate the financial system. In such as system, a fundamental "conflict between guaranteeing return of capital while also putting that capital at risk is a key channel through which financial instability can be, and recently has been generated" (Cooper, 2008). Fractional reserve banking and its close relatives—in the form of money market funds and hedge funds, plus other financial innovations operated by highly leveraged institutions—ensure that the credit and debt creation process is amplified manifold during the upswing phase of the financial cycle, to lead to asset bubbles. The process works in reverse during the downswing phase, leading to a credit crunch once the bubbles burst.

The view that the fractional reserve system is a source of instability—creating a financial system dominated by interest rate-based debt in which the credit multiplier and leverage ratio mechanisms are operative—found its most forceful expression during the years of the Great Depression. This recognition led a major group of American economists, including Irving Fisher and the Chicago Group (such as Henry Simons, Frank Knight and other members of the economics faculty in the University of Chicago), to propose a significant reform of the US banking system. The proposal, which came to be known as "the Chicago plan," was submitted to President Roosevelt

but was not implemented. It required banks to hold 100 percent reserves against deposits. The plan claimed that there were four major advantages to the proposal: (1) much better control over the major sources of business fluctuations—sudden increases and contractions of bank credit and the supply of bank-created money; (2) complete elimination of bank runs; (3) dramatic reduction of the (net) public debt; (4) dramatic reduction of private debt, as money creation no longer requires simultaneous debt creation.

Recently, in an excellent theoretical-empirical study, Benes and Kumhof (2012) found support for all four claims. Moreover, they found that the plan would lead to an output gain approaching 10 percent. Additionally, they found that "steady state inflation can drop to zero without posing problems for the conduct of monetary policy." Whereas these American economists viewed the fractional reserve banking system and its power of credit creation as the source of financial instability, Keynes saw another deeper cause. He argued that market capitalism, left to itself, was inherently unstable. The core of this argument maintained that the real phenomena of saving and investment came from two different subsectors of the real economy: consumer and business. They save and invest for different reasons. Their coordinated behavior is subject to uncertainty. Even under the best of circumstances, their equality cannot be assured. The existence of a financial system dominated by *ex-ante* fixed interest rate debt contracts exacerbated this coordination problem.

Since the equality of saving and investment could not be assured, the emergence of unemployment and inflation were likely possibilities. Not only could the equality of saving and investment not be guaranteed because of the coordination problems, but it was also likely that not all savings would be channeled into productive employment-creating investment. This, Keynes argued forcefully, in his famous book *General Theory of Employment, Interest and Money* (1936), was due to the role of interest in creating a wedge between savings and investment. He viewed interest as "rents" and those who demanded it as "rentiers."

Keynes was neither the first nor the only scholar to hold such views. Nor was the expression of the concept confined to the twentieth century (see, for example, Ferguson, 2008). However, it was Keynes who made the relationship between interest-rentier and the lack of coordination a centerpiece of his explanation as to why market capitalism was unable to achieve full employment. Moreover, he argued that the rentier-interest rate relation was responsible for another "evil" of capitalism. Keynes not only states that "Interest today rewards no genuine sacrifice" (Keynes, 1936, p. 376), but its compounding leads to wealth accumulation at an accelerated pace, without the commensurate risk or work. This tilts income and wealth distribution

toward the rentier. So convinced was Keynes of the detrimental role of the predetermined fixed interest rates that he suggested that, while unemployment and poor income and wealth distribution were the two "social evils," the real "villain of the piece" creating both, as well as inevitable instability that followed, was the rentier class that finds advantage in holding liquid assets rather than risking their holdings in employment-creating investment. They would part with them only if they can loan them in the form of ironclad debt contracts that guarantee full repayment of principal and interest. The solution he offered was the "euthanasia of the rentier." This was to be a gradual process that "will need no revolution" but could be achieved through "socialization of investment" (for fuller discussion see Mirakhor and Krichene, 2009; and Keynes, 1930, 1936).

One of the most perceptive, productive and astute followers of Keynes was Hyman Minsky, who pushed forward the frontiers of Keynesian thought to produce valuable insights into the workings of financial capitalism. As did Keynes before him, Minsky considered such a system in which debt dominates as endogenously and endemically unstable. Indeed, he argued that in a debt-dominated financial system of contemporary capitalism, the structure itself amplifies disturbances. His major contribution is known as the "financial instability hypothesis" (see Minsky, 1984, 1986; Mirakhor, 1985; Mirakhor and Krichene, 2009). The pivotal element of the hypothesis is debt. So important is this element, that Minsky himself considered his hypothesis as a "theory of the impact of debt on system behavior." This hypothesis contains two central propositions. The first states that there are two financing structures: one promotes stability and the other instability. Simply stated, this proposition maintains that the more a financial structure, as measured by debt to equity ratio, tilts toward debt, the more fragile the system becomes. The second proposition argues that in financial capitalism, stability is not sustainable because, during a prosperity phase, stability sows the seeds of instability. Minsky refers to the second hypothesis as saying "stability is destabilizing."

During the stages of prosperity, businesses finance their activities using internal funds or through equity finance. If they borrow, they do so only if their future income streams are sufficient to meet payment commitments on the principal and interest, over the lifetime of the contracted debt. Minsky calls this "hedge finance." The system in which hedge finance dominates—that is, financing is mostly equity or internal funds with minimal debt commitments that are validated compatibly by an underlying income stream—is stable. As profit opportunities intensify during prosperity, however, there is higher reward to borrowing as enterprises take on riskier investments. More and more firms and other participants tilt their financial structure toward

debt and increased leverage. Minsky calls this "speculative finance" and enterprises using this type of finance as "speculative units" who overwhelm their financial structure with debt to the point where their income stream becomes insufficient to pay the principal that becomes due. They can only pay the interest but must rollover the principal.

According to Minsky, matters do not rest here. Firms continue to borrow to the point where their financial structure is made of debt commitments that can only be validated by more borrowing to pay both principal and interest. He referred to these enterprises as Ponzi units and their financing as "Ponzi finance." Minsky considered contemporary capitalism as a dynamic system with a number of dialectical processes and feedback loops at work that created issues of instability, unfair distribution, and structural unemployment. In this, he was following Keynes, and, like Keynes, he thought the dialectic forces within the system would lead it into disaster if the system were left to its own devices. He was known as one of the followers of Keynes, most faithful to the purity of the master's ideas. Nevertheless, it is enigmatic and puzzling that, as central as the discussion of interest rate mechanism and concepts of "rent" and "rentier" were in Keynes' perception of contemporary capitalism, they are not dealt with in Minsky's writings. One explanation could be that perhaps he saw no need for it since he had already made "debt" such a potent and pivotal element in his own rendition of the Keynesian model; and "debt" without the interest rate mechanism was not "debt."

Be that as it may, in the aftermath of the credit crisis, many found Minsky's diagnoses of past crises—and his explanation of potential turbulences ahead—to be insightful. He had warned of a growing fragility in the system, debt build up in the household and business sectors, as well as the adverse consequences of securitization, debt globalization, and deregulation. A number of his colleagues and students continued research in the Minskian tradition (for their research, see the publications of The Levy Economics Institute of Brad College online) after his death in 1996. Minsky had observed the growing fragility of the US financial system since 1966, as a boom and bust in one asset market was followed by the formation and implosion of another bubble in a different asset market. After him, his colleagues and students saw a continuation in the phenomena of bubbles of debt and credit forming and then imploding.

In Minsky's tradition, they considered these not as isolated incidents due to external factors, but as "rolling bubbles" signifying the growing fragility of the financial system. Soros (2008) too had seen each asset bubble connected to others and all part of a long-term formation of a "super bubble" of debt and credit that finally imploded in 2007/2008. The "Minsky Moment" had arrived (Lahart, 2007).

Financialization: James Tobin and Hans Tietmeyer

The period between the second half the 1960s and 1970s was one of much progress in the theory of finance. This advancement became the foundation for the development of derivatives and securitization. These theories included spanning and the efficient market hypothesis, themselves based on the early development of Arrow-Debreu and Modigliani-Miller theories. By the mid-1970s, the application of these achievements initiated a drive for innovations, unmatched in history, that gave finance a significant presence in industrial economies investing in it, with the potential to take on a life of its own. This influence manifested itself in massive currency trade, so alarming that James Tobin, a Keynesian economist, proposed what became known as the Tobin tax, just to throw sand in the wheels of this financial trade (Tobin, 1978). By the early 1980s, finance was well on its way to dominating the real sector of the economy. In1984, Tobin sounded the alarm about the emergence of a "paper economy":

> We are throwing more and more of our resources into financial activities remote from production of goods and services into activities that generate high private rewards disproportionate to their social productivity, a "paper economy" facilitating speculation which is short-sighted and inefficient. (Tobin, 1984)

In little over a decade later, the "paper economy" was not only dominating the real sector, but was well on its way to decouple from it. This period coincided with the presidency of Hans Tietmeyer at the Bundesbank. Much respected, Tietmeyer used his presence in domestic and international forums to warn about "financialization"—a process whereby financial sector growth is much faster and larger than the real sector—and the "decoupling" of finance from the production of goods and services (Menkoff and Tolkorof, 2001); in other words the rapid growth of the "paper economy." In any event, Tobin's and Tietmeyer's warnings were not heeded, resulting in the collapse of the "paper economy" in 2007/2008.

A "paper economy" has distinct characteristics: (i) its finance is speculative rather than productive; (ii) its finance is focused on short-termism, buying pieces of paper and trading them back and forth in rapid turnover; (iii) its finance decouples from real sector production; (iv) it extracts, rather than adds, value from the real sector; and (v) it has only an illusory or, at best, a tenuous (virtual) anchor in real assets.

How is the "paper economy" fairing five years after the crisis? Data shows that at the end of 2011, the nominal value of paper instruments that had no connection, tenuous or otherwise, to the real economy—such as interest rate

swaps, collateralized debt obligations, credit default swaps, and others—was US$700 trillion in the United States alone. This is 4.5 times as large as the capitalization of the global debt and stock markets (Bogle, 2012).

Data also reveals that stock markets too are mostly serving the paper economy. Over the last five years, data shows that, of the total volume of US$33 trillion annual trading in the US stock markets, on average only US$ 250 billion per year provided additional equity capital to new and established companies.[2] In other words, only 0.8 percent of the US$33 trillion was devoted to capital formation in the real sector of the economy every year, on average, for the last five years. The remaining 99.2 percent was devoted to pure finance activities, that is, the paper economy. In the meanwhile, debt continues to pile up in major economies. A BIS study (Cecchetti, Mahonty, and Zampolli, 2010) showed that by 2010 total debt in each country (government, households, and corporate) of the US, Japan, Canada, and 15 European countries ranged between a minimum for Austria of 238 percent of its GDP to 456 for Japan. Indications are that, with little growth in these countries, their debt continues to increase with significant spillover effect on emerging and developing countries elsewhere (Alper and Forni, 2011). To bring their debt-to-GDP ratios to more sustainable levels, these countries have to produce primary surpluses ranging between 5 percent for Austria to 12 percent for Ireland, every year, for five years; a Herculean task by any standard, particularly given the negative to low single digit growth in these countries.[3]

Importantly, credit expansion has contributed to a financialization of the economy, i.e., an increase in the relative size of the financial sector in relation to the rest of the economy. Too much resource has been allocated to financial markets, in the form of thousands of speculative entities such as investment funds, structured finance companies, and hedge funds. In turn, the growth of these institutions and instrument innovations for speculation and hedging added substantially to the opacity and complexity of the financial system, leading to greater uncertainty. Moreover, traders, instead of investors, dominate the financial markets. With very low interest rates, speculators, in search of yield, engineer structured products to increase monetary returns and play games against each other. The loss for J. P. Morgan of about $5.8 billion in July 2012 is a gain for hedge funds who bought its structured products. All in all, the result of these activities has been the growth of complexity in the financial system with increased vulnerability to shocks.

Credit expansion on the basis of cheap money causes distortions in the allocation of financial resources; particularly those that adversely affect long-term investment in the real economy. Projects with very low return are undertaken. Demand financed by credit is also shifted to housing, automobiles, and durable goods. A large capacity is installed to meet this

demand. However, when the credit process goes bust, this demand vanishes. Companies face large inventories of unsold real estate, durable goods, and excess production capacity.

The Financial Crisis as "Moral Failure"

There is a third alternative explanation for the credit crisis that considers it as a major sign of a massive "moral failure" that has plagued contemporary society. In this view, the credit crisis was an episode, albeit highly damaging, in a long march of civilization toward becoming totally unhinged from any moral anchor, as the "banality" of economic crimes becomes entrenched in the psyche of the people.

There is a view that considers finance as "a profoundly moral issue, as it involves the creation of relationships of trust, often with very high stakes indeed" (Davies, 2012). This is perhaps the reason why the revelation of the extent of fraud and other financial and economic crimes committed by financial institutions—the latest being LIBOR rate fixing—created intense moral outrage reverberating in the "occupy" protest movement. Thus, in an expression of moral outrage, Zuboff (2009) argued that while there is merit in technical explanations of the credit crisis, what is ignored in these analyses is "the terrifying human breakdown at the heart of the crisis." She maintained that at its "heart," what drove the crisis was a sense of "remoteness and thoughtlessness compounded by a widespread abrogation of individual moral judgment." This is promoted by the "business model" that dominates, and is characterized by, the self-centeredness of its practitioners, who operate at an "emotional distance" from their victims and from the "poisonous consequences" of their actions. It was this "narcissistic model" that "paved the way for a full-scale administrative economic massacre…to the world's dismay, thousands of men and women entrusted with our economic well-being systematically failed to meet…minimum standard of civil behavior" that "says: you can't just blame the system for the bad things you've done" (Zuboff, 2009).

Zuboff found to be appropriate the philosopher Hanna Arendt's formulation of "the banality of evil," in her observation of Eichman in his trial in Jerusalem. Arendt observed that Eichman did not appear "perverted and sadistic," but "terribly and terrifyingly normal" (Arendt, 2006; Zuboff, 2009). Accordingly, Eichman was motivated by nothing except "an extraordinary diligence in looking out for his personal advancement." The same motivation animated the practitioners of the "narcissistic business model" operative in the run up to the crisis. Zuboff argues that the "the crisis has demonstrated that the banality of evil concealed within a widely accepted business model can put the entire world and its people at risk." She concludes that "in the crisis of

2009 the mounting evidence of fraud, conflict of interest, indifference to suffering, repudiation of responsibility and systemic absence of individual moral judgment produced an administrative massacre of such proportion that it constitutes economic crime against humanity" (Zuboff, 2009).

The crisis and its aftermath have led to a debate about the need to consider the role of ethics and morality in the economic and financial workings of contemporary capitalism (see, for example, *Citizen Ethics in a Time of Crisis*). It is worth noting that Adam Smith, considered to be the father of Western economics, wrote his book *The Theory of Moral Sentiments* some decade and half before his *Wealth of Nations*. An argument has been made that the proposition discernible from *The Wealth of Nations* regarding the workings of market capitalism must be placed within the institutional framework of *The Theory of Moral Sentiments* that provides the mooring for them (see Mirakhor, 2011c). The decoupling of the two books, in effect, cut off economics and finance from the ethics of the system envisioned by Smith. This purging process to purify economics and finance in order to make them "value free" began in earnest in the second half of the twentieth century, leaving market capitalism with only one ethic: "quid pro quo" (Knight, 1939). This is perhaps a fundamental reason for the emergence of the "narcissistic model" subject of Zuboff's outrage.

Complexity and Regime Uncertainty

The global financial crisis of 2007/2008 and its continuing adverse economic and social consequence, as well as the failure of significant policy actions to elicit the desired response, seem to provide evidence that the global financial system displays the characteristics of a complex system. Added to the shock over the occurrence of "fat tail" events, increased poverty and worsening distribution of income and wealth in individual and collective economies have intensified regime uncertainty. Such doubts about the sustainability of a system based on the interest rate debt financing have been discussed above.

A fact that can be discerned from the historical analyses of nearly all financial crises is the potentially destabilizing role of the interest rate mechanism in the debt-growth dynamics of the economies. In the 1920s, a young mathematician/philosopher, Frank Ramsey, had published a paper analyzing the interaction between market determined interest rate and growth rate (Ramsey, 1928), a work that was ignored by economists until the 1960s. He used the interaction between the rate of population growth, the growth of market-determined interest rate, and the growth of economy, to deduce the following: if the rate of economic growth exceeded the other rates, that is, the market determined rate of interest and the rate of population growth,

the economy would grow. A steady state was when all the three rates were in equilibrium; however, when the market determined interest rate growth surpassed the growth of the economy and the growth of the population, economic activity would begin a downward spiral.

In this context, it is worth noting that the artificially low interest rates contrived and forced by central banks' easy monetary policies may have disrupted economies, financial markets, and spread financial chaos, as the recent debt crises in Japan, the US, and Europe have clearly established. There seems to be an adverse debt dynamic at work in the global economy presently where, even at artificially low interest rates, the rates of the growth of economies are not sufficient to validate the growing debt.

The question arises as to whether there is alternative to the present dominant global finance system. Perhaps a practical alternative would be to step back from targeting the interest rate mechanism and focus on the incentive structure that has rendered the interest rate-based debt financing such a destabilizing force in the global economy. This can be accomplished by reorienting the system from relying on risk transfer and risk shifting to risk sharing.

The idea of "regime uncertainty" (Higgs, 1997) argues that a major cause of the intensity and duration of the Great Depression was the depth of the uncertainty (ambiguity) surrounding the policy regime of the time, and its economic and financial consequences. This type of uncertainty can arise from many sources ranging from simple tax-rate increases to the imposition of new kinds of taxes to outright confiscation of private property. It can also arise from various sorts of regulation, for instance, of securities markets, labor markets, and product markets. The security of private property rights rests not so much on the letter of the law as on the character of the government that enforces, or threatens, presumptive rights. Henry Morgenthau the Treasury secretary in President Roosevelt administration in the 1930s encapsulated the wide-ranging uncertainty as follows:

> Uncertainty rules the tax situation, the labor situation, the monetary situation, and practically every legal condition under which industry must operate. Are taxes to go higher, lower or stay where they are? We don't know. Is labor to be union or non-union?...Are we to have inflation or deflation, more government spending or less?...Are new restrictions to be placed on capital, new limits on profits?...It is impossible to even guess at the answers. (qtd. in Higgs, *Depression, War, and Cold War*, p. 16)

The most serious problem facing the global economy today is the situation of debt overhang and, more importantly, the risk of sovereign default. The latter cannot only prolong the adverse impact of the recent recession,

but could also trigger another major crisis in the global financial system, through contagion. Given the prevailing conditions of low growth, validation of the debt of the scale that exists now is in doubt. There exists the prospect that countries, including some among the advanced economies, could default on their debt, with defaults taking many forms. It could be an outright default, as in 1980s, for middle and low-income countries. It could be in form of near-zero interest rates by denying creditors any return on their lent capital. It could be in form of a high rate of inflation or hyperinflation that wipes out the real value of debt. The fiscal theory of the price level argues that the government will inflate money to reduce the real debt burden. The prospects of very high world inflation are very likely in view of the high indebtedness in many industrial countries. It will amount to an inflation tax levied on consumers and on holders of money.

Reinhart and Rogoff (2009) contend that all financial crises, whether currency or banking crisis, are, at the very root, debt crises, including the Asian Crisis in the late 90s. Another paper by the same authors studies a period of 200 years for 44 countries for which data was available. An important insight of this study is that the growth of the economy is adversely affected as the ratio of debt-to-GDP goes beyond 30 percent and nears 100 percent, eventually creating a situation where the GDP is only able to service the interest payments. The IMF reached similar conclusions in its "post-mortem" of the Asian financial crisis in the late 90s and recommended a safe level of government debt-to-GDP of no more than 25 percent. They further advised the avoidance of debt-creating flows, advice that was not taken by the advanced economies. Rogoff (2011) suggests that there are now $200 trillion of financial paper in the global economy, of which nearly 75 percent or US$150 trillion is in interest-bearing debt. The global GDP in 2011 is estimated optimistically at US$65 trillion. The question is, how will the underlying real global economy, growing at rates below the growth of global debt, be able to validate this debt?

According to the recently launched Fiscal Monitor of the International Monetary Fund (IMF), the average debt per working age person in advanced economies will increase from $27,600 in 2007 to $62,000 in 2016, and from $1,500 to $2,200 in emerging markets. In 2009, the IMF estimated that gross general government debt in high-income advanced G-20 economies is expected to grow from 78 percent of their GDP in 2007 to 120 percent in 2014, an increase of 40 percent over a 7 year period. These countries suffer from high unemployment, fiscal instability, low capacity utilization, and high debt and leverage. The stress and strain on the international trade and financial system and its associated arrangements did not suddenly become apparent after the 2007/2008 global crisis; in the 1990s, Japan, Russia, Argentina, Brazil, and Mexico were sending distress signals. Neither the

signals nor the lessons of these crises made any noteworthy impact on the way the world economic system and its policies were being steered. Andrew Sheng (2009) suggests that the crisis would have been evaded had the system learned the lessons of the Asian crisis:

> Whilst the emerging economies learned the lessons of 1997/98 crises, put their macroeconomic policy house in order, reduced their exposure to sudden stops, and accumulated reserves, most advanced economies went in the opposite direction. They reduced their savings, increased consumption, ran fiscal deficits and accumulated large debts. Observers suggest that Ireland, Portugal and Greece are only the tip of the axiomatic iceberg and that there is a heightened risk of the emergence of an even more serious global debt crisis.

The lessons had been distilled most effectively by the IMF from the "post-mortem" analyses of the Asian, Brazilian, Argentinian, Russian, and Mexican crises of the late 1990s and early 2000s. Reforms and remedies were suggested but were only implemented, most effectively, in case of emerging and developing countries. The advanced countries perceived their economies as immune to the forces of instability. Growing vulnerabilities, however, built up the pressures that dramatically proved the folly of such perceptions. Uncertainties, ambiguities, and complexities governing the present architecture and configuration of policies, seem to exacerbate the perception that the present financing regime is unable to mitigate the risks to the global economy effectively. Hence, there is a palpable anxiety and growing concern leading to the search for an alternative to the present interest-based debt-financing regime.

Perspective from Islamic Finance

A financial system based on risk sharing would be more stable than the conventional dominant system, which is based on risk transfer and, increasingly, on risk shifting. A main source of stability is the elimination of the interest-based credit system, which has evidently created financial chaos, distortions, unemployment, inflation, and unjust wealth redistribution. Other sources of this stability are the operational characteristics that remove major sources of volatility and instability. Among these characteristics are the following:

- transparency, trust, and faithfulness to terms and conditions of contracts;
- close relationship between finance and the real sector activities, such that the rate of return to the latter determines that of the former;

- asset/liability risk matching such that short-term funds finance trade, and long-term funds finance projects;
- asset/liability value matching such that the value of both sides of the balance sheet move simultaneously and in the same direction in response to changes in asset prices; and
- limitations on credit expansion and leverage, naturally arising from the need for credit growth that is tied closely to the expected rate of growth of the real economy.

It has been shown that a system based on these operational characteristics would be stable and capable of producing employment, income, and output growth. In an Islamic economy, the essential function of the financial sector is to serve and support the operation of the real sector. There are no interest rate-based debt instruments and all financial transactions are based on sharing risk and return (Askari, Iqbal, Krichene, and Mirakhor, 2012).[4] Hence, all financial claims are contingent claims. In such a financial system, deposit taking (commercial banking) institutions operate on a 100 percent reserve basis (as opposed to fractional); and non-deposit-taking (investment banks and mutual funds) institutions operate on risk and return sharing and their liabilities are not publically guaranteed.

Proposals along these lines (100% reserve banking) for the commercial banking structure are not new. As mentioned earlier, such an approach was recommended in the "Chicago Plan" which was forcefully advocated and supported by the noted Yale University professor Irving Fisher in his book titled *100% Money*. Noting the fundamental monetary cause underlying the severe financial crises of 1837, 1873, 1907, and 1929–1934, the Chicago Plan calls for a full monopoly for the government in the issuance of currency and prohibits banks from creating any money or near money by establishing 100 percent reserves against demand deposits. Investment banks that play the role of brokers between savers and borrowers undertake financial intermediation. As stated by Irving Fisher (1936): "The essence of the 100% plan is to make money independent of loans; that is to divorce the process of creating and destroying money from the business of banking. A purely incidental result would be to make banking safer and more profitable; but by far the most important result would be the prevention of great booms and depressions by ending chronic inflations and deflations which have ever been the great economic curse of mankind and which have sprung largely from banking."

Irving Fisher wrote, "I have come to believe that that plan is incomparably the best proposal ever offered for speedily and permanently solving the problem of depressions; for it would remove the chief cause of both booms

and depressions." Along the lines of the Chicago Plan, Laurence Kotlikoff (2010) has made a proposal called "Limited Purpose Banking."

Instruments of Islamic finance allow risk sharing and risk diversification through which individuals can mitigate their idiosyncratic risks. On the other hand, mandated levies, such as *zakat*, are means through which the idiosyncratic risks of the poor are shared by the rich as an act of redemption of the former's property rights in the income and wealth of the latter. Other recommended levies beyond those mandated, such as *Sadaqat* and *Qardh Hassan*, too play the same role. They help reduce the poor's income-consumption correlation. In other words, the poor are not forced to rely on their low (or no) level income to maintain a degree of subsistence living for themselves and their families. It is possible that at some point in time even these levies can be instrumentalized to be included in the full-spectrum or menu of instruments for risk sharing in Islamic finance. In the event, Islamic finance becomes a risk manager for society. Its instruments of risk sharing would help blunt the impact of economic shocks, disappointments, and suffering on individuals by dispersing their effects among a large number of people. It will have instruments of finance available for all classes of people to allow them to reduce their idiosyncratic risks and smooth their consumption. It will ensure that innovators, entrepreneurs, and small and medium sized firms have access to financial resources without the need to take all the risk upon themselves or, alternatively, abandon productive projects altogether. It will have instruments of insurance that not only provide protection against health and accident risks, but also insure against risks to livelihood and home values to protect people's long-term income and wealth.

Such a comprehensive Islamic financial system with a menu of risk-sharing instruments can then truly be said to have "democratized finance" without transferring risks of any venture to a particular class, or to society as a whole. This would be in sharp contrast to the results of the "democratization of finance" that led to the recent global financial crisis in the conventional system, wherein the risks of financial innovations were shifted away from financiers. The consequence was that while the gains of this "democratization of finance" were privatized, its pain was socialized (Sheng, 2009).

All forms of organized risk sharing have a "mutuality" dimension in their activities. The most familiar are cooperatives of various forms to share risk faced by their members. Producer, consumer, and farm cooperatives allow members to share risks of production, consumption, crop output, and related activities. In the case of Islamic insurance such as *takaful*, meaning mutual care, a group pools its resources to insure its members against risk. Ordinary insurance, where a person buys an insurance contract for a fee (indicated by a premium), is not an example of risk sharing but of "risk transfer" where, for

a fee, the insured transfers part of his/her idiosyncratic risks to a firm that is willing to provide protection against possible contingencies. What is missing here is the element of mutuality. Each policyholder deals directly with the insurance company without the need to know any other policyholder. For instance, if a plant catches fire, the owner does not have to bear the full cost of rebuilding the plant. The insurance company can cover this because it pools the resources of a large number of such policyholders. Since fires do not occur simultaneously in all insured firms, an insurance company is expected to be financially in a position to replace one or a number of destroyed plants.

Risk sharing is a contractual or societal arrangement whereby the outcome of a random event is borne collectively by a group of individuals or entities involved in a contract, or by individuals or entities in a community. In a company, all shareholders share in the risks inherent to the operations of the company. At the community level, a family or a nation shares in the risks affecting the wellbeing of the family or the nation. In finance, risk sharing is an essential feature of equity financing, where risk of loss and gain are shared, as opposed to interest-based debt financing, where the lender does not share in the risk of losses, thus all the risk of loss is shifted to the borrower.

In addition to a strict prohibition of interest-based and speculative transactions, Islamic finance is an equity-based system under which Islamic intermediaries own real assets and participate directly in production and trade activities. While in safekeeping, banking activity deposits remain highly liquid and checking services are fully available at all times; in the investment activity whereby deposits are considered as longer-term savings, banks engage directly in risk taking in trade, leasing, and productive investment in agriculture, industry and services. The most important characteristic of this activity is that it is immune to the un-backed expansion of credit. An Islamic bank is assumed to match deposit maturities with investment maturities (with no need for asset-liability management). Short-term deposits may finance short-term trade operations. With the bank purchasing merchandise or raw materials and selling to other companies; liquidity is replenished as proceeds from sales operations are generated. For longer-term investment, longer-term deposits are used. Liquidity is replenished as amortization funds become available. In all these investments, an Islamic bank is a direct owner of the investment in a project or in a business, which is awarded through the normal due-diligence process. In such a system, a financial institution therefore participates directly in the evaluation, management, and monitoring of the investment process. Returns to invested funds arise *ex post* from the profits or losses of the operation, and are distributed to depositors as if they were shareholders of equity capital. Since the loan default is absent, depositors do

not face the risk of loss of their assets. In conventional finance, loan default is pervasive. In the absence of government guarantees, depositors face a risk of losing their deposits, especially during a financial crisis.

Stability Conditions of Islamic Finance

An important performance dimension of risk-sharing finance, in general, and of Islamic finance in particular, is whether it is more, or less, vulnerable than conventional finance (which relies heavily on debt) to principal-agent and informational issues. Agency issues arise because of asymmetric information between agents (entrepreneurs) and principals (investors) and the possibility that the agent's utility maximization may not maximize the utility of the principal. The agency problem is normally addressed by incorporating incentive structures in contracts for the complete sharing of information and for the agent to behave in a way that maximizes rewards for the principal. In addition, there are implications to risk transfer, cooperation among economic agents, and stability of a financial system when risk-sharing is widespread and encouraged across the system.

Informational and agency problems have been discussed in the context of one risk-reward sharing instrument: equity. On the one hand, for example, Stiglitz (1989) suggests that there are two informational problems in case of equities: (i) adverse signaling effect which leads good firms not to issue as much equity for fear that it may signal poor quality; and (ii) an adverse incentive effect problem which suggests that equity finance weakens the incentive for the entrepreneurs (agents) to exert their maximum effort for the highest joint returns for themselves and their shareholders (principals). This happens because once the project is financed, the entrepreneur knows that the net return will have to be shared with the financier (the principal) and, therefore, may not have a strong motivation to work as hard as when the return is not shared. On the other hand, there are also agency and informational problems in interest rate-based debt financing. Stiglitz (1989) points out that there is an inherent agency conflict in debt financing in that the entrepreneur (the agent) is interested in the high end of the risk-return distribution. The lender (the principal) on the other hand, being interested in safety, focuses on the low end of the risk-return distribution, and therefore discourages risk taking. This, Stiglitz asserts, has "deleterious consequences for the economy." He further suggests that "from a social point of view equity has a distinct advantage: because risks are shared between the entrepreneur and the capital provider, the firm will not cut back production as much as it would with debt financing if there is downturn in the economy" (Stiglitz, 1989, p. 57).

The agency problem has been generalized to bank lending. Banks, being highly leveraged institutions that borrow short (deposits) and lend long, are exposed to an asset-liability mismatch that creates the potential for liquidity shocks and instability. Stiglitz (1989) suggests that to protect their financial resources, banks generally discourage risk taking. Additionally, their behavior toward risk often creates informational problems that lead to phenomena that can be classified as market failure, such as credit rationing. In contrast to Stiglitz's position, Hellwig (1998, p. 335) argues that there is an oft-neglected informational problem in the lending behavior of banks, which he refers to as "negative incentive effects on the choice of risk inherent in the moral hazard of riskiness of the lending strategy of banks." This risk dramatically materialized in the period of the run up to the recent financial crisis (see Askari, Iqbal, Krichene, and Mirakhor, 2010b; Sheng, 2009).

Based on the above background, the question is whether Islamic contracting (with risk sharing) is better suited to solving this contractual dilemma through its reliance on risk-reward sharing under conditions where interest-based debt financing is prohibited. In the presence of informational problems such as asymmetric information (where only one side of the contract, usually the agent, has information not available to the other parties) there is a transaction cost as well as cost of monitoring of the agent's activities and the project(s). It could be plausibly argued that in Islamic contracts, asymmetric information issues would be minimized. This assertion is supported by the strict rules governing contracts, exchange, and trade enunciated in the Qur'an and in the Tradition of the Prophet. These include the need for written contracts that fully and transparently stipulate terms and conditions, the direct and unequivocal admonition that commitments to the terms and conditions of contracts must be faithfully carried out, and strong emphasis on trust, cooperation, and consultation. Rules governing market behavior also create incentives—both positive and negative—to enforce honest, transparent, and compliant behavior on the part of participants. Hence, risk-sharing contracts designed under Islamic rules would mitigate informational problems (Khan and Mirakhor, 1987; Presley and Session, 1994) and could be better structured than interest-based debt contracts with incentives to maximize both parties' expected joint rewards.

In comparing risk-sharing financing and debt financing, Pressley and Session (1994) and Haque and Mirakhor (1987) propose to consider

> a single project undertaken by a single manager, the outcome of which is determined by the level of capital investment, the level of managerial effort, and the state of nature, which we envisage in terms of some random shock to demand or technology. We examine the situations where

> capital is financed through riba [debt] and mudarabah [profit-loss] based contracts respectively . . . The manager is assumed to have superior information to investors in two respects: First, having signed a contract with investors the manager is able to-observe the demand or productivity conditions affecting the project before committing to production decisions; and second, he alone observes his personal level of effort. Such an asymmetry is not unusual and, indeed, rationalizes the manager's involvement in the project. But whilst the manager's relative informational expertise suggests that he should be delegated some authority over production decisions, the exploitation of this expertise is problematic. Since effort is private information, the manager cannot be compensated directly for its provision. A revelation problem therefore arises with the manager's preferences over productive inputs only coinciding with those of investors if he personally bears the entire risk of adverse shocks.

In this situation, Pressley and Session show that a profit-loss (mudarabah) contract between the agent and a group of investors may result in a more efficient revelation of any informational advantage possessed by the agent over the principals.

In addition, the conventional banking system is a fractional reserve banking system that is predominantly based on debt financing and, by its structure, creates money and encourages leveraging. The embedded risk of such a system is that is money and debt creation and leveraging could be excessive. Safeguards, such as deposit guarantee schemes, as FDIC in the United States, and the classification of some banks as "too big to fail," are the implicit government subsidies that reduce funding cost and create moral hazard, encouraging mispricing and excessive assumption of risk by financial institutions. The mispricing of loans and assumption of excessive risk, in turn, threaten the liquidity and solvency of financial institutions. Systemic risks that are inherent in the system, such as the linkages and the interdependencies of institutions as well as the prominence of too large to fail institutions, create financial instability, and threaten the financial and real economy. To enhance financial stability, regulators would have to adopt policies and practices that eliminate moral hazard, excessive debt creation, and leveraging.

One way to ensure the stability of the financial system is to *eliminate* the type of asset-liability risk that threatens the solvency of all financial institutions, including commercial banks. This would require commercial banks to restrict their activities to two things: (i) cash safekeeping, and (ii) investing client money, as in a mutual fund. Banks would accept deposits for safekeeping only (as for example in a system with 100% reserve requirement)

and charge a fee for providing this service and check writing privileges. In their intermediation capacity, banks would identify and analyze investment opportunities and would offer them to clients; the bank would charge a fee for this service, much like a traditional investment bank. The bank would not be assuming any asset-liability risk on its balance sheet; instead, gains or losses would accrue directly to client investors. In other words, there would be very little debt financing by banks, only equity financing; and no risk shifting, only risk sharing. Banks would not create money as under a fractional reserve system. Financial institutions would be serving their traditional role of intermediation between savers and investors, but with no debt on their balance sheets, no leveraging, and no predetermined interest rate payments as an obligation.

While in our opinion, Islamic finance would be inherently stable because it is structured on a foundation of equity financing and risk sharing, conventional finance, a debt-and-interest-based system, has proven to be unstable. Minsky has dubbed the instability of conventional finance as endogenous instability because conventional finance experiences a three-phased cycle: relative calm, speculation and fictitious expansion, and then crisis and bankruptcy. Bankruptcy in conventional finance is not limited to the private sector, as governments can also face bankruptcy. Again, recent historical analysis has demonstrated that all financial, banking, and currency crises are, at their core, a crisis arising from debt (Reinhart, C. and K. Rogoff [2009], *This Time Is Different: Eight Centuries of Financial Folly*, Princeton University Press). In the recent past, the widespread bankruptcies of many developing countries have entailed debt cancellation or forgiveness. This is often because governments that borrowed at what were considered reasonable debt levels (normally as measured by debt/GDP) later found themselves in an unsustainable debt spiral as a result of increased debt service obligations. Some countries even found themselves with debt levels many times larger than the original amount of borrowed principal. A growing body of literature and proposed reforms have argued that the stability of a financial system can only be assured by limiting credit expansion and leveraging; this in turn requires the elimination of subsidies that fuel moral hazard, such as subsidized deposit insurance schemes and guarantees that support too large to fail institutions, and restrictions to limit the creation of money through the fractional reserve conventional banking system. Islamic finance, based on risk sharing and prohibiting fractional reserve banking, has been shown to be inherently stable and socially more equitable. In such a system, there is a one-to-one mapping between the growth of financial and real sector activities, meaning that credit cannot expand or contract independently of the real sector, as in the conventional system. In other words, the real and

the financial sectors are closely connected and cannot be decoupled as in conventional finance.

The stability conditions have been further elaborated upon in another model of an Islamic economy (Askari, Iqbal, Krichene, and Mirakhor, 2010), with two markets: a market for assets that include equity (common stocks) and financial assets (money and foreign *sukuk*), and a market for commodities.[5] The labor force is assumed to be constant and the labor market clears at full-employment. As in general equilibrium analysis, the forces of demand and supply apply freely to clear markets. Equilibrium in the asset market is studied by examining the portfolio balance conditions. More precisely, the stock of physical capital, or equivalently, the number of equity shares as well as the amount of nominal money, are fixed at a given point in time. Although individual wealth holders are able to change the composition of their portfolios, the community as a whole holds the existing stocks of assets. Hence, the rate of return on equity has to adjust until the desired portfolio composition is equal to the actual composition of assets in the economy. The condition of equilibrium in commodity markets is similar to that in the asset market. Aggregate demand for commodities has to be equal to a fixed real output. More precisely, the rate of return of capital and the price level have both to adjust in order to clear the commodity markets. The Islamic economic model establishes short-run equilibrium prices that clear all markets, where prices are an endogenous rate of return on equity and endogenous commodity prices. The model describes the dynamics of the economy and its ability to converge to a steady state where all prices and quantities are at long-run equilibrium.

The Islamic macro-economic wealth model is formalized along the lines of the models in Metzler (1951), Frenkel and Rodriguez (1975), Dornbusch (1975), Dornbusch and Fischer (1980), and Mirakhor (1993). In addition to money as a form of wealth, these models imbed the securities market, mainly common stocks, and directly relate the rate of return on equity shares to the production sector and to the marginal product of capital.[6] Hence, the rate of return is no longer an interest rate on bonds, but a rate of return from common shares that depends on productivity and thrift (savings) in the economy, as well as by portfolio balance conditions. The market price of shares enters directly into the wealth equation; it values the capital stock not at its historical cost, but at its market value, and thus allows for capital gains and losses. Wealth models stress the interaction of flow and stock variables and study both short-run and long-term (steady state) equilibrium. Short-run equilibrium determines flow variables for given stocks of wealth variables. The equilibrium flow variables such as savings, investment, and balance of payments feed into the stock of wealth variables such as real capital stock and

money, and move the economy to a new short-run equilibrium. Eventually, the economy reaches a stationary state where flow variables reach values that no longer affect stock variables. The Islamic financial system can be shown to move to equilibrium and has strong stability features. The economy is stable and resilient to shocks (Askari et al., 2010).

Ethical Governance

While the issues relating to failure of risk management and deficiencies in effective regulations that govern financial intermediation and its links to the finance crises have been the focus of a global policy and academic debate, little has been done to address the actual moral and ethical failures or to really examine how Islamic economic and financial principles provide a relevant framework to deal with challenges of unethical and irresponsible financial behavior. Islam's emphasis on ethical behavior, responsibility, and accountability defines a sound framework of governance with the highest standards. Islam demands strong commitment to preserving property rights, preserving the sanctity of contracts, and trustworthiness from those who are given a leadership or managerial responsibility.

Iqbal and Mirakhor (2004) present a stakeholders-based model of governance suggested by Islam, which advocates protecting the rights and interests of all stakeholders rather than being an owner-centric governance structure. Such framework demands that the mindset and training of the leaders and managers is driven by expected ethical behavior, accountability, and responsibility.

Although not an ideal system, one can draw a lesson from current practices of Islamic financial institutions that maintain a *Shariah* advisor or Board, and all the products and activities of the financial institutions are subject to approval by such advisor or Board. Typical *Shariah* advisory function not only ensures that the transaction complies with financial principles of Islam, that is, risk-sharing, but also ensures that the transaction does not engage or encourage an activity or behavior prohibited by Islamic principles. This advisory function performs an indirect filter on the activities of the financial institutions and safeguards the stakeholders (depositors, customers, borrowers) against unethical practices. This was one of the reasons for Islamic financial institutions not to engage in toxic assets, which led to the demise of many conventional financial institutions. As a result, Islamic financial institutions were not exposed to the first wave of financial crisis.

CHAPTER 6

Financial and Capital Market Policies*

Introduction

Capital markets in conventional finance can be broadly divided into three categories; (i) debt markets, (ii) equities or stock markets; and (iii) market for structured securities that are hybrids of either equity or debt securities. Debt markets dominate the conventional capital markets and debt is considered a major source of external funding for the corporate and public sectors. As a result of financial innovations and the application of financial engineering, large numbers of financial products have been developed for resource mobilization. Most of these innovations are variations of plain-vanilla debt or equity security with added optionality or customization. In comparison, Islamic capital markets would come under two major categories: (i) stock markets; and (ii) securitized "asset-linked" securities markets. Due to the prohibition on interest bearing debt financing and mandated risk sharing, stock markets become central to an Islamic economic system.

Core Features of Islamic Capital Markets

What would an Islamic capital market look like? Of course, it would comply with the core principles of Islamic economics. What truly separates an Islamic capital market from others would be the dominance of risk-sharing securities. As is evident from the description of requirements for an Islamic capital market that follows, many capital markets—excluding debt-based ones—and especially those of developed countries, would come close to fulfilling most of the requirements. However, risk sharing is such a

differentiating feature that a true Islamic capital market will have features vastly different from that of conventional capital markets.

Key requisites for an Islamic capital market are as following:

Risk Sharing

Prohibition of interest is substituted by the principle of risk sharing in Islamic capital markets. Risk management is arguably at the core of both conventional and Islamic finance, but in the latter case, this is done with risk sharing as the organizing principle. Islamic capital markets promote risk sharing among investors; securities are contingent claims whose payoff depends on the state of the world.

Asset-Based

Whereas equity markets will be one major source of external funding, capital markets would also have a large segment of securities which are asset-based. One of the key features of Islamic economics is to link the financing closely with the real asset being financed, which opens the door to securitization and the development of asset-based financing, where investors will be exposed to the risk and return of underlying assets.

Balance and Equity (Fairness)

Rules governing conduct and operations of financial and capital markets in Islam are the same as those of the goods market, and are intended to remove all factors inimical to justice in exchange for—and to yield—prices that are considered fair and just. Prices are just or equitable not on any independent criterion of justice, but because they are the result of bargaining between equal, informed, free, and responsible economic agents in accordance with the prescribed rules of behavior. Interest-based transactions (*Riba*) violate the requirements of balance and fairness in transactions. In interest-based debt financing where the lender has claims on both the underlying asset of the transaction (collateral) and on his or her money, as well as on the debtor for an amount equal to the interest payment, there is neither balance nor equity.

Markets and Market Prices

As a merchant and businessman, the Prophet (saw), in several sayings (*hadiths*) emphasizes the need for price determination through market

trading. As part of the all-important rule of encouraging compliance with prescribed rules and the discouragement of their violation (*amri bi al-ma'ruf wa nahi 'anil munkar*), the Prophet (saw) required that prices be determined by competition among market participants and that their practices be subject to oversight by market regulator/supervisor (*muhtasibs*), to ensure their accountability. This arrangement entails a clear placement of faith in the functioning of the markets, but with the appropriate regulatory/supervisory oversight.

Contracts and Trust

Trust is the very essence of Islam. The faithful, in submitting to the will of Allah, place all trust in the Creator. Contracts "enforce" trust, and Islam forcefully places all social-political and economic relations on the firm footing of *contractus*. Markets cannot function well unless one is free to contract and can enforce the trust inherent in exchange. Trust, rule-compliance, and contracts go together. The end result of these requirements would be the lowering of transaction costs, potential for widespread participation, and the smooth functioning of markets.

No Fixity of Returns

Emanating from the requirements to have exchange based on risk sharing and market-traded price discovery, and the prohibition of interest, the implication is that Shari-áh-compliant transactions should have no *ex-ante* fixity in the final returns.

The Equities Market

Equities are essentially risk-sharing instruments. As such, their use and propagation would move closer to risk-sharing finance, the essence of Islamic capital markets.

The reason stock markets are such effective tools for risk sharing is because each share represents a contingent residual equity claim. Particularly in case of open corporations, their common stocks are "proportionate claims on the pay offs of all future states" (Fama and Jensen, 1983). These returns are contingent on future outcomes. Stock markets that are well organized, regulated, and supervised are efficient from an economic point of view because they allocate risks according to the risk-bearing ability of the participants. The Arrow-Debreu model of competitive equilibrium provides a solution to the problem of how best the risks of an economy

can be allocated. According to this model, efficient risk sharing requires that economic risks be allocated among participants in accordance with their "respective degree of risk tolerance" (see Hellwig, 1998). Governments could also access stock markets as a vehicle for equity-based financing of their investment projects.

Considerable theoretical and empirical studies over recent decades have focused on the investment-employment-growth benefits of stock markets (see the reference list in Askari, Iqbal, Krichene, and Mirakhor 2010). When risk is spread among a large number of participants through an efficient stock market, closer coordination between the financial and real sector is promoted as well as better sharing of the benefits of economic growth and financial system stability. Risk transfer through debt instruments, in contrast, along with high leverage, weakens the link between the financial and real sectors, thus posing a threat to financial sector stability. Especially as the growth of pure financial instruments—that is, those with little connection to real assets—outstrips the real sector, a phenomenon called decoupling emerges (Menkoff and Tolkorof, 2001), otherwise known as financialization (Epstein, 2006; Palley, 2007), whereby finance no longer is anchored in the real sector. As we have stated earlier, the result is financial instability leading to frequent bouts of crises. Reinhart and Rogoff (2009) have demonstrated the high frequency of crises in the history of the conventional system invariably connected to debt financing. All too often, financial crises have required large government interventions and massive bailouts. Thus, while private financiers enjoy the gains of robust pure financial innovations, which ultimately lead to decoupling of the financial system from the real sector, the society at large suffers the pain of saving the real sector from the vagaries of financial sector crises. This is what Sheng (2009) has aptly called "privatizing the gain, socializing the pain."

The Implication for Cost of Capital

The cost of capital for a firm is typically the weighted average of the component sources of capital within its capital structure. The two most common sources of capital are equity and debt. From the company's viewpoint, debt is initially cheaper than equity. Debt becomes even cheaper when the tax shelter on interest expense is taken into account. However, debt, though cheaper, has a number of problems. First, the use of debt (leveraging) makes the firm riskier. Leverage increases the volatility of profit and cash flows. Thus, a leveraged firm is riskier than an unleveraged one, all other things being equal. Second, the use of debt, given the fixed nature of its claim, increases the probability of financial distress. Third, the use of debt reduces

a firm's financial flexibility. Finally, again due to its fixed nature, the use of debt raises the firm's breakeven point, as the fixed charges arising from debt add to the firm's total fixed cost. In view of these disadvantages, one would have to ask whether cheaper really is better.

In a risk-sharing framework without debt, a firm's cost of capital will converge to its cost of equity, which in turn will be reflective purely of its business risk. This brings about a number of benefits:

- stock and equity values will be priced based on their business risk, uncluttered by compensation needed for the higher risk due to leverage
- the incentive for companies and shareholders to leverage in order to increase expected earnings/returns will be eliminated
- tax arbitrage, which increases government revenue without necessarily causing a reduction in growth, will be eliminated
- corporate earnings and stock returns should become less volatile
- on a macrolevel, the absence of debt reduces economic vulnerability and the potential for sudden stops in capital flows

Would a company's cost of capital be cheaper in a risk-sharing framework? Yes, in some cases, but not necessarily in most cases. This has to do with the fact that there would be countervailing forces at work. To take the easy case first, companies with capital structures near their optimal level would likely experience a marginal increase in their cost of capital. The replacement of equity with debt causes this. In the case of companies with excessive leverage, with debt levels beyond optimal, the logic of Modigliani and Miller would imply that the cost of capital would be lower.

The countervailing forces affecting the cost of capital are as follows. A moderately leveraged firm could have a lower overall cost of capital, even though its cost of equity would be higher than a similar firm that is completely unleveraged. The higher cost of equity reflects the firm's higher risk due to leverage; however, the lower cost of debt reduces its overall weighted average of cost of capital. It is easy to see what the likely impact on the firms' overall cost of capital would be if the economy moved to a pure risk-sharing arrangement. Two things would happen simultaneously: as debt is replaced with equity-like, risk-sharing finance, the weighted average cost of capital (WACC) would creep up. However, the cost of equity, which was high due to leverage, would begin to fall. The final weighted average cost of capital would converge to the unleveraged cost of equity, which would be a pure reflection of the underlying business or asset risk. In such a situation, equity stock values would reflect the underlying asset/business risk.

The Equities Market and Its Impact on the Overall Economy

Mirakhor (2010) has argued that an important element for promoting risk sharing is a vibrant capital market (see also Sheng and Singh, 2013) and that Islamic finance would more readily achieve its envisioned objectives by utilizing such markets.

Since Islamic finance is all about risk sharing, then an efficient and vibrant stock market would allow the risk diversification necessary for management of aggregate and idiosyncratic risks. Such an active market would obviate the need for debt financing where risks become concentrated and lead to system fragility (Sheng, 2009). A stock market operating in accordance with Islamic rules would be expected to allocate investible funds strictly in accordance with expected investment returns. Stock markets would also be capable of improving allocation of savings by accumulating and disseminating vital information in order to facilitate comparisons between all available opportunities, reflecting the general efficiency in resource allocation expected from a system that operates primarily on the basis of investment productivity.

Not only can individuals and firms benefit from the existence of a vibrant and robust stock market that provides risk-sharing opportunities, countries can also benefit from risk sharing with one another. A large body of empirical research in recent years, in the area of international risk sharing, has demonstrated that there are gains to be made by countries when they trade in each other's securities. For example, Kim et al. (2005) looked at the potential welfare gains of ten East Asian countries through sharing risk among themselves and separately with the OECD. Indonesia and Malaysia had the lowest level of risk sharing and, therefore, the largest potential for welfare gains from improving the sharing of risk between themselves and other East Asian countries. The magnitude of gains was even higher through increased risk sharing with the OECD. These results would in all likelihood be replicated in other areas and regions. One major reason for the failure of empirical studies to find stronger international risk sharing may well be that these studies do not focus on the method of financing international transactions, which rely, to a great extent, on debt financing, that is, risk transfer and not risk sharing finance.

The creation of a deeper and wider equities market would have several positive effects on the overall economy.

Better Resource Allocation

With asset (stock) values reflective of their actual business risk, resource allocation ought to be better. Sectors that have relatively higher risk but

lower returns would be avoided; thus resources would flow into assets/ sectors that provide the best risk-return trade-offs. This is unlike conventional debt financing, where a high risk, low-return activity can be made profitable purely by adding several layers of leverage. Equity holders can earn a decent return from such an investment, mainly because the extensive use of debt makes the venture profitable. Absent the debt, the venture would be unprofitable. Much of hedge fund activity that seeks to "arbitrage" very minute mispricing would fall in this category. It is precisely the extensive use of leverage that makes their effort worthwhile. In a world with limited resources, there is a social cost to such diversion of resources. Resources that could have been gainfully employed to build real assets are diverted into speculative activity that provides gains to a very small group.

Reduced Vulnerability

Flowing from the above, another advantage of risk-sharing finance would follow: the advantage of avoiding the provision of one-way options for speculative play, or in the words of Paul Krugman (1998), avoiding the creation of "Pangloss value." When the ability to leverage multiple times goes hand in hand with implicit or explicit guarantees, speculative play becomes not only highly profitable, but presents minimal downside risk—thus, the one-way option. When financial institutions that had literally speculated have to be bailed out with public funds, society loses not only the bailout money but also the loss arising from the diversion of funds away from real productive uses. Pangloss value can also result from capital budgeting in which discount factors that are lower than they should be are used. One common situation would be one in which the cost of capital used is lower than it should be because of a heavy reliance on debt in capital structure. As noted, the use of debt can reduce overall cost of capital. As a result, projects that are marginal and which, in normal circumstances, would be rejected are accepted, leading to what Krugman calls "overinvestment." In industries where market share can be acquired only through new investment, the use of leverage to make marginal investment profitable is often justified in the name of competitive advantage. While there indeed may be a temporary improvement in competitiveness, over the long term, the company and industry become vulnerable because they are being set up for a fall. With risk-based financing, such losses are minimized, largely because the incentive is being tempered. Without being able to leverage, most speculative plays become unattractive. Thus, risk sharing reduces the moral hazard that leads to destructive risk-taking behavior.

Avoidance of Financialization

The next key advantage of risk-sharing finance to the overall economy is the avoidance of "financialization",[1] and, by extension, the creation of asset bubbles. Financialization refers to the growth of pure financial instruments, completely detached from the real sector and having a life of their own. Other than the private gains of the few who design and trade in these instruments, society benefits little, if at all. Worse, such instruments typically divert funds into sectors of the economy that are most malleable to speculative play: usually commodities, real estate, stock, and the like. The result is the creation of asset bubbles, leading to overall economic vulnerability. The fact that, in many developing countries, asset bubbles can coexist with productive sectors that are starved for funds is the irony of financialization.

In a risk-sharing economy with little or no debt, the banking sector would have to readjust. Much of its key roles, such as intermediation, facilitating the remittance and payments systems, and even making intertemporal transfers, would remain the same. The kind of products and services they offer, however, would differ. In fact, their expertise in areas such as business evaluation and project assessment would become even more valuable in a risk-sharing framework. By offering more equity-like products on the deposit (liability) side, and participating in the risk of the assets they finance, banks would have to be much more vigilant in their evaluation of customer financing. This has the added advantage of automatically reducing the moral hazard arising from the implicit guarantee of banking deposits. In a risk-sharing framework, risks are not transferred to the banks, but like equity mutual funds, banks share the risk with their depositors. Moreover, like equity mutual funds, banks would be evaluated for their performance in a risk-return framework. In such a world, banks' lending at Pangloss values would be a thing of the past.

Impact on Portfolios and Diversification

One of the key functions of capital markets is value preservation through risk management. Aside from the use of derivative instruments for risk management, diversification is one of the most basic means of risk management. An Islamic capital market based on risk-sharing finance should enable the same level of diversification as a conventional capital market. Since diversification is dependent on diversity and the correlation between stocks, there is no reason why portfolio diversification should be any less efficient in a risk-sharing system. As will be argued below, it is foreseeable that equity risks could be lower in risk-shared capital markets. In the case of diversification within a domestic market, it can be argued that the residual risk that

remains even with full diversification, also known as systematic risk, ought to be lower in a risk-sharing context. In today's equity markets, where debt is seen as an attractive financing choice by shareholders and where businesses see leveraging as a competitive edge, a domestic portfolio, even a fully diversified one, will have high betas.[2] Portfolio betas that are higher than they should be reflect the inherent leverage. Since interest rates are an economy-wide variable and therefore systematic, their risk is not diversified away like other idiosyncratic risks of a stock would, thus, the higher portfolio beta.

It is easy to see the beneficial impact of risk sharing on the residual risk of fully diversified asset portfolios. For the same portfolios, beta will be lower in the absence of leverage. Since riskiness is lower, risk premiums and therefore required returns for stocks would also be lower. The reduced riskiness of stocks should also make it better suited for the lower rungs of society to participate in equity markets. Currently, equity investment is unsuited to most ordinary folk, given the volatility of equity markets. Yet, to keep things in perspective, there is no reason why equity markets should be much more volatile than the underlying real sectors that they represent. If real sector returns are fairly stable, the volatility in stock returns is not attributable to changes in the real sector, but to external factors like leverage, investor psychology, herding, and the like. The need to understand and make sense of these externalities, has not only led to the spawning of an entire industry of equity analysts and investment advisors, but has further distanced ordinary folk from stocks. In many ways, this is sophistication that is not necessary.

In the absence of leveraging, including share margin financing and short sales, there is no a priori reason why an Islamic equities market should in any way be suboptimal. In the context of the Markowitz model[3] and modern portfolio theory (MPT), a short sale has no role in the formulation of an optimal portfolio. Share margin financing, on the other hand, like all leverage, increases returns but also risk. In fact, the capital market line[4] has no difference in slope, even if the cost of leveraging is the risk-free rate, implying that there is no net benefit to leveraging in a risk-return context.

The absence of short sale and margin financing could dampen liquidity at times, but once again, there is no reason why there should be a systematic reduction in liquidity over time. The potentially negative impact of reduced liquidity must, however, be balanced against the positive benefits of reduced volatility and "forced" overshooting of markets and asset prices. In the absence of such overshooting, price discovery should be more attuned to changes in the real sector, and therefore more reflective of real values—not artificially induced changes to value.

Seen from the viewpoint of international portfolio diversification, a risk-sharing economy ought to be an attractive market for international investors.

For a country to be attractive for diversification purposes, its equity market should have low correlation with the rest of the world, especially with the developed markets. A debt-based open economy would, by definition, have equity and financial markets closely linked with developed markets. The movement of "hot money" and speculative capital across borders to arbitrage interest differentials would ensure the close correlation. Even emerging equity markets are pulled into the orbit of developed equity markets by way of speculative capital that seeks to arbitrage individual country differences in interest rates. In this regard, a policy of moving away from a debt-based to a risk-sharing framework has two benefits. First, it reduces the economy's susceptibility to speculative flows, thereby improving overall stability. Second, with equity, asset returns anchored to the real sector returns, the correlation in returns is reduced, thereby making the domestic economy attractive to foreign equity capital in search of diversification.

Keep in mind that even in a risk-sharing framework, attracting foreign equity capital is positive since the cost of capital can be lowered. Since such capital is also based on risk sharing, it does not increase risk the way that inflows of debt-based speculative capital would.

Asset-Based Securities

As Islamic finance advocates the financing of real economic activities and the close linking of financing with the financed asset, debt securities in the financial system are expected to be substituted by truly asset-based securities. Such an asset-based approach will promote similar features mentioned above under the equities markets, that is, risk-sharing, asset-based, less financialization, etc. In search of developing alternative to debt securities, Islamic financial markets have innovated Islamic bond securities known as *Sukuk*. This market is in its infancy, and is still far from the ideal; but it is a step in the right direction.

Sukuk, which is plural for *sakk*, refers to an investment certificate. It could also mean a trustee certificate. *Sukuk* was used extensively by Muslim merchants in the Middle Ages as paper denoting financial obligations arising from commercial activities. Some have argued that the contemporary term "check" has its origins in the word *sakk*. Today, *sukuk* are used as instruments for raising external financing. Being a fundraising product, *sukuk* have often been referred to as "Islamic bonds" and subjected to comparison with conventional bonds. While *sukuk* are intended to raise external financing just like bonds, their operational, legal, and regulatory frameworks are vastly different. Seen in the light of conventional debt and equity, a *sukuk* would costitute a hybrid instrument. That is, it has a

definite maturity and is therefore terminal, as is debt. However, the returns to *sukuk* holders are not fixed and predetermined, but are typically dependent on the profits/cash flow generated by the asset or investment financed using *sukuk* proceeds. In this sense, *sukuk* is very much like equity, in that returns come from profits, and the magnitude of return is dependent on the size of profits.

As a risk-sharing instrument, the *sukuk* should provide returns based on profits/losses. The fact that there is no fixed additional claim on the company's cash flow—as would be created by the fixed interest on debt—implies that there will be no increase in the firm's breakeven point, nor will there be an increase in the firm's financial leverage. Since *sukuk* holders' returns are tied to company earnings, the implication is that financing by way of such a *sukuk* acts as a built-in stabilizer. The firm is a more stable entity after the *sukuk* have been issued. Of course, shareholders could have reached this same result by issuing new shares (equity) by way of a rights issue, instead of *sukuk*; however, there is a huge difference. By issuing new equity, they would have diluted their ownership of all assets of the firm, including existing (old) assets. This would be the case because new shares are on equal footing with existing shares in all cases. Additionally, as Hellman, Murdock, and Stiglitz (2000) have pointed out, there is adverse signalling effect when a firm issues additional equity (Mirakhor, 2010). In the case of *sukuk* issuance, however, there is a major if subtle difference. Since *sukuk* are issued to finance the aquisition of new asset(s), *sukuk* holders have a right of claim on only the profits generated by the new asset(s). This is unlike new shareholders, who will have a claim on *all* of the firms' assets, including assets that existed before they were shareholders.

Since the risk/profit sharing feature of *sukuk* resembles equity financing, financing with *sukuk* does not reduce the firm's financial flexibility, as debt would. Further, the fact that there are no fixed claims on the firm resulting from the issuance of *sukuk* implies reduced volatility of cash flow and reduced risk premiums for both the currently outstanding stocks as well as bonds of the firm. All else being equal, for the firm with a mixture of both equity and debt in its capital structure, funding new requirements with *sukuk* should reduce risk, and thus the required returns of both its current equity and bondholders. Existing equity holders (shareholders) and bond holders of the firm should see the market values of the instruments increase in value, given the reduced required returns. This happens because of the equity-like features within the *sukuk*. The company's equity holders and debt holders experience a gain in wealth simply because the new *sukuk* holders come in to share the risk of the new asset being acquired by the firm. Unlike the use of debt, which gives a firm's shareholders advantages that come at the expense

of the rest of society (as described earlier), the gains experienced here are real and do not come at the expense of others. Thus, society is simply better off with the use of risk sharing.

Recently, there have been proposals to have *sukuk* that are based not on the performance of a single underlying asset, but on such things as GDP growth, a price index of a nation's export comodities, and the like. Linking *sukuk* returns to GDP performance is not unlike the Shiller proposal for *"Trills"* that have been made in the conventional space (Shiller, 2012).[5] Though most *sukuk* issuance has been sovereign issues by governments, none have used these novel concepts. Yet it is easy to see how governments of low-income and less developed countries can use *sukuk* to raise development financing. For example, a less developed country with limited resources could use *sukuk* to finance needed development expenditure such as roads, railways, ports, and other infrastructure within a Build-Operate-Transfer (BOT) framework. A needed highway project could be undertaken by issuing *sukuk,* whose returns during the period of construction would be a percentage tied to export earnings of the country, and on completion would yield returns that are a percentage of the tolls collected over, for instance, the subsequent 20 years. If the period of construction is 5 years, then the overall maturity of the *sukuk* would be 25 years. Such a risk-sharing instrument, aside from avoiding any economic vulnerability to the issuer, would have the added advantage of removing the bottleneck of limited funds. Furthermore, the government would suffer no loss of ownership of the asset financed. Currency risk could also be shared by denominating returns in the main currency of the issuing country's export earnings. After the construction period, the return could be in the home currency of the issuer. It is obvious that the percentage of profit due to the *sukuk* holders should depend on the stability of the home currency and other risks related to the *sukuk*. In other words, the percentage of profit attributable to *sukuk* holders should also reflect country risk premiums. Islam requires fairness in transactions, and unless the returns expected are justified when weighed against the risk, there may be insufficient uptake of the *sukuk*. That returns be comensurate to risks is a requirement for all financial instruments and is not unique to *sukuk*.

Several other variants of the *sukuk* structure above are also possible. For example, the financing of projects that are highly capital-intensive and require extensive upfront investments, like power generation plants, intra-city mass rapid transit systems and the like, have always been problematic for developing countries. Given infantile and shallow domestic equity markets, such projects have typically been financed largely with debt, which usually is foreign sourced. Such borrowing has two inherent problems. First, the borrowing entity commits Eichengreen's "Original Sin."[6] Second, as a result of the long

gestation period for these projects and the compounding nature of debt, the projects come on stream carrying a masive debt overload. Without government subsidises, the cost to consumers would be prohibitive. The usual result in such cases has been either perpetual subsidization from the government or nationalization, which then shifts the debt burden to the government. It is precisely projects of this nature that would be well suited for *sukuk*-based financing. For example, a mass rapid transit system that typically requires several years of construction but would provide stable cash flow for a long period subsequently could be financed with *sukuk* that pays nothing in the initial years, but converts into profit-sharing instruments, for, as an example, the next 30 years; this could be a very attractive investment. The advantage is that such financing would place no strain on government budgets but would get development going. At the end of the 30 years, the government would own a very lucrative asset that it never paid for but only facilitated.

Policy Implications

Developing Risk-Sharing Instruments

The risk-sharing framework obviously has much promise, especially for the development financing of lower-income/less developed countries. What is needed is often a change in mindsets and an ability to resist the temptation for familiarity.

A key advantage of the risk-sharing framework is that it works through and within market forces and not against them. Strengthening the rule of law, minimizing corruption, enhancing property rights, and the like, would improve existing markets while also enabling increased risk sharing. The easiest and least resistant means to increasing risk sharing within an economy would be by expanding equity markets by deliberately reducing the reliance on debt markets. Creating a level playing field for debt and equity by eliminating the tax shelter on interest rates would be a good beginning. Educating the public on the need to share rather than transfer risks would be necessary. Pointing out that relying on real rates would be both more stable and lucrative compared to debt-based time deposits would also be necessary. Removing the blanket deposit insurance currently being offered to all deposits should be considered.

Banking, and bank themselves would have to change. Banks would have to be more like mutual funds or funds of funds. Assets and liabilities are inherently mismatched in many ways in conventional banking, and a mismatch in risk has been a key contributor to banking crises. The funding a bank provides (its asset side) is uncertain, but the deposits (liability side) with which it funds these loans are required to be guaranteed. In a risk-sharing

context, depositors would have to share in the risk. Their returns would be linked directly to net returns from the asset side, in the manner of mutual funds. In effect, matching savers with borrowers is true intermediation. Depositors with no appetite for risk—the proverbial widows and orphans—would have to be provided safe (*wadi`ah*) deposit accounts that provide safekeeping and the conveniences of banking, but provide no returns. Like Kotlikoff's (2010) limited purpose banks, banks in a risk-sharing ICM would be limited to intermediation.

Building a trusting society would perhaps be the most challenging and time-consuming task. Yet headway could be made with rule of law, strict enforcement, policy consistency with well-announced policies, and a willingness to stay the course without falling for political expediency. For risk-sharing systems to work, it is critical that investors be made to bear only the risks of the underlying asset/business. They should not also bear other risks, like political and regulatory risks. A failure to keep such risks in check would lead to an inevitable relapse to debt-based financing. One could make the case that fixed rate debt financing is popular not because investors want to avoid business risk, but because of all the nonbusiness risks that come attached. Most if not all Islamic states are notorious for their ambiguities. Once again, rule of law and sanctity of property rights and contracts, as well as their enforcement, would have to be paramount for a risk-sharing system to work.

Risk sharing does have its downside. Being equity based, the agency problems of equity could be prevalent. Thus, the controls used by equity holders, especially venture capitalists, to manage these issues would have to be considered. In this regard, some of the Shari-áh-based contracts at the heart of risk sharing—contracts like *mudarabah* and *musharakah*—may have to be modified to be applicable to contemporary settings. As some scholars have pointed out, there is nothing sacrosanct about these contracts that they cannot be modified. The kind of modifications needed for these contracts are of a control nature to check for moral hazards and agency-related problems. Controls are needed at least until a time when trust makes these controls redundant.

A number of countries, most notably Malaysia and Bahrain, have attempted to build Islamic capital markets. Malaysia has a functioning ICM with all the components of a capital market operating in a Shari-áh-compliant way. Thus, there is an Islamic Interbank Money Market for Islamic Banks and other institutions to manage their liquidity. There is an Islamic equities market with Shari-áh-screened stocks, a thriving mutual fund industry, and listed real estate investment trusts (REITS) and exchange-traded funds (ETFs). There is also the very active market in *sukuk*. While providing for the Muslim populace with Shari-áh-compliant alternatives and despite impressive growth

rates, the overall emphasis appears to be on short-term, low-risk, and highly liquid instruments. The longer tenured *sukuk* are highly illiquid, with nearly absent secondary markets. The *sukuk* also are not all necessarily risk sharing, but mostly mimic conventional bonds. Unless there is a deliberate attempt to change this, path dependency would mean more of the same. A large part of this may have to do with the fact that although governments, such as those of Malaysia, are determined to develop their Islamic capital market, policy making at the macroeconomic level remains conventional—especially monetary policy. Thus, interest rate targeting and the use of debt-based instruments to execute monetary policy continue. For a nation aspiring to a full-blown Islamic capital market, this is a paradox that needs to be looked into. One cannot continue with a monetary policy that is designed for a debt-based system to nurture a risk-sharing Islamic capital market.

Traditional debt-based financing has proven repeatedly to be unstable. Regulation, no matter how fine-tuned, will be meaningless because debt is inherently destabilizing. One cannot expect different results from continued use of debt. Risk-sharing financing, which is the basis of Islamic capital markets, promises inherent stability. Since risk is being shared and spread, the logic of this stability is clear. What needs to be done is to give risk sharing a chance. Now may be a good time to begin.

Development of Stock Markets

While most studies have examined the role of formal institutions such as governance and rule of law in the banking sector development and growth nexus, there is a relatively smaller body of literature that examines the interlinkages between informal aspects of institutions, stock market development, and total factor productivity (TFP). Informal institutions are equally important, as institutions do not develop in a vacuum (Dasgupta, 2011) and their functioning depends on "a prior sense of moral community, that is, an unwritten set of ethical rules or norms that serve as the basis of social trust" (Fukuyama, 1995, p. 90). As part of institutions, ethical rules, shared norms, and social trust are important dimensions of social capital and are an ever-ready social lubricant that permits voluntary participation in production and exchange (Arrow, 1974).

In the case of the stock market, only investors with high enough trust will invest in stocks. Less trusting investors are less likely to purchase stock, and even if they participate in the stock market, they will purchase fewer stocks (Guiso, Sapienza, and Zingales, 2008). Trust is associated with stock market development and appears to be a key complement to formal institutions when a society has little regard for the latter, or vice versa (Calderón,

Chong, and Galindo, 2001). However, Law and Ibrahim (2013) found that the role of social capital is more prevalent in the banking sector development when institutional quality is low, but there is no significant relationship between social capital and stock market development.

Empirical studies show that trust has significant impacts on aggregate economic activity, and can promote savings and foreign direct investment (Guiso, Sapienza, and Zingales, 2009; Knack and Keefer, 1997; Zak and Knack, 2001). However, the relationship between social capital and TFP is mixed. While Dettori, Marrocu, and Paci (2012) showed that a large part of TFP differences is elucidated by disparities in the endowments of intangible assets, to wit, human capital, social capital (cohesion and trust), and technology, Knack and Keefer (1997) found that the effect of trust on TFP is insignificantly positive.

Using data from 73 jurisdictions covering the period from 2009 through 2011, Ng, Ibrahim, Mirakhor (2014a) examine the existence of social capital thresholds in the stock market development and macroeconomic performance nexus. They adopt the threshold regression model proposed by Hansen (2000) to encapsulate the rich dynamics in stock market development and macroeconomic performance. The empirical results demonstrate that stock market liquidity is significant and positive in influencing GDP and TFP growth respectively only after the attainment of a certain threshold level of firms' ethical behavior. Until then, the effects of the stock market on both GDP growth and TFP growth are found to be negligible. Market liquidity is also significant and positive in promoting GDP and TFP growth in cases of high trustworthiness and confidence. The evidence is supportive of productivity growth as an important channel where stock market development promotes economic growth.

The following explains the reasons for this phenomenon. First, high level of ethical behavior in interactions with public officials, politicians and other enterprises falls within the wider ambit of positive social norms that act as constraints on narrow self-interest and opportunism. Corporate behavior is conditioned by ethical incentives that align interests of stakeholders. Further, the ethical relationships can be leveraged for a productive purpose that generates social capital. A corporation underpinned by ethical behavior, therefore, has the effect of raising the payoffs to investment and other financial activities, and preventing capital divergence to unproductive or unethical investments. This can contribute positively to market efficiency and macroeconomic performance.

Second, well-developed stock markets may strengthen corporate control by reducing the principal-agent problem through selection of sound firms and alignment of the interests of shareholders and management towards

maximizing firm value and promoting growth (Arestis et al., 2001). A high-trust society also complements the mitigation of the principal-agent problem and contributes to firms' efficiency (Chami and Fullenkamp, 2002). Economic activities that require the reliance on the future actions of others can be conducted at a lower cost in a high-trust environment. Where trust exists in the market, financiers and investors can channel funds via the stock market to viable projects and trustworthy entrepreneurs in a manner that is more cost and time-efficient. Investors can also adopt more appropriate investment horizons to benefit production technologies, which are optimal in the long run. Entrepreneurs can devote more resources to innovation in new products and investment, rather than monitoring or protecting themselves from potential malfeasance by partners, employees, and other stakeholders (Knack and Keefer, 1997; Roth, 2009).

Third, in countries where social capital is low, the government is usually called upon to create rules and regulations to avert rent-seeking behavior. Ineffective and excessive regulations may result in unnecessary hurdles that impede entrepreneurial activity, innovation, and competition which, in turn, can inhibit investment and thwart growth. Although high-income nations typically have less, but more effective, regulations due to their higher social capital (Legatum Institute, 2012), that does not necessarily imply that effective regulation alone can influence market liquidity to enhance macroeconomic performance. Ideally, the role of regulation and supervision would be better accomplished when complemented and combined with ethical behavior and other factors that contribute to trust and confidence.[7]

Fourth, higher trust often results in greater confidence. The incentive effects of greater confidence may encourage people to invest in ambiguous and riskier areas with high-return prospects, which can result in higher stock return and equity premium. There is also source dependency where trustworthy sources may stimulate such investment. According to Erbaş and Mirakhor (2007, p. 17; 2010, p. 54), "investor trust in the actions of more knowledgeable decision makers (corporate insiders and rating agencies), and their trust in the institutional checks and balances (government insiders) on such actions can play an important role in the determination of the extent of stock market participation and equity premium." To the extent that trust has a positive and large influence on stock market participation and on the proportion of portfolio invested in stocks (Guiso, Sapienza, and Zingales, 2008), the results of our study show that this influence can be further translated into positive impact on macroeconomic performance where there is high trust and confidence.

The study by Ng, Ibrahim, and Mirakhor (2014a) supports the notion of "better finance, more growth" and provides empirical evidence that serves

as a basis for policy makers to formulate initiatives to enhance social capital in cases where low levels of social capital impede the role of stock market development in enhancing macroeconomic performance. Initiatives such as "credible sources of information, fair forms of contract, and disinterested forms of regulation" can create reliable conditions for economic behavior (Tonkiss, 2009, p. 202).

To sum it all up, the search for alternatives to more regulation that fosters trust and ethics in institutions and between members of communities is a step in the right direction that may eventually restore public confidence and further promote economic efficiency and social welfare. It is appealing to postulate that moral or ethical creditworthiness must be injected into the lifeblood of finance and corporation since "the competitive advantage of nations depend on the moral fiber of its corporations" (Mayer, 2013, p. 11). Even though ethics and trust are as old as mankind, we are only at the starting point in the journey to better understand the role of ethics and trust, or in a broader sense, social capital in financial markets.

Government's Role in Promoting Risk-Sharing Securities

Governments could become active in markets for risk sharing. Governments do, generally, share risks with their citizens. They share risks with individuals, firms, and corporations through their taxation and expenditure policies. They also share the risk of livelihood of their poor and disadvantaged citizens through social expenditures; they provide natural disaster relief; and they share in financial system risk through monetary policies and deposit guarantees. They could thus choose to finance part of their budget, at least development spending, through risk sharing and direct ownership of development projects with their citizens. In this way, they would also reduce their budgetary debt burden; the attendant reduction in government borrowing would in turn reduce the burden on monetary policy. Governments undertake public goods projects because the characteristics of these goods—especially the characteristics of indivisibility and non-exclusivity—prohibit their production by the private sector. However, the social rate of return of public goods is substantial and is likely to be much higher than private rates of return. Some have made suggestions that these projects should be undertaken jointly with the private sector, hence the Public Private Partnership (PPP) label. The proposal has a number of problems—market distortion, informational and governance problems being just three.

The design of risk-sharing instruments to be issued by governments is not difficult. It could start by equity financing of the development budgets, usually 20–40 percent of the total budget. These instruments can be

traded in the secondary market if the shareholders experience liquidity or idiosyncratic shocks. Their rate of return can be structured as an index of return tied to the rate of return of the stock market. If the domestic stock market is not deep, then an index of regional and/or international stock market returns can be developed. The argument is that, since the social rate of return to public goods is much higher than to privately produced goods and services, the investment in public goods should have a rate of return at least as high as the return to the stock market, in order to promote efficient resource allocation. Since governments are usually less risky than their corporate counterparts are, the rate of return to government-issued shares has to be adjusted downward to take account of governments' risk premium. Depending on the country and the interest rate its government pays on debt, it is unlikely that the rate of return the government would pay to holders of equity shares it issues—adjusted for the credit rating of the government reflected in a lower risk premium—would be any higher than the interest rate on its debt. Even in the unlikely event that the rate is a few basis points higher than on its debt, the tradeoff is worthwhile, considering the positive contributions that equity financing would make to society and to the economy in general.

Financing a portion of governments' budget through the stock market, instead of resorting to debt financing, presents a number of advantages. First, it can energize a stock market—provided that all preconditions, in terms of human capital, legal, administrative and regulatory framework are met—and it can also help to strengthen market credibility. Second, it deepens and broadens the stock market. Third, it demonstrates that stock markets can be used as a tool of risk and financial management. Fourth, it reduces the reliance of government budget on borrowing, thus imparting greater stability to the budget and mitigating the risk of "sudden stops." Fifth, it has positive distributional effect in that the financial resources that would normally go to service public debt can now be spread wider among the people as returns on the shares of government projects. Sixth, it enhances the potential for financing of a larger portfolio of public goods projects without the fear of creating an undue burden on the budget. Seventh, it makes the task of monetary management simpler by limiting the amount of new money creation. Eighth, it promotes ownership of public goods by citizens, which should have a salutary effect on the maintenance of public goods as it creates an ownership concern among the people and, to some extent, mitigates "the tragedy of commons." Ninth, it has the potential of strengthening social solidarity. Tenth, it also has the potential to promote better governance by involving citizens as share-holder-owners of public projects. Eleventh, it provides an excellent risk-sharing instrument for financing of long-term private

sector investment. Twelfth, it is also an effective instrument for firms and individuals to use to mitigate liquidity and productivity risks. Thirteenth, by providing greater depth and breadth to the market and minimizing the cost of market participation, governments convert the stock market into an instrument of international risk sharing as other countries and their people can invest in the stock market. Finally, it will help demystify Islamic finance and will create an environment of cooperation and coordination within international finance.

Stock markets may be characterized by the low participation of investors due to low trust level and, a related factor, the cost of entering the market. Empirical evidence (Guiso et al., 2005; Erba and Mirakhor, 2007) suggests that people generally do not trust stock markets. The low level of trust, in turn, is explained by institutional factors and education. Moreover, high transaction costs—especially information and search costs as well as the high cost of contract enforcement—are crucial factors inhibiting stock market participation. These factors also stem from the institutional (rules of behavior) framework in the economy.

Stiglitz (1989) suggests that the disadvantages of equity finance stem from two informational problems: (i) adverse signaling effect, which leads good companies not to issue as much equity shares for fear that it may signal poor quality, and (ii) an adverse incentive effect problem, which suggests that equity finance weakens the incentive for entrepreneurs to exert their maximum effort for highest possible joint return. This happens because, once the project is financed, the entrepreneur knows that net returns have to be shared with the financier and may, therefore, not be motivated to work as hard as when the returns would not be shared. While the idea has intuitive appeal, empirical evidence does not support it. Conditions for a vibrant, robust stock market have been analyzed in literature. Allen and Gale (2007) suggest that a successful, deep, and active stock market requires that information, enforcement, and governance cost be eliminated, or at least minimized. Once this happens, the cost of entry into the equity market becomes low and "there is full participation in the market. All investors enter the market, the average amount of liquidity in the market is high, and asset prices are not excessively high" (p. 115). Lucas (1990) has proposed the abolition of capital tax gains as a way to promote investment through stock markets. "I now believe that neither capital gains nor any of the income from capital should be taxed at all." If the Islamic rules of market behavior—such as faithfulness to the terms and conditions of contracts, trust, and trustworthiness—are in place in a society, the informational problems, transaction costs, and governance and enforcement issues would either not exist, or would be at low levels such as not to create a deterrence to stock market entry.

There is, however, a paradigm gap between what Islam teaches and actual market behavior. For this reason, government actions (and the institutions they create) to remedy the deficit in informational, enforcement, and governance behavior to reduce the cost of participation in stock markets have to be stronger and more comprehensive than exists today. These policies, actions, and institutions should have the competence, efficiency, and enforcement capabilities such that they can elicit the kind of behavior that replicates, or closely approximates, what is expected if market participants behaved in compliance with Islamic rules. Such actions, policies and institutions would include, inter alia; (i) developing a level playing field for equities to compete fairly with debt-based instruments; this means removing all legal, administrative, economic, financial, and regulatory biases that favor debt and place equity holdings at a disadvantage; (ii) creating positive incentives for risk sharing through the stock market; (iii) investing in massive public education campaign to familiarize the population with the benefits of stock market participation; the kind of campaign that Prime Minister Thatcher's Government ran in the UK, increasing stock market participation substantially in a short span of time; (iv) investing in human capital to produce competent, well-educated and trained reputational intermediaries—lawyers, accountants, financial journalists, and *Shari'ah* scholars—which means investing in the creation of world class economics departments, business schools, and law schools; (v) limiting leverage (including margin operations) of non-bank financial institutions and the credit creation ability of banks through prudential rules that effectively cap the total credit that the banking system can create; (vi) instituting thoughtful securities laws and regulations; (vii) developing strong and dynamic regulatory and supervisory systems for stock exchanges that, not only continuously monitor the behavior of markets and participants, but stay a few steps ahead of those with a penchant and motivation to use regulatory arbitrage to get around rules and regulations; (viii) finding ways and means of regulating and supervising reputational intermediaries or, at least, mandating that they become self-regulating, in order to ensure minimization of false reporting or misreporting under threat of liability to market participants; (ix) ensuring completely transparent and accurate reporting of the day's trade by all exchanges; and (x) instituting legal requirements for the protection of the rights of minority shareholders. While the above policies and institutions are crucial in reducing the cost of participation in stock markets and thus promoting widespread risk sharing, governments need to do more; they must lead by example. Thus, it goes without saying that a strong financial sector goes hand-in-hand with a strong real economy, which is in turn largely dependent on good institutions, including the rule of law. A regulatory framework

is, therefore, indicated with the aim of organizing the stock market on an Islamic basis that controls speculation and information asymmetry.

Ever since Keynes (1936) dubbed stock markets as casinos, a major concern with conventional stock markets has been the predominance of speculative and liquidity considerations and the limited emphasis on their role in allocating resources towards productive long-term investments (see Bogle, 2012). Most long-term investments are assumed to have been financed through retained earnings or debt. The volume of new issues destined for long-term investment has been low. An Islamic stock market has to avoid the main shortcomings of conventional stock markets and insure financing of long-term investment while preventing speculation. Its regulatory framework must be designed to prevent the excesses of conventional stock markets. An efficient Islamic market would enable mobilization of savings, promote risk sharing, and generate returns closely tied to those of the real sector, provided that the required institutional scaffolding prescribed by Islam is in place. An Islamic stock market would be inherently stable and would likely not suffer from the systemic risks that have periodically undermined the stability of conventional stock markets and their associated economies. This stability derives from the institutional structure prescribed by Islam that includes the prohibition on interest and speculation. The latter two factors have been sources of instability in conventional financial markets. Stability would be essential for enhancing participation in stock markets and risk sharing. Along the same lines, Maurice Allais (1989) called for radical reforms of conventional stock markets. He noted that stock markets were true casinos where big poker games were being played. The wide gyrations in stock prices were transmitted to real economy, leading to economic crises. According to Allais, the present stock market is fundamentally non-economic, inefficient, and unfavorable to the smooth functioning of economies. It can be advantageous only to a small minority of speculators. Allais called for the elimination of hedge funds and institutional intermediaries, other than brokers whose activity would only be trading in shares. He proposed the elimination of all financing of stock market operations through credit and the adoption of high margin requirement for forward operations to be paid in cash and not through loans. The continuous quotation of stocks would be dismantled and replaced by one daily quotation; the automatic trading programs for sales and purchases would also be eliminated. In the same manner, speculation on indices and derivatives would be eliminated.

Monetary policy has a direct bearing on the stability of stock markets. Central banks have often fuelled stock market bubbles by creating excessive liquidity. When stock prices become over-inflated in relation to fundamentals, the market eventually crashes. Central banks at times try to re-inflate

the bubble. Some governments have seen stock market bubbles as a sign of buoyant economy and opposed attempts at corrective action. A regulatory framework for stock markets cannot be conceived independently of monetary policy. Criteria have to be developed for measuring and preventing bubbles and determining how far stock prices have departed from their fundamentals. Triggers have to be put in place to arrest euphoria and speculation and prevent ruinous crashes.

Summary

Current Islamic finance has, mostly, relied on short-term liquid assets and neglect long-term investment instruments that are more supportive of economic growth. To develop long-term investment and venture capital financing, a vibrant capital market is necessary. Developing financial markets require resources for its operation and for its regulation, monitoring, and supervision. In order to develop an Islamic stock market, the active role of government in building the institutional and regulatory framework for capital markets to flourish cannot be underestimated. In such a market, governments could finance part of their budget through risk sharing and direct ownership of development projects with their citizens. In this way, they would reduce their budgetary debt burden and enhance governance.

Developing an active and efficient stock market can promote international as well as domestic risk sharing which render the economy and its financial system resilient to shocks. In a sense, lack of significant presence of risk-sharing instruments within the menu of Islamic finance instruments is akin to a market failure; a strong ground for government intervention. The introduction of Islamic finance at the global level could present a remedy for the failure of globalization to instill strong risk-sharing culture in international transactions. Governments can develop a stock market with characteristic of low entry cost, transparency, good governance, trust, and full investor protection to ensure the widest possible participation of investors. In this market, there would have to be limitations on short selling and leverage operations through market-based regulatory measures. Islamic finance has, so far, developed instruments to serve the low end of the time-risk-return profile of its transactions menu. Such a stock market will serve the high end. The intermediate space of the menu can then be left for the private sector to complete.

CHAPTER 7

Fiscal and Monetary Policy in Islam

Introduction

The role of the state in an Islamic economy is to ensure that everyone has equal access to resources and means of livelihood, that there are rewarding employment opportunities for all those who can work, that market rules, regulations, and supervision minimize business uncertainties so that justice is attained and transfers takes place from the more able to the less able, and that distributive justice is ensured for the next generation. As Islam is a rule-based system, the state regulates, supervises, and provides an incentive structure for rule compliance, all within the framework of the rules prescribed by the *Qur'an* and *Sunnah*. The role of the government is broadly divided into two functions: first, a policy function that ensures that private interest does not diverge too far from public interest; and second, to design and implement an incentive structure to encourage rule-compliance, coordination, and cooperation.

In market economies when the markets fail to clear, it is said that there is a market failure. The presence of market failures can impair the efficiency of economic relations and transactions. In such situations, government intervenes to protect the public interest. As society's risk manager, government is to reduce uncertainty for members of society. The prescribed rules specify what kind of conduct is most appropriate in achieving just results when individuals face alternative choices. The degree of effectiveness of rule enforcement is determined by the degree to which the members of the society have understood and internalize the rules.

Policies are decisions of the government to undertake actions directed toward achieving certain objectives consistent with those of the society. At a macro level, generally, policies have been designed to achieve the objectives of

economic stability, full employment, growth, and development. To achieve these objectives, two main policy tools are utilized: a monetary policy to induce adjustments in the portfolio of the private sector (producers and consumers) to fine-tune aggregate demand, which uses the instrument of the interest rate to increase or reduce the level of supply of money (largely through the banking system in conventional economics), and thus spending and production in the economy. The other policy tool, fiscal policy, uses the power of the government to tax and spend as means of influencing aggregate demand and the level of economic activity. Whenever there is a shock to the economy, these tools are used, independently or in combination, to stabilize the economy and nudge it toward a state of full employment and price stability.

In most situations, when government spending has increased and revenues have not increased commensurately, governments have financed the resulting shortfalls (budget deficits) by increasing borrowing, raising taxes, or both (see chapter 7), or just printing money. In theory, financial stimulus to economic activity is expected to increase future growth that, in turn, is expected to provide additional revenue to the government to service the debt incurred. More often than not, the current and prospective rates of growth of the economy are lower than the interest rate on the growing debt. Growth may not be large or fast enough to validate debt levels that may exceed 100 percent of the GDP, as is the case today in many advanced countries. The solution of austerity, higher taxes, and lower spending as suggested by the dominant policy regime requires a strong political consensus. Increased borrowing by issuing bonds or long-term government borrowing increases vulnerability to shocks, such as a sudden stop, creates a burden on future generation of taxpayers and has an adverse distributional implication.

The current public sector borrowing policy in a conventional economy that is interest rate based is putting countries in a highly leveraged position. As national debt increases beyond a threshold level, say 100 percent, the country runs the risk any additional growth will only service the interest on debt. The problem of debt repayment must be passed on to the public, as tax revenue must increase in order to pay for the debt. Thus, the risk of mismanaging the economy is shifted to the present and future generations. In addition, to the extent that the government borrows from the rich and taxes mostly the middle and lower income groups, income and wealth distribution skew in favor of the wealthier segment of the population. When government borrowings are funded externally, the problem is exacerbated by the outflow of resources on debt servicing, which adds pressure to the balance of payments. As was experienced by the emerging markets in Asia and Latin America in the late 1990s, external borrowing exposes economies to “sudden stop” shocks.

Fiscal Policy

In all market-based economies, national income (output) is determined by the interaction of savings and investment. Importantly, there is no guarantee that the conventional economy would always operate at full employment and with stable prices. In fact, it is highly unlikely that the economy would operate at full employment with stable prices at all times.

Prior to the Great Depression of the 1930s, economists believed that the appropriate fiscal policy for the government was to maintain a balanced budget. However, the Great Depression changed this widely held view. John Maynard Keynes put forward the idea that fiscal policy should be used in a counter-cyclical manner so that the government moderates the expansion and contraction phase of the business cycle that is a process of "leaning against the wind." Thus, the government budget should be in deficit when the economy was contracting and in surplus when it was booming with no excess capacity and with inflation; but fiscal policy has not been an effective tool to smooth these cyclical movements because of political constraints and also because the economy has what are called "built in stabilizers," such as a progressive tax system and unemployment insurance. Politicians resist raising taxes when the economy is booming as this is not a popular policy with the electorate; and automatic stabilizers cushion the impact of a boom and bust, reducing the incentive for discretionary policies (during a recession, incomes will be shrinking, but because of progressive taxation, the loss of income or purchasing power is cushioned and it will lead to a decline in government tax revenues, and, so long as the government does not reduce expenditures, the end result will be moderation in the decline of the level of economic activity).

The effectiveness of discretionary fiscal policy has been questioned on other grounds as well, primarily, the policy's "inside lag" and its long run impact on economic output. The inside lag is the time when the need for fiscal policy arises and when the policy makers actually implement it. In practice, the art of economic forecasting is such that forecasts are uncertain and policy makers realize the need for policy months after the need should have been recognized; and it takes policy makers (parliaments and parties) much time to reach a political compromise and take remedial action. In part because of these limitations, some economists argue that discretionary fiscal policy to counteract business cycle fluctuations may do more harm than good. Others prefer monetary policy and see little need for fiscal policy. Some argue that the longer-run impact of fiscal policy may be seriously limited because the higher aggregate demand resulting from a fiscal stimulus translates into higher prices and not into a permanently higher output,

as sustainable economic output is determined by the supply of factors of production (capital, labor, and technology).

The supply of the factors of production determines a "natural rate" of output around which business cycles and macroeconomic policies can cause only temporary fluctuations. The fact that output returns to its natural rate in the long run is not the end of the story, however. In addition to moving output in the short run, expansionary fiscal policy can change the natural rate, and the long-run effects tend to be the opposite of the short-run effects. The basis of this argument is as follows. A short-term expansionary fiscal policy affects longer-run output because of its impact on the savings rate. Savings is made up of a private and a public component. A fiscal expansion results in government dissaving; with lower aggregate savings, either investment in plant and equipment will decline or external borrowing (for investment) would have to increase; the former would directly lead to lower investment and the former could be sustained only if the return on investment is higher than the cost of foreign debt. In short, the argument is that expansionary fiscal policy will lead to higher output today, but will lower the natural rate of output below what it would have been in the future. It should be noted that fiscal policy also affects the relative burden of future taxes. An expansionary fiscal policy adds to the stock of debt. However, because of the government's obligation to pay interest on this debt or pay back debt in the future, expansionary fiscal policy imposes an additional burden on future generations.

The following discussion reviews the standard income determination-equilibrium diagram in figure 7.1. As can be seen, government expenditures (G) can be directly added to the other two components of demand: consumption (C) and investment (I); G adds onto aggregate demand just like investment and an additional unit of G, like an additional unit of I, increases income by more than the increase in G (the multiplier) because one person's expenditure becomes somebody else's income and that person spends a part of that increase in income and saves the rest and so on down the line with each additional expenditure less than the previous recipient of extra income. The equilibrium point E is stable in the sense that at any other point in the figure, the desired investment of business does not equal the desired savings of families, and as a result, if the economy is not at E it will tend to move or gravitate toward it. Moreover, if F is the full employment level of GNP, then at point E there is significant unemployment of labor (and other resources). Increasing G could nudge the economy toward F directly or by adopting tax policies that increase *C* (see figure 7.2) and/ or I. Alternatively, if there is unwanted inflation—an indication that the economy is operating too close to its capacity and excessive demand is pressuring price and wage increases to clear markets—then the government

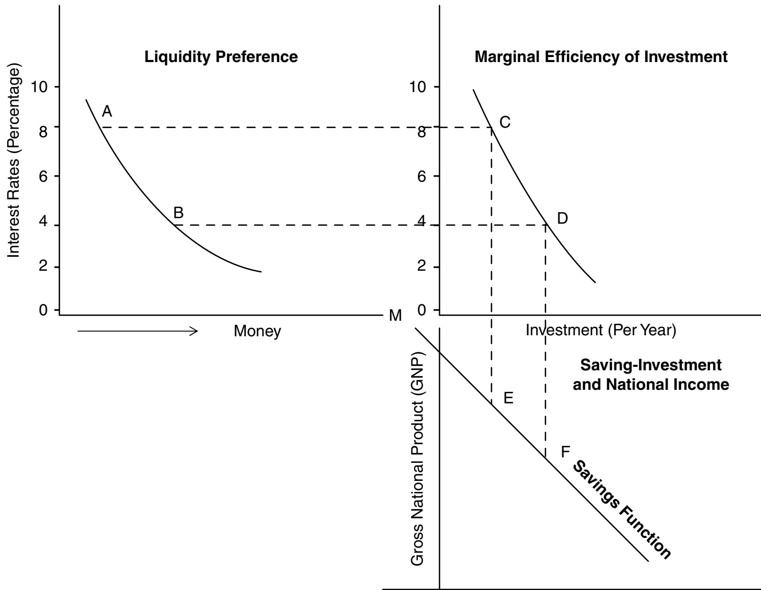


Figure 7.1 Monetary Policy and National Income Determination.

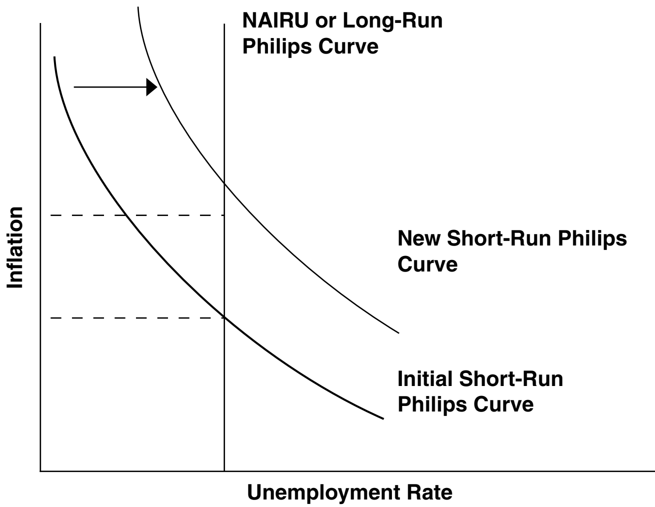


Figure 7.2 Philips Curve.

could reduce G or adopt tax policies that reduce C and /or I. It should be noted, however, that to offset a $200 billion upward shift in *G*, tax collection must increase by more than $200 billion. A marginal propensity to consume of 2/3, for example, requires that if *C* were to be lowered by $200 billion, taxes would have to be $300 billion to balance the government budget and avoid an inflationary gap. Moreover, a $1 decrease in taxes has less of an impact on income than a $1 increase in government expenditures, and would lead to a larger budget deficit; and in the former case, the private sector expands, as opposed to the public in the latter.

Fiscal Policy in an Islamic Economy

The goals of fiscal policy in the Islamic economic system include establishing incentive structures for rule compliance, poverty alleviation, provision of an adequate safety net, and protection of the environment. The degree of reliance on taxation and/or public finance will depend on the degree of compliance of the members of the society with the mandated redistributive rules, which supplements social welfare programs through Islam's re-distributive instruments and the state of development of the economy.

Financing Government Expenditures

If public expenditures are financed by taxes, a number of issues and questions arise. At the outset, we must note that taxation, by reducing the income and wealth of the private sector, lowers economic activity through the multiplier (see chapter 8). In the extreme, if the government had 100 percent taxation, then the private sector would evaporate. Taxes essentially shift the available resources from private to public use.

Turning to the questions raised by taxation, the first question is the appropriate form of taxation—VAT, wealth, income, real estate, or special levies—to be used. Value added taxes (sales tax) encourage savings because they only tax consumption. Some advocate wealth taxes because they have a much larger base (than income), are targeted at an important source of income for many individuals and are applicable to a more permanent source of a person's wealth than income, which can fluctuate widely from year to year. As a matter of equity, some argue that taxes should be levied according to the ability to pay. The current focus on taxing income may impose undue burdens on income earners who need the income for their day-to-day living. Income alone may not be a sufficient measure of wellbeing or taxable capacity. Wealth adds to the capacity to pay tax over and above the income yielded by that wealth. Taxing wealth means making those who are financially

more able to contribute more in taxes. Wealth represents accumulated assets owned, and not just income earned. Therefore, in the interests of equity, it is justifiable to tax wealth in addition to income. Moreover, as wealth generally represents a much larger tax base than income, the rate of taxation can be kept low but still raise substantial tax revenues. In addition, advocates of a wealth tax argue that such a tax may encourage the better off to transfer their assets from less productive uses to more productive ones, and from idleness to income-producing ventures. Collecting tax revenue from that segment of the population with the most wealth could promote equity, as the wealth that is currently concentrated in the hands of a few would become revenue for the government to be used for social development. Moreover, as we shall see below, Islam does, in part, advocate a wealth tax, because it motivates the wealthy to employ their capital more productively.

If income (or wealth) taxes are to be used, a second question arises: should it be a progressive tax or a flat tax, subject to the exclusion of a minimum level of income from taxation and fiscal rebates? Those who favor a flat tax argue that it is simple, as there is only one tax rate applicable to all income and to all taxpayers. A simple tax system would naturally lead to efficient tax collection. Implementing a flat tax system would increase compliance by taxpayers and thereby increase tax revenue. A flat tax system, because it is a fairer tax system than a progressive tax system, could lead to less tax evasion. To address the issue of the tax burden of the low-income earners who currently may be paying a low tax rate, a minimum exemption level of income could be determined before taxes would be payable. As Islam places great deal of emphasis on human dignity, the amount determined for the minimum bracket is one that could enable a person to live in society with dignity. This usually translates into sufficient income to guarantee "basic needs." This minimum level is called the "*Nisab* limit." Two well-known proponents of the flat tax system, R. Hall and A. Rabushka (1995), have developed a flat tax system that taxes income and eliminates double taxation by excluding taxes on investment. It is advocated as a simple tax system that would generate greater tax compliance, as tax filing would become a less painful process. It would reduce tax evasion while raising high levels of revenue for the government. This is not a new tax system. A flat tax has been adopted in a number of countries.

Third, what level of taxation is reasonable? Most argue that taxes should be kept to a minimum and taxes should not destroy individual incentives and hard work. Fourth, is double taxation fair? In most countries, there are corporate taxes and in some countries, in turn, there are taxes on dividends. Some argue that this amounts to double taxation. Similarly, some argue that all forms of wealth and inheritance taxes amount to double taxation

in countries that already have an income tax system; if a person has already paid taxes on his or her income, then to tax wealth and inheritance amounts to double taxation. Some also advocate special levies to mitigate economic externalities—force polluters to pay the full price (that includes the cost of their pollution) of what they consume. Similarly, localities in most Western countries levy real estate taxes to finance local needs, while in the United States, this tax is used to finance education.

The issue of excessive income and wealth inequality is a question that all societies must face. For Westerners, it has become a personal belief and they register their preference at the ballot box. Some argue that such personal choices as to social importance of income and wealth inequalities should be left to individuals—to make or not to make payments to NGOs to address social concerns and direct transfer payments. The issue of income and wealth inequality, however, has become increasingly important at the global level since about 1975. Income inequality has increased in many countries. And the growing inequalities have come under special scrutiny in the case of the United States and in much of the developing and emerging market world. In the case of the United States, the growing financialization of the economy, tax laws, and globalization seem to receive most attention, while corruption and tax evasion is seen as the culprit in developing and emerging economies. Besides issues of justice and simple fairness, two other considerations have come to the fore. Concentration of wealth that is repeatedly passed on through inheritance affords excessive political power to an individual, a family, or a group that could undermine and corrupt the political process. It is just as important to note that the accumulation of wealth through natural resource depletion and environmental degradation robs future generations—individuals who have no vote or say on decisions of the day—of their birthright.

In addition to taxation, governments can resort to borrowing to finance their expenditures. Governments borrow by issuing interest-bearing debt, or government bonds. As governments run annual budget deficits and borrow, the national debt (the accumulation of annual deficits) increases. Growing national debt becomes problematic for a number of reasons. As debt grows, a nation becomes increasingly more likely to default and thus be subjected to credit downgrades and paying higher interest rate on its debt. Increasing government debt crowds out the private sector from its financing requirements and raises interest rates, or the cost of capital, for all borrowers. Moreover, the higher interest rate on government debt benefits the wealthy, as they are the population segment that is more likely to have the wealth to acquire government bonds, while the average taxpayer (and future generations) is burdened with the interest and principal payments on the debt. In most

situations, when government spending has increased and revenues have not increased commensurately, governments have financed the resulting shortfalls (budget deficits) by increasing borrowing, raising taxes, or both.

In theory, a stimulus (financed by debt) to spur economic activity during slow-downs is expected to be financed by subsequent growth. More often than not, the current and prospective rates of growth of the economy are lower than the interest rate on the growing debt. Growth may not be large or fast enough to validate debt levels that may exceed 100 percent of GDP, as is the case today in many advanced countries. The solution of austerity measures, higher taxes, and lower spending suggested by the dominant policy regime requires a strong political consensus. Increased borrowing by issuing bonds or long-term government borrowing also does not appear to be a desirable solution, as it increases vulnerability to shocks, creates a burden on future taxpayers, and has adverse distributional implication. Additionally, as discussed earlier in this book, as the ratio of government debt to GDP approaches the 90 percent mark, the likelihood of financial crises increase significantly. The current public sector borrowing policy in a conventional economy that is based on interest is putting countries in a highly leveraged and precarious position. As borrowing increases, the country runs the risk of producing income only to service the interest on debt. The problem of debt repayment must be passed on to the public, as tax revenue must increase in order to pay for the debt. As borrowing continues to fund increasing government spending, the problem will be passed on to future generations of taxpayers. When government borrowings are funded externally, the problem is exacerbated by the outflow of resources on debt servicing that will add pressure to the balance of payments. So far, the solution to the problem has come in the form of providing more loans to help countries out of their debt problem. A question that arises: is solving a debt crisis with more debt the right solution to the problem?

Besides taxation and borrowing (or debt financing), a government can resort to printing new money, an activity that is almost costless but leads to inflation. The printing of money affords the issuer seigniorage, the benefit received by the issuer of paper money, and is represented by the difference between the face value of the money and the printing cost. Thus, a government buys goods and services with the paper money that it prints, while others have to produce something to acquire the same money that costs the government almost nothing. The problem with financing an excessive amount of government expenditures with new money is that the government's actions lead to increase in wages and an increase in the price of goods and services. This effect, the government taking away resources away from the private sector and increased wages and prices, is much more pronounced

when the economy is near full employment. Moreover, we must emphasize that inflation is a hidden and stealthy tax, but it is a tax that tends to fall more on the poorer segment of societies, whose wages are more sticky. Inflation is, in the end, an inequitable and arbitrary tax.

Public Finance in Islam

There is evidence from the life of the Prophet (sawa) to underline the fact that he saw his primary duty, both as a temporal and spiritual authority, to be the promotion of justice in society by upholding the equality of everyone before the law. During his life in Medina, he ensured that the rights of every citizen, regardless of belief, were protected. He laid the foundation for a public treasury. He devised an efficient system not only for collecting levies the Qur'an had ordained as the rights of the less-able members of the society to each person's income and wealth (*khums* and *zakat*), but also for taxes and rents on public lands used by private producers (*kharaj*), and for the per capita dues paid by non-Muslims for benefits derived from public services (this was paid in lieu of dues paid by Muslims). He established a means of defense against external threats, an education system, and procedures for the adoption of new technologies and infrastructural investment.

As stated in earlier chapters the Creator has endowed individuals with unique and unequal abilities, and that some individuals have greater mental and/or physical capacities and are, therefore, capable of attaining rights to a larger share of property and assets. But, this only means that such individuals have greater responsibilities and obligations than others. The Qur'an states: *We have apportioned among them their livelihood in the life of the world, and raised some of them above others in rank that some of them may employ others; and the mercy of your Cherisher Lord is better than the wealth they accumulate* [32:43]. Believers who are more able, recognize the source of their wealth as the gifts of their Creator and as an occasion for the testing of their faith. They also know that others less able have rights to their wealth. This recognition is especially poignant on the part of those who are not only believers, but also consciously aware of the ever-presence of Allah and know that redeeming these rights is considered by their Lord to be a demonstration of their love for their Creator. The Qur'an says: *The needy and the destitute have rights in their wealth* [19:51]; and that these are the human beings who are in constant communion with their Lord: *And in whose wealth is a right acknowledged for the needy and the destitute* [24:70]; and that they are those who recognize that: *Righteousness is not that you turn your faces to the East and the West, but righteous is he who believes in Allah, the Last Day, the angels, the scriptures and the prophets, and gives his wealth for the love of Him*

to kinfolk, orphans, the destitute, the wayfarer, the needy, to set slaves free; and establishes prayers and pays dues (of others in his wealth to cleanse it); and: *Those who are faithful to their promises (contracts) when they commit themselves; and those who patiently persevere in tribulation and adversities. Those are the truthful and consciously aware (of Allah)* [177:2]. These human beings are fully cognizant that not cleansing their wealth from the rights due to the less able and the needy will reduce the blessings of their wealth; once the wealth is cleansed, the remainder is held inviolable. The Messenger (sawa) has said that the wealth of a Muslim is as sacred as his blood.

This is the function of post-market redistribution, which is governed by its own set of rules. There are levies such as *khums* (on income) and *zakat* (on wealth) that must be paid. However, redistribution does not end here. There is *infaq* (expenditures in the way of Allah), *qard-al- hassan* (beautiful loan), *sadaqat* (payments to redeem others' rights and to demonstrate the veracity of one's claim to Islamicity), and *waqf* (designated assets whose underlying income flows are used to support building and maintaining public infrastructure). Any remaining wealth that is accumulated is broken up at the end of the person's life and distributed among a large number of beneficiaries spanning at least four generations, according to rules specified in the Qur'an (that permit up to one-third of the inheritance to be assigned by the wealth owner in any way that he or she wishes). This is designed to avoid the concentration of income and wealth in the hands of a few.

As remarked earlier, Islam is a rule-based system. Ensuring rule compliance is, arguably, the most important role of the legitimate government. It has to establish the infrastructure of an incentive system that assures rule compliance. These include a high quality judiciary, a regulatory/supervisory framework, and enforcement mechanisms. Second, the state must ensure implementation of mandated social policies. The effective performance of this role obviates the need for intrusive government actions. Murat Çizakça has undertaken valuable research into Muslim economic history. In reference to fiscal responsibilities of government, he makes an important observation that Islamic institutions of redistribution provided critical social services to the private sector, which complemented fiscal responsibilities of the public sector by lessening its fiscal burden.[1]

The focus of taxation in an Islamic economy is on increasing government revenues to meet social needs. Major levies mentioned in the Qur'an (khums and zakat) and operationalized by the Messenger (sawa) are within the domain of private sector redistributive framework. When private efforts fall short of the needs of the society, such as existence of poverty or shortfalls in infrastructural needs, governments are empowered to tax. The structure of taxation in an Islamic economy would most likely be designed along the

lines of the structure of the mandated levies; one with a flat structure. The optimum flat tax rate may differ from country to country, depending upon economic circumstance. As a reference point, the tax structure could be composed of a 20 percent income tax and a 2.5 percent wealth tax (with an appropriate level of income and wealth exclusion to reflect the minimum necessities of life). The flat tax system of 20 percent on income may represent a reduction in the marginal tax rate from the tax rate prevailing in most countries. The reduction in marginal tax rate would incentivize people and firms to work and increase production. The reduction in tax rates also represents an increase in disposable income to individuals that would lead to increased consumption in the economy. With a simple tax system in force, tax administration would be much easier, and government resources could be released to attend to other matters more important and productive to the economy (see Othman and Mirakhor in Iqbal and Mirakhor, 2013).

Even with a simplified and perhaps more productive tax system, additional resources may be needed to finance governments' developmental expenditures. Capital markets play a critical role for both private and public sector financing. The first best instrument of risk sharing is a stock market "which is arguably the most sophisticated market-based risk-sharing mechanism" (Brav et al., 2002). It would provide the means for the business and public sector to raise long-term capital. Governments could raise financing for their development expenditure in stock markets through the sale to the public of equity shares that can also be traded in secondary markets. Since the rate of return to the financial sector in an Islamic economy is determined by the rate of return in the real sector, the latter can serves as a benchmark for investment decisions and could be approximated by calculating the cost of capital in the real sector (Mirakhor, 1993).

Since the expected earnings of shareholders are derived from the expected returns in the real sector of the economy, it can be argued that the discounted value of expected earnings at the prevailing rate of return is the market value of a security and the supply price of capital. In the case of government securities, this would constitute the demand side of the market for these instruments. Moreover, the face value of securities, the length of maturity, and the expected dividend constitute the supply side of the market for government securities. At equilibrium, the social rate of return is such that the marginal benefit from public investment projects is equal to the opportunity cost of the provision of marginal services from these projects. However, because of the public nature of these projects, the marginal benefits may not be truly measurable. It can be argued, however, that precisely because of this characteristic of infrastructural and development projects, their social rates of return must be greater than, or at least equal

to, the rate of return in the private sector; otherwise, there is no financial justification for undertaking the project (Choudhry and Mirakhor, 1997). As a result, the coupon on non-interest-based government securities can be issued and traded in equity markets that promise, upon maturity, to pay a rate of return represented by an average rate of return on the underlying assets that is equal to the rate of return in the private sector. In addition to financing new projects, this approach can be used to retire government debt to the central bank that has financed previous projects since this debt can be securitized, providing the basis for the floatation of what has been called "national participation papers" to be traded on the stock market (Choudhry and Mirakhor, 1997). These government securities are considered to be in consonance with Islamic Law.

Financing a portion of governments' budget through the stock market has advantages, some of which are summarized here. First, it can energize a stock market—provided that all preconditions, in terms of human capital, legal, administrative, and regulatory framework are met—and help strengthen the credibility of the market. Second, it deepens and broadens the stock market. Third, it demonstrates that stock markets can be used as a tool of risk and financial management. Fourth, it reduces reliance of budget on borrowing, thus imparting greater stability to the budget and mitigating the risk of "sudden stops." Fifth, it has positive distributional effect in that the financial resources that would normally go to service public debt can now be spread wider among the people as returns to the shares of government projects. Sixth, it enhances the potential for financing of a larger portfolio of public goods projects without the fear of creating an undue burden on the budget. Seventh, it makes the task of monetary management simpler by limiting the amount of new money creation. Eighth, it promotes ownership of public goods by citizens. This should have a salutary effect on maintenance of public goods, as it creates an ownership concern among the people and to some extent mitigates "the tragedy of commons." Ninth, it has the potential to strengthen social solidarity. Tenth, it also has the potential to promote better governance by involving citizens as share-holder-owners of public projects. Eleventh, it provides an excellent risk-sharing instrument for the financing of long-term private sector investment. Twelfth, it is also an effective instrument for firms and individuals to use to mitigate liquidity and productivity risks. Thirteenth, by providing greater depth and breadth to the market and minimizing the cost of market participation, governments convert the stock market into an instrument of international risk sharing, as other countries and their people can invest in the stock market. Finally, it will help demystify Islamic finance and will create an environment of cooperation and coordination with international finance.

The design of risk-sharing instruments to be issued by governments is not difficult. These instruments can be traded in the secondary market if the shareholders experience a liquidity shock. Their rate of return can be structured as an index of return tied to the rate of return to the stock market. If the domestic stock market is not deep, then an index of regional and/or international stock market returns can be included. The argument is that, since social rate of return to public goods are much higher than to privately produced goods and services; the investment in public goods should have a rate of return at least as high as the return to the stock market to promote efficient resource allocation. Of course, since governments are usually less risky, the rate of return on government-issued shares has to be adjusted downward to take account of governments' risk premium. Depending on the country and the interest rate its government pays on borrowed money, it is not likely that the rate of return it would pay to holders of equity shares it issues—adjusted for the credit rating of the government reflected in lower risk—would be any higher than the rate of interest. Haque and Mirakhor (1998) proposed an index based security called National Participation Paper (NPP), which can be used to issue government securities as well as instruments of monetary policy for public finance. The concept of NPP is based on the reasoning that such non-interest-based government securities can be issued and traded in equity markets that promise, upon maturity, to pay a rate of return approximated by an average rate of return on the underlying assets that is equal to the rate of return in the private sector, but adjusted for any reduction in risk due to the government's backing. In addition to financing new projects, this method can be used to retire government debt to the central bank that has financed previous projects since this debt can be securitized, providing the basis for floatation of a "national participation paper" (NPP) that is to be traded on the stock markets.

Monetary Policy

The most important objective of a monetary policy is to influence the portfolio decision of the private sector (consumers and producers). It manipulates the incentive structure of the private sector in terms of credit availability to induce portfolio adjustment in the demand for this sector. Monetary policy is normally implemented by a country's central bank. In recent years, in a large number of countries, the central bank has been granted independence in order to be relatively free of political pressures, so that it can focus on adopting policies that best serve the stability of the financial system and that of an economy. The monetary policy aims at controlling the quantity of money in circulation, affecting private sector demand, and promoting

economic prosperity with low inflation. The mandate of the monetary policy varies from country to country. In some countries, the mandate of the monetary authority is to simply adopt a target (normally a narrow range) rate of inflation and to conduct its monetary policy in order to achieve the target or targeted range of inflation. In other countries, the central bank's mandate is to strive for full employment with moderate inflation. Monetary policy is expansionary when the monetary authority increases the money supply while lowering interest rates and contractionary when it is does the opposite. More money in the economy and lower interest rates encourage individuals and businesses to borrow more to spend and invest. This adds to aggregate demand and nudges national output higher with a multiplier effect, as with expansionary fiscal policy.

In a conventional economic system, there are essentially three forms of money: coins, bills, and bank deposits. In such a system, the central bank can pump money (bills and coins) into the economy through banks; banks in turn can lend the money to investors (and consumers); and investment increases, thus lifting national output.

The central bank in the conventional system uses a number of tools to affect the money supply and interest rates. The primary instrument of a central bank's monetary policy is "open market operations," which is buying and selling mainly government treasury bills, also corporate bonds, other securities, and foreign currencies; secondary instruments are: lending through the discount window (lender of last resort), changing reserve requirement of banks, moral suasion and changing market expectations through press conferences and other such means. In undertaking an expansionary monetary policy, the central bank seeks to expand the monetary base—consisting of money in circulation, as well as the banking sector reserve with the central bank—by injecting liquidity in the economy. Through open market operations, the central bank changes the money supply (increasing the supply by buying securities for cash and decreasing it by selling securities on the open market) by selling and buying securities in the market in order to achieve a short-term interest rate target such as for the federal funds rate, the rate for overnight interbank lending. It should be noted that in the conventional financial system, monetary policy works through the banking sector; the central bank principally influences the balance sheet of banks, which in turn must change their lending decisions to affect a change in economic activity. Monetary policy in the conventional system is mostly *indirect*. The central bank, as a lender of last resort, affects bank lending and interest rates by changing its discount rate, the interest rate at which it lends to member banks when they are temporarily caught short of funds. Money supply can be increased or reduced by reducing or increasing the reserve requirement of

banks. Banks can be "persuaded" to act in ways that the central bank wants and money markets and expectations can be affected by targeted speeches and interviews. Central banks use announcements especially to affect expectations about inflation (and interest rates), as high inflationary expectations can become a self-fulfilling prophecy.

The upshot of monetary policy in the conventional system is summarized as follows. The central bank can raise the money supply, lowering interest rates; this increases investment from firms; and the higher level of investment (as in the case of fiscal effects in Figure 7.2) raises GDP. The impact of monetary expansion is also reflected in what is called the "Quantity Theory of Money":

$$MV = PQ$$

Where:

M = Money Supply
V = Velocity Circulation of Money or Income Velocity
P = Average Price Level
Q = Real GNP

V, the velocity of money or the velocity of circulation of money, is the rate at which the money stock is turning over per year to enable income transactions. In the simplest version of this theory, V is a constant so that a doubling of M leads to a doubling of P. However, in practice, V is not a constant. In a more sophisticated view of this relationship, an increase in M results in an increase in PQ, which is the dollar or money (nominal) GNP.

An important consideration in the implementation of both monetary and fiscal policy has been the trade-off between unemployment and inflation. In 1958, Phillips plotted historical data on wage inflation against unemployment and found what appeared to be a trade-off; namely if the central bank wants to attain full employment, it may have to put up with more inflation, indicating a trade-off between unemployment and inflation. This relationship came to be known as the Phillips Curve. Economists generally accepted the relationship until the 1970s, when the US experienced stagflation (unemployment coupled with high inflation at the same time) and Milton Friedman and others questioned the validity of the trade-off portrayed in the Phillips Curve. They argued that the Phillips Curve was only a short-run relationship; in time, inflation would be taken into account by labor, and labor contracts would incorporate anticipated inflation and thus, with monetary expansion, unemployment would go back to its original level but with higher inflation. The implication is that there are a series of short-run

Phillips Curve and in the long run, there is no trade-off between unemployment and inflation, or that the long-run, the Phillips Curve is vertical. Eventually, only a single rate of unemployment that is the natural rate of unemployment, which is consistent with a stable rate of inflation that can be attained; with unemployment rates below it, inflation accelerates and with unemployment above it, inflation decelerates, but with the unemployment rate equal to it, inflation is stable. In other words, monetary policy affects prices, but not real values like output and unemployment. The practical implication is that central banks should not try to reduce unemployment below its natural rate; if they do for any length of time, inflationary expectations will rise and will be incorporated into wage demands resulting in higher inflation.

Monetary policy must meet certain challenges: notably, relying on the banking system to respond appropriately to its policy signal and ensuring the timing and credibility of announcements to affect market expectations. The latter depends on the success of the previously implemented monetary policies, as reputation is an important element in the implementation of a successful monetary policy. The success of this policy also depends on the effectiveness of the transmission mechanism and the independence of the central bank from the rest of government. The objectives of the central bank as policy maker and those of the private banking sector may not converge. When the banking sector does not transmit the increased liquidity to the rest of the private sector and consumers, but instead uses the liquidity to enhance its own bottom line, then the transmission mechanism is impaired. Moreover, within the context of a fractional reserve, operations of the banking system, in the course of serving its objective of maximum earning, make the current conventional financial system unstable and vulnerable to turmoil through the expansion of credit out of "thin air," that in the end results in excessive leveraging and a debt crisis. Interest rates set by the central bank create a wedge between the money interest rate and the natural rate of interest. It allows money capital to multiply independently of real or physical output. Creation of credits not backed by real economy diverts real savings from productive activities to nonproductive activities, which in turn weaken the process of real wealth expansion.

Monetary Policy in an Islamic Economy

Monetary policy in an Islamic economy takes place within a framework in which the tools available in a conventional economy are at the disposal of monetary authorities, with the exception of the discount rate and other policy tools that involve an interest rate. In an Islamic economy, monetary

authorities are able to operate through a more direct channel in the Islamic financial system.

The challenge for monetary policy in this framework is to design instruments that satisfy the requirements of an effective monetary policy while meeting the rule of exchange-based transactions without resorting to the interest rate-based instruments of monetary policy. Where monetary policy in a conventional economy uses interest rate to indirectly regulate the money supply, in an Islamic economy, money supply is directly altered through asset market activities. The incentive structure intended by monetary authorities to induce portfolio adjustment may be distorted if signals are not transmitted to the private sector by the banking sector. For example, the excess reserves arising from a lowering of the reserve requirements may be used by the banking sector to buy government bonds instead of lending to the private sector to increase consumption and investment. As a result, the effect of the monetary policy may not be fully achieved. The use of the interest rate as a tool of monetary policy creates incentives for financial decoupling. Risk-sharing instruments can avoid this problem. Such instruments, issued by the government to finance its operations and used by the monetary authority to affect portfolio adjustment by the private sector, can achieve the objectives of monetary policy while promoting greater resilience of the economy to shocks.

The principal goal of a monetary policy is to ensure macroeconomic stability, characterized in the main by price-level stability and a position of viable balance of payments. The establishment of a stable macroeconomic environment is a prerequisite for increased savings, investment, and foreign capital inflows—all of which are central to the growth process. Basically, without macroeconomic stability, economic growth can falter and not be sustainable. Furthermore, without broad-based economic growth, the basic structural and social transformations that make up the process of development will not occur, and the other objectives of the society, such as a more equitable distribution of resources and income, providing useful employment, improving living standards and the quality of life, and the alleviation of poverty, are unlikely to be met.

In figure 7.3, we depict the transmission of monetary and fiscal policy in the Islamic financial and economic system. The central bank, by buying and selling risk-sharing securities, directly affects the financial portfolio of the private sector—households and firms—and indirectly by affecting the holdings of banks and conditions in capital markets, that in turn affect real economic activity. The decision of households and firms impacts the real rate of return in the economy, which again affects economic activity; while financial signals to capital markets through central bank policies affect the availability of real resources for investment.

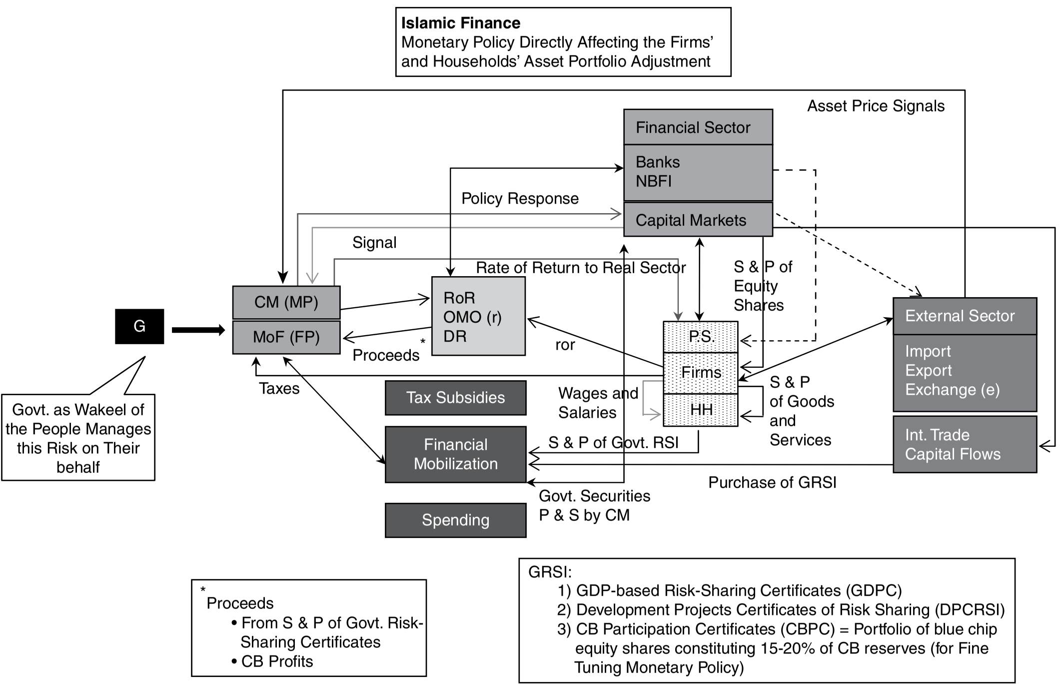


Figure 7.3 Fiscal and Monetary Mechanism in the Islamic System.

Source: Authors.

Because the banking system or financial intermediation is by design a 100 percent reserve banking system (banks cannot create money as in the fractional banking system), and there are no interest bearing debt instruments, a different set of instruments must be used to affect monetary policy. Monetary policy will have to use risk-sharing instruments. As discussed, fiscal policy develops such instruments to finance part, if not all, of its budget. The benefits of risk sharing are manifold, as discussed. Higher private sector savings would be mobilized to support productive public sector investment projects. By issuing risk-sharing instruments to fund development expenditures, the burden of debt would be reduced. At the same time, the household sector would be able to enjoy a higher rate of return on its savings because the rate of return on these instruments would be driven by the return to the real sector. These instruments must have low enough denominations and be traded in secondary markets so that ordinary citizens—not just institutional investors—can have access to them. Use of these instruments in affecting monetary policy would empower a more direct and predictable impact of monetary policy. In an exercise to contract the money supply, these papers would be issued directly to the market to mop up excess liquidity in the market. The effect would be immediate and leakages arising from intermediation would be reduced. Conversely, if the goal were to increase money supply, the monetary authority would buy these papers from the private sector.

The rate of return on these instruments would be referenced to the rate of return to the real sector of the economy. The rate could be benchmarked against the average rate of return of the stock market or the market for securitized assets, which is generally higher than the interest rate in the economy; hence, this presents investors with a better return on their idle income. An alternative could be that the rate of return on these papers could be benchmarked on the return to the real sector of the economy. Either way it would represent a better investment alternative for investors; savings would be mobilized to productive use in the economy for a higher rate of return. The effect of this policy measure would be not only to achieve a more potent monetary policy impact than in the conventional economy, but also to serve as a measure of improving income distribution by providing better access to all members of the society to the benefits from the growth of the economy. It would also serve as a consumption-smoothing instrument (to mitigate idiosyncratic risk) for small investors.

These papers would be openly traded in the secondary market so that the holders could redeem or liquidate them by selling them at the prevailing market price. This means that institutional investors such as banks would have to pay the market price in order to have access to these instrument for

purposes of managing their asset portfolios. In this way, the same economic opportunity would be equally available to all and would not be limited to the more financially able. At the same time, the opportunity (risk-reward profile) in economic activity would be available according to the level of financial capability of each investor. Such monetary policy instruments would also enhance governance, as the government would be more accountable to the general public, with regard to their investments in the risk-sharing instruments.

The cost to the government of raising financing through equity participation shares would be not much higher than the current rate of interest paid on debt instruments, but it would provide a better impetus to the growth of the economy by mobilizing funds that would otherwise be idle in deposits. At the same time, these papers could also serve as an ideal instrument for monetary policy measures. Ideal in the sense that monetary policy signals would reach the private sector without being filtered by the banking system. To expand the money supply, the papers could be bought from the open market, thereby increasing the amount of money in circulation to increase consumption and investment.

The central bank in the Islamic economy has other instruments, in addition to our proposed equity shares or participation papers (securitized paper) in development projects, which it can buy and sell on the market to affect the money supply, and thus attain its monetary objectives. The major objective being the generation of market oriented incentives to induce portfolio adjustments to stabilize the economy. These risk-sharing and interest-free instruments work as monetary policy tools to absorb/expand liquidity from/to the economy and, at the same time, match the investors' intention of investment in the Islamic monetary instruments. The available instruments include a variety of Islamic bonds or *sukuk* (based on ownership in a debt *sukuk al murabaha*, or in an asset *sukuk al ijara*, or on a project *sukuk al istisna*, or in a profit sharing business *sukuk al musharaka* and on investment *sukuk al istithmar*):

1. The state can issue non-interest bearing bonds (*qard al hassan*) that the wealthier members of society may want to hold as one of their contributions to overall societal goals.
2. Securities that can be backed by trade-based financing or *tijara* (fixed rates).
3. Securities that can be backed by lease-based financing *ijara* (fixed rates).
4. Securities that are linked to real assets that are securitized and the security holder have access to the underlying asset (especially in the

event of default). They are of two basic types: *Istisna* contracts that can be securitized to raise funds based on assets that provide a rental income (such as buildings for fixed income or variable in the case of road tolls); and Salam contracts that entail the delivery of specific goods in the future, where the goods are sold to the public on a mark-up.

As explained above, open market operations, the buying and selling (from the investment bank type of Islamic institutions and not from the safekeeping category of institutions, more on this below) of equity or securitized assets in projects (participation papers), and asset-linked *sukuk*, are expected to be the main instrument of monetary policy, but there are additional tools that the central bank can adopt to affect its monetary stand in the Islamic system.

At this point, we must address two controversial and unsettled issues between economists specializing in Islamic finance, concerning the operation of central banks. Are central banks permitted to print paper money and can they act as the "Lender of Last Resort (LoLR)"? We believe that the answers to both of these questions are yes. Let us explain. While some argue that money and value cannot be created out of "thin air," in Islam, we believe that this argument has moment if it is being done to benefit particular members of the community. To our mind, there is nothing in the Qur'an or in the *Sunnah* that recommends or prohibits the state from creating money (of course, we realize that there was no paper money at the time of the Prophet). Yes, the state cannot issue interest bearing bonds and paper money that earn interest. However, if the state prints money in order to facilitate business transactions and enhance prosperity for the benefit of the community because the economy's output is below its potential, then it should be permissible. This can be operationally defined as "when there is unused productive capacity in the economy." Also, the central bank can print money to accommodate expected additions to productive capacity. This would mean that there is accurate estimation of full employment output and expected future growth of the economy; and yes, the state gets the usual advantage of seignorage; but again, if this is used for the equitable benefit of all members of society, not rulers and privileged classes, then why should the central bank be barred from issuing paper money? Similarly, the central bank should be permitted to act as a lender of last resort as long as it does not charge interest in order to sustain economic growth. It could charge a financially sound investment bank in need of liquidity a rate consistent with the rate of return to the real sector of the economy *ex post* (thus, an actual real rate of return). Alternatively, the central bank could purchase

assets from the investment bank, which in the end is akin to acting as a lender of last resort.

Two things need to be clarified. First, that the banks operate on 100 percent reserve basis and there are no deposit guarantees, either for banks that handle the payment system, that is, those that are allowed to accept demand deposits, or for investment banks that, even though they are not permitted to take demand deposits, can take investment funds. Those who would not allow central banks to print money argue that this is necessary to tie the hands of the authorities and regulate monetary policy so it cannot fuel inflation through monetary expansion. However, this power is very much limited once 100 percent reserve system is the structure of the banking system. The most important point is that a responsible and accountable central bank under a 100 percent reserve system limits the liability of the government (printing money since it is a government IOU) to no more than the economy would allow in terms of expansion in the productive capacity.

A commercial banking system that is 100 percent reserve banking prohibits lending and eliminates the need for reserves and changes in the reserve requirement of these commercial banks as a policy instrument. However, the other mode of banking, namely investment banking, affords important policy options as we have mentioned above. Recall that these banks channel investor funds into different investment projects (by risk, maturity, rent/dividend, etc.) and issue the investor with equity shares or bonds (backed by the investments) that are traded in the market. The central bank can affect the operation of these banks in two principal ways. First and foremost, the central bank can buy and sell the securities that they issue directly to investors and those that they issue on their account by investing their own capital. In the case of security purchases, the central bank injects cash into the hands of investors and the banks, resulting in investors and banks having cash to invest in new projects. Note the power of this instrument and compare it to open market operations in the conventional banking system. Here, the central bank puts cash directly into the hands of investors, whereas in the conventional system, the cash is put into the hands of bankers who may or may not lend it.

In addition to the implementation of a monetary policy, central banks in an Islamic system could take the lead in developing financial institutions and instruments that facilitate efficient mobilization of savings and allocation of resources consistent with the economic development objectives of the Islamic economy. The central bank, in particular, must initiate and foster the development of primary, secondary, and money markets. Mere adoption of Islamic rules of finance will not necessarily create the impetus for financial and economic development where the shallowness of financial markets

and lack of attractive financial instruments have created impediments to the saving-investment nexus and the process of financial intermediation.

There are reasons to believe that the relationship between financial deepening and real growth of the economy would be strong in an Islamic economy where risk sharing can be expected to have significant positive influence on the saving-investment process. The positive relationship between the expansion of financial markets and financial development on the one hand, and between financial development and economic development on the other, necessitates an active participation by the monetary authorities in evolving the financial infrastructure of the economy. For example, the monetization of transactions in rural areas requires the wider geographical and functional penetration of the banking system. Through provision of such facilities and expansion of financial markets, the central bank can both lower the cost and increase the availability of credit in the economy. Moreover, the prohibition against interest provides natural opportunities for the integration of financial markets. The monetary authorities, through the central bank, can take steps to foster competition between organized and unorganized markets on the basis of profit-sharing and rates-of-return in order to enhance the process of integration as well as strengthening of the process of financial inclusion.

The extension and enforcement of Islamic regulations concerning contracts and property rights to financial and capital markets is needed to reduce uncertainties arising from the present structure of rights that tend to discourage private investment. Such actions would include the imposition of legal sanctions on irresponsible behavior on the part of agent-entrepreneurs to the extent necessary to reduce problems of moral hazard and to encourage lending on the basis of the viability and profitability of investment projects rather than solvency, creditworthiness, or collateral strength of entrepreneurs. Uncertainty in contract and property rights combined with heavy costs, at least initially, of project appraisal, evaluation, and monitoring may lead to a significant reduction in investment. In fact, it can be argued that the risk in adoption of an Islamic financial system, particularly in the initial stages, is not lower savings but, if the Islamic rules regarding contracts and property rights are not enforced, lower investment. In the absence of legal protection, risk-averting bankers and savers may simply refuse to provide funds on the basis of risk-sharing arrangements. Alternatively, principals and agents may engage in the type of contrived contractual relationships that may be Islamic only in appearance. The enforcement of Islamic rules regarding contracts and property rights would increase public confidence in capital markets, financial institutions, and in the process of financial intermediation. It is only then that the banks and other financial institutions

can, through their direct involvement in risk sharing with the real sector, become instruments of industrialization and development. This way, the whole investment process would add to efficiency, as real entrepreneurs, rather than those whose only claim to enterprise is based on the ownership of savings, would utilize their savings. The increase in efficiency will, in turn, increase profits and afford a higher rate of return to savers.

The central bank in an Islamic economy can be expected to perform the usual regulation, supervision, and control functions of central banks as in the conventional financial system. A further opportunity for enhancement of the control of the banking system is available to the central bank through its purchase of equity shares of not only the banks, but also of other financial institutions. The necessity of the leadership role of the central bank in initiating and evolving primary and secondary markets is far more crucial in an Islamic economy, particularly in the present context of the financial development of the majority of Muslim countries, than in a conventional system. Through performance of these functions and its lender-of-last-resort role, the central bank can exert greater influence in the financial system. Moreover, opportunities will exist for the central bank to directly invest in the real sector on a profit-sharing basis, as well as to take equity positions in joint ventures along with other banks. The opportunity for the central bank to buy and sell securities in the financial markets may enable it to influence financial resource allocation.

Summary

The principal goal of fiscal and monetary policy is to help the economy achieve stability and sustainable growth. The government directly affects aggregate demand changes by changing taxes and its expenditures. The change in aggregate demand affects the level of national income. In the case of monetary policy, the central bank affects demand through the rate of return to risk-sharing instruments held by the public and financial institutions. This affords monetary authorities a more direct connection to the process of private sector portfolio decisions, as they do not have to rely on the banking system to transmit policy signals.

The design of policy instruments of macroeconomic policies are risk-sharing securities such as national participation papers and government securities tied to the real rate of return in the economy. Moreover, the banking system in the Islamic economy would be a 100 percent reserve banking-based system, as contrasted with fractional reserve banking in the conventional system. This difference eliminates the creation of money by banks and affords the central bank in the Islamic economy better monetary

control, resulting in a financial system that is more stable and less prone to frequent crises. Monetary policy signals would be more potent because, while the objective of policies in the conventional and Islamic economy is to affect portfolio adjustment in the private sector, in the former, the transmission mechanism of these signals is indirect through the banking system whose objective function is different from that of monetary authorities. Hence, the signals through this transmission mechanism may weaken as they are filtered by the banking system. In the Islamic economy, the transmission mechanism establishes a direct means of signal reception by the private sector through the retail security market. Thus, the potency of the signals sent by the monetary authority is strengthened considerably. In addition to the conduct of monetary policy, the central bank would take the lead in developing financial institutions and instruments that facilitate the efficient mobilization of savings and the allocation of resources through risk sharing.

CHAPTER 8

Developing Social Capital*

Introduction

The concept of social capital is multidisciplinary and is not easily defined or understood. The concept has been used to explain phenomena from the growth tragedy in Africa associated with high ethnic fragmentation (Easterly and Levine, 1997) and group-based programs for environmental improvements including microfinance (Pretty and Ward, 2001) to the role of trust in underdevelopment (Banfield, 1958; Guiso, Sapienza, and Zingales, 2004) and the limited stock market participation puzzle (Guiso, Sapienza, and Zingales, 2008).

Since the 1990s, social capital has received considerable attention among philosophers, sociologists, economists, and political scientists. Among the reasons attributed to the proliferation of the social capital literature lies in the limited success of traditional approaches to the problems of economic development and political order (Ostrom and Ahn, 2009, p. 17). The various stages of economic and political performance across countries cannot not be comprehended by standard approaches alone, and should take into account "the omitted factors: trust and norms of reciprocity, networks and forms of civic engagement, and both formal and informal institutions" (Ostrom and Ahn, 2009, p. 18). Countries such as the United Kingdom, Ireland, and Canada have considered the impact of policy on a community's social capital (Illingworth, 2012). The World Bank has developed a Social Capital Implementation Framework, and the OECD has included social capital in developing its policy on well-being. Indeed, these efforts are commendable and mirror the importance with which social capital is accorded, particularly by policy and development practitioners (Illingworth, 2012).

Be that as it may, to the extent that the concept of social capital remains elusive with serious conceptual and empirical issues, it has now emerged as a puzzle in itself (Durlauf, 2002; Quibria, 2003). While elusiveness may pose serious implications for empirical and policy analyses, it is precisely this openness that instills richness in the discourse of social science that is itself open and evolving. It is worth highlighting the remarks of Dasgupta and Serageldin (2000). We contend that social capital is not a confusing medley, as it can be defined according to the context. In the context of risk sharing, social capital can be defined as "an institutional resource derived from meaningful trust, social networks, social structures and shared norms that facilitates rule-compliance and cooperation in sharing the risks of life." In the overall analysis, social capital is a sufficient condition that needs to be in place to conceptually bridge the ideals and the current realities of Islamic finance. Classical economics recognized that economic agents are heavily socialized, and their economic activities firmly hinge on rules, norms, and relationships surrounding them. Typical words permeating the literature of social capital, such as trust, norms, values, altruism, and sympathy can be traced back to the work of Adam Smith (Antoci, Sabatini, and Sodini, 2012; Becker, 1981; Bruni, 2000; Fontaine, 2000).

One of the earliest pioneers in the study of social capital is Lyda Hanifan, who defined social capital as those "tangible substances that count for most in the daily lives of people; namely good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit" (Hanifan, 1916, p. 130). In fact, Hanifan (1916) found many similarities between business corporations and social corporations, and that social capital "may easily be directed towards the general improvement of the community well-being... [including] its recreational, intellectual, moral, and economic conditions" (pp. 130–131). In this case, social capital was used in the context of social cohesion and investment in the community, where schools were used as community centers to address the problems of rural life.

The concept of social capital, premised on the broad idea that social relationships are resources that help people act effectively, was brought to prominence by James Coleman, who is among the earliest social scientists to carry out the first systematic conceptualization of the term in the 1980s (Dasgupta and Serageldin, 2000; Ostrom and Ahn, 2009).

Since the work of Coleman (1988), social capital has been defined differently by various writers. Some hold social capital as an individual asset derived from social networks, whereas others view it as a collective asset in the form of a homogenous community with shared values. Some see social capital as an emblem of trust, tolerance, culture, and social norms. The

components of social capital are discussed using a contextualized approach in the following section.

Components of Social Capital in the Context of Risk Sharing

The incentive to create social capital can be attributed to risk sharing, in that profit and loss are shared by virtue of trust, networks of relationships, and norms of reciprocity. As an effective resource to harness a better flow of information among economic agents and partners, social capital can reduce the problems of adverse selection and moral hazard in the financial market. Social capital can also increase the ambit of enforcement mechanisms for non-compliance with contractual terms or default on obligations, particularly in an environment where recourse to formal institutions such as the legal system is prohibitive. Recognizing the diverse components and mostly intangible nature of social capital that are due to different kinds of relationships and engagements (Dasgupta, 2011), we focus on four components of social capital, to wit, trust, social networks, social structures and shared norms that have been widely discussed in the literature and measured by Lee, Jeong, and Chae (2011).

Trust

Central to all transactions, trust is a public good and is an ever-ready social lubricant that permits voluntary participation in production and exchange (Akerlof, 1970; Arrow, 1974; Dasgupta, 1988) and the proper functioning of the market and social solidarity (MacMillan, 2002; Mirakhor and Hamid, 2009). Trust is one of the most prominent dimensions of social capital (Fukuyama, 1995; Glaeser, Laibson, Scheinkman, and Soutter, 2000; Knack and Keefer, 1997; Zak and Knack, 2001). However, some view that "trust itself is not a form of social capital but an outcome of the forms of social capital linking them to successful collective action" (Ostrom and Ahn, 2009, p. 22). Another related view is that social capital is only one of the means to creating trust (Dasgupta, 2011). Although trust can be a result of other forms of social capital such as trustworthiness and networks, it does not necessarily mean that trust is an outcome of social capital. In fact, social capital is "a capability that arises from the prevalence of trust in a society or in certain parts of it" (Fukuyama, 1995, p. 26). The concept of social capital is sufficiently broad to embrace trust. It is trust—along with other components of social capital—that forms the foundation and gives value to the reservoir of this important capital.

Trust can be acquired through behavior and reputation over time in well-understood circumstances (Dasgupta, 1988). Like other moral resources, trust grows with use and decays with disuse (Hirschman, 1986) and is similar to commodities such as knowledge or information as its value and worthwhileness can be measured in any given context. However, the fact that trust among persons and (enforcement) agencies is interconnected makes "trust such a fragile commodity" (Dasgupta, 1988). There is difficulty in determining the right amount of trust and the provider of such level of trust as is required in a transaction. According to Khan (2002, p. 1723), "the more complicated the commodity, the more difficult its delivery, and the greater the resources needed to verify that it is in fact what it claims to be; the greater the trust required for its successful transaction." Trust cannot be treated as a commodity and be left to the market to produce it, and "vigilance must be exercised as to the possibility that a dishonest-untrustworthy person may be taking honest-trustworthy actions" (Khan, 2002, p. 1747).

Trust can take three forms (Putnam, 2000). The first is thick trust or micro-trust formed within family and across family networks (Newton, 1997; Williams, 1988). The second is generalized or interpersonal trust established by looser and secondary relations in societies based on interaction between people who do not otherwise know each other. This meso-trust is the focus of most social scientists and is a good indicator of the overall level of social cohesion in a society. The third is systemic or institutional trust, which represents the confidence that people have in institutions, such as trusting in the parliament, government, judiciary, police, and armed forces (Roth, 2009). This macro-trust is the broadest of all types of trust.

In full rationality, agents negotiate comprehensive contracts at no cost, under the assumption of perfect rationality. The standard Arrow-Debreu model, attempting to prove rigorously the classical economics' propositions, assumes well-defined institutional scaffolding, including a set of property rights and established trust relation among agents. However, since human foresight is limited and the rationality assumption of neoclassical economics is too strong, it is natural to expect that contracts are unavoidably incomplete and "costly contractual breakdowns (refusals of cooperation, maladaptation, demands of renegotiation) may be posed" (Williamson, 2002, p. 174). Given that informational problems are inherent in contracts, institutions that lay the foundation of the system and governance frameworks become necessary to ensure enforcement of rules. The need is even more pronounced in equity-based contracts that are associated with moral hazard and agency problems.

In this regard, rules governing the behavior of participants such as trusts can play an important role in promoting good governance. It is particularly

important in institutions dealing with financial services, which manage property in "trust" (Askari, Iqbal, Krichene, and Mirakhor, 2012):

Financial contracts are trust intensive, different levels of trust may have important consequences for the functioning and development of financial markets. Financing is nothing but the exchange of a sum of money today for a promise to return more money in the future. Whether such an exchange can take place depends not only on the legal enforceability of contracts, but also on the extent to which the financier trusts the finance (Sapienza, 2009, p. 30). Trust induces the sharing and transparency of information. Where information is obscure or not shared, trust can act as a substitute for such non-disclosure or ambiguity. It can also reduce the strength of the rationality assumption of neoclassical economics. It can decrease costs of interactions associated with asymmetric information problems and allows for building expectations and plans with greater certainty, which is a crucial element in the undertaking of financial transactions (Sangnier, 2013). In a world of irreducible uncertainty, trust is an indispensable element in investments, as perceived risk varies inversely with trust (Olsen, 2008).

Social Networks

Social capital has a network aspect. Social capital is a system of communication channels for safeguarding and enhancing interpersonal relationships where members develop and maintain trust in one another to keep their promises through mutual enforcement of agreements and a system of mutual beliefs (Dasgupta, 2011). It can also be defined as the aggregate of actual and potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition—or in other words, to membership in a group—which provides each of its members with the backing of the collectively-owned capital, a credential which entitles them to credit (Bourdieu, 1986, p. 51).

Among the different types of networks, horizontal networks, which confer societies a sense of identity and common purpose, have been found to be more effective than vertical network as vertical flows of information are usually less reliable than horizontal flows (Putnam, Leonardi, and Nanetti, 1993). There is also strength in "weak ties" (Granovetter, 1973) and "bridging social capital" (Putnam, 2000), which transcend social divides and connect one to diverse set of people and information. Coupled with weak or bridging ties, horizontal networks can be a basis for the pursuit of wider societal interests and access to useful resources.

A network of reciprocal social relations is fertile ground for civic virtue to thrive (Putnam, 2000) and can influence access to opportunities. According

to Loury (2000, p. 233), "each individual is socially situated, and one's location within the network of social affiliations substantially affects one's access to various resources. Opportunity travels along these social networks." By increasing defection costs and improving information flows, social networks foster norms of reciprocity, protect against market failure that is caused by asymmetric information, and exploit monitoring devices that are not otherwise available (Arrow, 2000). Uncertainty is reduced as agents' behaviors are more predictable through repeated interactions, which increase "the opportunity cost of free-riding in 'prisoner's dilemma' kind of situations" (Antoci et al., 2012a, p. 804). With better information, certainty, and opportunity arising from effective social ties and networks, people are more willing to share risk and to pursue ventures with higher prospects and returns.

Networks are associated with markets as all societies depend on a blend of impersonal markets and communitarian institutions arising from networks. Where both complement one another, production and exchange through networks in one commodity can have a significant influence on the functioning of another market (Dasgupta, 2011). Historically, networks in the form of long-distance trade can even be the means by which markets are formed. In cases where markets and networks are substitutes, networks may be a stumbling block that prevents markets from functioning well (Arnott and Stiglitz, 1991). While kinship ties strengthen the obligations of members to share rewards and pool individual risks with others in the group, kinship obligations can also be a disincentive for individual to invest for prosperity, as the individual cannot privately benefit from returns on investment in an activity that involves her kin (Dasgupta, 2011). It is, therefore, important for networks not to act as enclaves that impede efficient allocation of resources.

Social Structure

Social structure epitomizes the nature of relationship between groups of individuals in a society that is represented by cultural and social conflict (Lee et al., 2011). Culture represents the common characteristics of relationships embedded in a society and its differences in the form of religion and language can explain the cross-country variations of investor rights (Stulz and Williamson, 2003). Social conflict is examined by the extent a society's institutions manage social divisions, and can be measured by indicators such as ethnic, linguistic, and religious fractionalization (Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg, 2003).

Where social divisions are deep and the institutions of conflict management are weak, distributional conflicts can intensify the economic costs

of exogenous shocks (Rodrik, 1998). In such circumstances, information becomes obscure and more asymmetrical with higher agency costs. Social cohesion may lower economic volatility, since internal conflicts are a major source of shocks for any economy (Lee et al., 2011; Sangnier, 2013). Social capital may thus be associated with better economic management by the authorities if it reflects greater cohesion in the society. Such stability, in turn, mitigates the impact of information asymmetry and lowers agency costs, creating a conducive for market development.

Shared Norms

Social capital includes social norms that instill an attitude of cooperation in public, and have two aspects: civic attitude and social behavior (Lee et al., 2011). Civic attitude indicates the norms of reciprocity or mutual obligation imbedded in society, where people believe that their attitude and actions toward others will be returned in the future. Social behavior refers to the extent people accept and comply with the rules of society. Shared norms such as ethics are important, as their absence may result in the proliferation of negative opportunistic behavior such as free riding, rent seeking, and bribery (Dasgupta and Serageldin, 2000). Norms of reciprocity reduce the incentive to cheat, thereby encouraging people to do things they would not have done but for the existence of such norms. This will further promote collective action and coordination, that are beneficial to the society (North, 2003).

The Dark Sides of Social Capital

There is also a dark side, as social capital cannot guarantee an increase in human welfare (Ostrom, 2000). Most of these adverse aspects such as "exclusion of outsiders, excessive claims by insiders, restrictions of individual freedoms, and perpetuation of backward norms" (Quibria, 2003, p. 9) relate to social networks and social structures (bonding social capital among homogeneous members and the Olson group) that yields negative effects.

Strong moral bonds and particularized trust within a group that is confined to a small and closed circle of people may, in some cases, decrease the degree to which members of that group are able to trust outsiders and cooperate effectively with them. Fostering social capital by emphasizing closely connected groups can result in the exclusion of others and can even encourage rent-seeking activities (Illingworth, 2012; Lee et al., 2011). The lack of a broader, generalized social trust outside the family, such as in strongly familistic societies in China and central-southern Italy, can preclude the group from beneficial external influences. This may "actively

breed distrust, intolerance, or even hatred for and violence towards outsiders" to the extent that "one feels entitled to steal on behalf of one's family" (Fukuyama, 2001, p. 9).

Groups or networks that open up opportunities for their own members based on ethnicity, religion, language, and profession create barriers for outsiders (Quibria, 2003). In public bureaucracy, creating social capital may not yield the intended results; it may instead result in restricted networks of individuals or cliques that participate in reciprocity at the expense of the wider group they are supposed to be serving. This negative aspect can be reduced if officials are strongly motivated to promote the growth and empowerment of others (Ostrom, 2000).

Citing an extreme example of conspiracy, Quibria (2003) argues that conspiracy can assist group members in safeguarding their economic interests or perpetuate monopoly privileges that can be harmful to the society. Olson (1982) contends that there is a risk of stable societies accumulating collusions and organizations of collective action over time that function as special interest groups. These collective actions can undermine the state's power to implement necessary reforms or agendas to sustain high economic growth. In turn, such social liability may reduce efficiency, the aggregate income in the societies in which they operate, and cause divisions in political life, thereby harming economic growth. Associational activity and groups with strong bonding ties may produce, on an aggregated scale, a high interpersonal trust stock that reduces economic outcomes (Roth, 2009).

While collusion can be facilitated by social network and groups, the association of social capital with conspiracy is an extreme stretch. At most, it is only the use, not the beneficial nature of social capital, which should be linked to such negative occurrence. As noted by Dasgupta, "there is nothing good or bad about interpersonal networks: other things being equal, it is the use to which members put a network that determines its quality" (2011, p. 121). Another downside to social capital relates to close-knit groups that can reduce individual incentives to work hard, leading to moral hazard and welfare-havens (Quibria, 2003).

Social Capital from an Islamic Perspective

Social capital is not strictly a religious term. However, a study of social capital from an Islamic perspective is essential for three reasons. First, social capital has within it components that are universally rooted in Islamic values. Islam places a strong emphasis on family and social solidarity, the brotherhood of mankind, tolerance, cooperation, as well as trust.

The *Qur'an* specifies the elements of social capital and prescribes rules that ensure its strength and continuity. Second, it is also precisely because social capital has not been widely viewed from a religious perspective that makes it relevant here. Third, while the Muslim civilization had once flourished, most present-day Muslim countries are characterized by low social capital and underdevelopment. This section discusses social capital and the conception of an ideal society and economy, as set out in the *Qur'an* and from the perspective of contemporary scholars.

The conception of an ideal society and economy from an Islamic perspective can be derived from the axiom of *tawhid*, which is the oneness and unity of the Creator, reflected in the axiom of unity of man. The unity of man, reflected through the idealized community or the *ummah*, is accorded central importance in the *Qur'an*. The birth of this concept began when the first Islamic community was established in Medina and became increasingly consolidated in Arabia (Mirakhor, 1987).

For an ideal society and economy to exist in a sustainable manner, the necessary (rule compliance or *imān*) and sufficient (ever-consciousness of the presence of the Creator or *taqwā*) conditions must be in place (Mirakhor, 2009). This is evidenced in the *Qur'an* (Chapter 7, verse 96) which states that, "If the members of the collectivity were to be rule-compliant (*mu'min*) and ever-conscious (had *taqwā*) surely We should have opened for them blessings from the sky and from the earth. But they rejected (the Divine messages) therefore we seized them on account of their (non-compliant) deeds."

Humankind, as agent of the Creator on earth, performs their responsibilities to fulfill the Divine Trust. Trust from an Islamic perspective has additional elements of compliance and consciousness in that trust brings with it responsibility and accountability. Trustworthiness and keeping faith with contracts and promises is obligatory and inviolable, except in the case of an explicitly permissible justification (Askari et al., 2012).

Apart from trust being one of the pillars of the market's institutional structure, the other four pillars can be supported by social capital. The four pillars are: (a) property rights; (b) the free flow of information; (c) contracts; and (d) the right not to be harmed by others, and the obligation not to harm anyone by one's activities (Mirakhor, 2009). Property rights and the right not to be harmed can be associated with positive social norms and social structure. Positive norms of reciprocity imbedded in society, compliance with the rules prescribed by the Creator, culture, and resolutions of social conflict strengthen these two pillars of the market's institutional structure. Further, having a cohesive and strong social network can also assist in the sharing of information sufficient for market activities, thus promoting the free flow of information. In essence, social capital can play a reinforcing

role in strengthening these pillars of the market's institutional structure to reduce uncertainty and transaction costs as well as to facilitate cooperation and collective action (Mirakhor, 2009).

Islamic social capital can increase opportunities for innovative interactions among multiple sets of agents in different sectors of the economy, thus promoting the Islamic ethics at a broader level (Farooqi, 2006). Farooqi's proposition is insightful given his emphasis that an extended networking can help to build the linkages that motivate people to comply with the Islamic conventions and norms governing the development process. Further, this kind of social capital may be collectively owned by the community and Islamic financial institutions based on Islamic brotherhood principles, without exclusive ownership rights for individuals. In the overall analysis, the material advancement underpinned by moral uplift, justice, and social harmony is important for producing the required social and ethical capital for sustained development (Chapra, 2008). It is only when such institutional framework is in place that the economy and society can be strengthened.

Social Capital and Finance

The contemporary financial system is faced with a set of challenges arising from two important phenomena. The first phenomenon is the crisis of trust in the financial system caused by repeated episodes of financial crises. As a result of the most recent global financial crisis in 2008, and several recent corporate scandals attributed to managers' greed and bad corporate governance, trust between stakeholder and institution has significantly eroded and the prevailing level of trust in the stock market is low (Edelman, 2013; Sapienza and Zingales, 2012). The second phenomenon is the rapid development of Islamic finance as an alternative to mainstream finance, especially in Muslim countries, and the prospect for the financial system to be redesigned based on risk-sharing principles to mitigate future financial crises.

These phenomena have two implications. The first implication is that the stability of the financial system hinges on the restoration of trust, rebuilding of social capital, and the reform of formal institutions. This gives rise to the second implication: the need to enhance social capital, particularly, trust and ethics, to further promote risk sharing, which is the essence of Islamic finance. One of the best means of risk sharing is through the stock market (Askari et al., 2011; Iqbal and Mirakhor, 2007; Mirakhor and Zaidi, 2007). This need is particularly important considering the underdevelopment of stock markets and the low level of social capital in many Muslim countries.[1] Many of these markets face informational problems and governance issues that result in high transaction costs (Askari et al., 2011). While

the development of Islamic finance is not limited to Muslim countries, these countries present significant growth opportunities for Islamic finance going forward.[2]

Whereas studies have demonstrated empirically the significance of trust and ethics in stock market development and macroeconomic performance, the pressing issue remains as to how social capital can be developed to promote a trustworthy, ethical, and efficient stock market. This issue is of central importance to policymakers, industry players, investors, academia, and households. We set forth seven broad recommendations for the development of social capital in Islamic finance under four headings. These headings are (i) principle and value; (ii) trust-reinforcing regulation; (iii) investment opportunity and infrastructure; and (iv) reputational intermediaries.

As for the first dimension, the recommendation is adoption and implementation of ethical principles that underpin the stock market. Regarding the second dimension of trust-reinforcing regulation, principles-based regulation to facilitate the development of a relationship based on responsibility and mutuality is proposed. In the third dimension, namely investment opportunity and infrastructure, two recommendations are outlined: (i) enhance equity-based financial inclusion through crowdfunding; and (ii) promote investment in pools of small and medium enterprises (SMEs) to increase stock market access and to diversify risk. Regarding the final dimension on reputational intermediaries, several initiatives are outlined so as to reinforce self-regulating behaviors. This dimension also highlights the need to enhance transparency and openness of stock market and business practices, which, in turn, builds trust and confidence in the financial system.

A Trustworthy and Ethical Stock Market

At its most basic level, an exchange takes place when there is trust between two agents in a transaction. An exchange is also an exchange of "trust," especially when risk and reward are shared, and can promote trust over time through repeated interactions. Trust constitutes an important asset that "greases" the cogwheel of exchanges in the society, rendering the market more efficient and connected. On the other side of the coin, ethics underpin a trustworthy relation and reinforce trust. The role of ethics is particularly pertinent when the social function of the stock exchange and ethical investor relations are taken into consideration. At the broader level, market ethics derived from religion, such as the Islamic rules for moral market behavior, also play a role in financial and economic development (Erbaş and Mirakhor, 2013).

The emergence of the early stock markets was characterized by three features. First, equity was an important source of external finance and the stock

markets played a significant role in channeling these resources to productive activities. Second, these markets emerged and flourished in the absence of formal systems of law and regulation. Third, there was strong reliance on informal relations of trust (Mayer, 2008), which is the most striking feature in the context of early stock markets and in the current context. A successful and vibrant stock market requires that information, enforcement, and governance costs be minimized for full participation to take place in the market (Allen and Gale, 2007). Reinforcing this participation is the existence of strong informal relations of trust that can reduce such costs (Erbaş and Mirakhor, 2007, 2010; Guiso et al., 2008). More broadly, the institutionalization of Islamic rules of market behavior in a society, such as faithfulness to the terms and conditions of contracts, and trustworthiness, can address informational problems and reduce the costs of market entry (Askari et al., 2012). This would further promote risk sharing among a large number of participants and foster closer coordination between the financial and real sectors. As such, the litmus test for a successful stock market, or any form of multilateral exchange, is whether such a market functions in a trustworthy and ethical manner. Satisfying this test would require the building of informal institutions such as trust, ethics, and more broadly social capital.

Key Dimensions, Recommendations, and Initiatives of Social Capital Development in Risk-Sharing Finance

First Dimension: Principles and Values

Adopt and Implement Ethical Principles That Underpin the Stock Market

The recent review of the United Kingdom's stock market by Kay, and the government's positive response with the aim of ensuring that stock markets are supportive of long-term growth is a good reference for the development of the Islamic stock market. As incentives geared to speculation in short-term market movements rather than long-term value creation have caused the erosion of trust, the review is timely and offers important principles for the building of social capital conducive to risk-sharing finance. In support of the establishment of Islamic stock markets within the current global context, Sheng and Singh (2013) highlight two important principles outlined in the report:

1. All participants in the stock investment chain should act according to the principles of stewardship, based on respect for those whose funds are invested or managed, and trust in those by whom the funds are invested or managed.

2. Relationships based on trust and respect are more effective than trading transactions between anonymous agents in promoting the high performance of companies and securing good returns to savers taken as a whole.

These two principles, which emphasize stewardship, trust, and respect, are theoretically aligned with the ethics and faiths of participants in the Islamic stock markets, compared to those practiced in the non-Islamic markets (Sheng and Singh, 2013).

In addition, two additional principles from Kay's report are also related to the other dimensions of social capital:

3. Company directors are stewards of the assets and operations of their business and their duties are to the company, not its share price, and companies should develop relationships with investors, rather than with "the market."
4. All participants in the stock investment chain should act in good faith, in the best long-term interests of their clients or beneficiaries, and in line with generally prevailing standards of decent behavior. This means ensuring that the direct and indirect costs of services provided are reasonable and disclosed, and that conflicts of interest are avoided wherever possible, or else disclosed or otherwise managed to the satisfaction of the client or beneficiary. These obligations should be independent of the classification of the client and should not be contractually overridden.

The third principle, which focuses on the company fundamentals and development of relationships with investors, reflects the (social) network and interaction aspects of social capital. As highlighted by Kay, it is the quality of the relationship rather than the amount of engagement that is important. The stewardship relationship, based on an appreciation of company fundamentals, creates an environment of trust and constructive challenge, which, in turn, enables managers of the company to take beneficial long-term decisions on investment and strategy (United Kingdom Department for Business Innovation and Skills, 2012). In the context of social capital and risk sharing, the amount of engagement is also important because uncertainty is reduced when agents' behaviors are more predictable through repeated interactions. Regular interaction is also helpful to sustain cooperation for successful multilateral mechanisms.

The fourth principle, which contains notions of good faith, long-term interests of clients or beneficiaries, and standards of decent behavior, is

associated with social norms of behaviors that are "preferences related to prescriptions about actions or outcomes that are not focused primarily on short-term material payoffs to self" (Ostrom, 2013). These principles can be reinforced by a voluntary code of ethics and measures that promotes integrity. For example, the Chartered Financial Analyst (CFA) Institute Integrity List, which outlines 50 ways to restore trust in the investment industry; the CFA Institute Asset Manager Code of Professional Conduct and Statement of Investor Rights can be adopted by policymakers, regulators, professional bodies, stock exchanges, and firms. While naming and shaming unethical behavior, being one of recommendations in the CFA Institute Integrity List, serves as an *ex-post* punitive measure, stock exchanges and firms can make public declarations or corporate pledges to advocate the values and principles that they stand for. This will function as an important *ex-ante* deterrent measure to self-regulate behavior and to build confidence in these institutions.

Overall, these principles and measures provide a solid foundation for a long-term approach in stock markets from the perspective of social capital. Adherence to these principles and measures offers an opportunity for the commitment to a high global standard of practice on a voluntary basis going beyond domestic regulatory requirements. While some of these universally recognized principles were in place before the onset of the 2008 global financial crisis, they are now even more relevant and have to be implemented in its entirety. Given the strong ethical foundation of the Islamic stock market, the implementation of these reforms would be easier for the Islamic stock market and participants than their British counterparts (Sheng and Singh, 2013). It is, therefore, important for proponents (governments, regulatory authorities, and market practitioners) of Islamic stock markets to adopt and implement these principles in future development of policies, regulations, and practices.[3]

Second Dimension: Trust-Reinforcing Regulation

Institute Trust-Reinforcing Regulation to Facilitate the Development of a Relationship Based on Responsibility and Mutuality

Securities regulations were introduced in 1933 in the United States to restore trust in the financial markets, which was largely undermined by the crash of 1929 and the early 1930s (Zingales, 2009). The loss of this important asset is still evident 75 years later. This has prompted the call for a new set of rules and reforms to regain the public's trust in the securities market. Judgment on the effect of government intervention on the general level of trust, however, remains inconclusive. While trust in the stock market rose after the passage of the Sarbanes-Oxley Act (Hochberg et al., 2009),

80 percent of the individual investors became less confident in the market when the government intervened during the 2008 global financial crisis. Nevertheless, 52 percent of Americans support more regulation of financial market (Sapienza and Zingales, 2012).

High-trust societies are inclined to demand fewer, less complex, and less restrictive economic regulations. Countries with low levels of social capital tend to be highly regulated, vice versa.[4] In these countries, the government is usually called upon to create rules and regulations to avert rent-seeking behavior. Ineffective and excessive regulations may result in unnecessary impediments to entrepreneurial activity, innovation, and competition, which in turn can inhibit investment and growth (Legatum Institute, 2012). Regulation also promotes instrumental behavior that can be damaging to other stakeholders by aligning the interests of directors closer with certain stakeholders, and by imposing uniformity where diversity is required (Mayer, 2013). It is worth noting a troubling prospect where social capital is in decline in several advanced countries such as the United States, the United Kingdom, Austria, and the Netherlands, which may plausibly call for more regulation. The challenge will be to find "alternatives to regulation that better cultivate trust in institutions and between members of society" (Legatum Institute, 2012, p. 22). This leads to the proposal for instituting trust-reinforcing regulation such as principles-based regulation.

Principles-based regulation can be a complex form of regulation and takes varying shapes in different contexts, countries, and regulatory domains. For firms, principles-based regulation can offer flexibility, encourage innovation, and promote competitiveness. For regulators, it can foster regulatory innovation and competitiveness, and make regulatory regimes more durable and adaptable in a dynamic market environment. Objectively, the focus of principles-based regulation is on enhancing substantive compliance and attaining regulatory outcomes. It reframes the regulatory relationship from "one of directing and controlling to one based on responsibility, mutuality and trust" (Black, 2008, p. 430) and promotes co-regulation by regulators and firms. At the other end of the regulatory spectrum is rules-based regulation, which stresses the "primacy of stability over proper exploration of risk" that may be "founded on mistrust of innovation, and so work against the interests of consumers" (Wagstaff, 2007). The two distinctive regulatory approaches can be distinguished in that rules-based regulation promotes "regulated trust," which is "trust based on the self-interest of staying in the right side of the rule book," while principles-based regulation induces "real trust," which is a "belief that people will do the right thing" (Wagstaff, 2007).

There are seven paradoxes that relate to the nature of principles and the manner in which principles-based regulation is practiced. The most

important paradox relates to the trust paradox, where a high level of trust needs to first exist among all the participants in the regulatory regime before principles-based regulation can be operationalized; although principles-based regulation can help further develop the relationship based on mutuality and trust. The difficulty in pre-establishing trust can be summarized in Mayer's words: "it is easier to legislate for investor protection than it is to achieve effective enforcement of investor protection and still harder to promote the conditions for relations of trust" (2008, p. 631).

In making a success of principles-based regulation to facilitate the development of a relationship based on responsibility, mutuality and trust, the participants in such regulatory environment must appreciate each other's willingness to adapt their mindset and behavior through constructive dialogue. Developing and maintaining such dialogue can clarify the respective duties and expectations of both the regulator and regulated firm in interpreting and applying relevant regulations. Regulators should take an advisory approach to supervision and enforcement, while the shareholders and management of regulated firms should be more involved in developing business objectives that are in line with the regulatory objectives. In this regard, Zingales (2009)'s proposal for the reduction of regulatory gap can be achieved by adopting a principles-based regulatory approach.

Third Dimension: Investment Opportunity and Infrastructure

Implement Recommendations of the Kuala Lumpur Declaration

Shari'ah scholars and Muslim economists who participated in the 2012 Second Strategic Roundtable Discussion (September 20, 2012, Kuala Lumpur) adopted a final statement known as the Kuala Lumpur Declaration. The statement recommends that (i) governments must endeavor to enhance risk-sharing systems by leveling the playing field between equity and debt;[5] (ii) design fiscal and monetary policies based on risk-sharing; (iii) issue macro-market instruments that are of low denominations, sold on the retail market and supported by strong governance oversight; and (iv) broaden the organizational structures beyond traditional banking models to formats such as venture capital and *waqf*, to meet the social goals and risk-sharing features of Islamic finance.

Effectively, the adoption and implementation of these recommendations can further strengthen social solidarity and cooperation, promote better governance, and build trust in the financial system. For example, financing a government's development budget through equity participation securities that are issued in low denomination and traded in the retail market would allow for wide participation of the population in the government's

activities. Such involvement of citizens as shareholder-owners of public projects can promote better governance through natural oversight, which in turn enhances confidence and trust in public institutions. Ownership of public goods by citizens can also reduce the tragedy of the commons to some extent, thereby strengthening social solidarity (Askari, Iqbal, Krichene, and Mirakhor, 2012; Mirakhor, Krichene, and Shaukat, 2012). Returns on investment based on real capital productivity can also reassure both sophisticated investors and households that their investments would be driven by fundamentals rather than by speculation. This would encourage participation and increase trust in financial markets. Further, equity participation securities would promote financial inclusion and provide a hedge against idiosyncratic risks to the public at large.

Promote Equity-Based Crowdfunding to Support Socially Responsible Investment

Crowdfunding is an emerging investment phenomenon that capitalizes on network and trust. According to Ordanini et al. (2011, p. 444), crowdfunding is "a collective effort by consumers who network and pool their money together, usually via the internet, in order to invest in and support efforts initiated by other people or organizations." By having equity-based crowdfunding, it effectively democratizes stock offerings by making stock available to investors online. The recent Jumpstart Our Business Startups (JOBS) Act 2012 in the United States, for example, provides legislative support for equity-based crowdfunding, opening the door for an entirely new industry of funding portals to emerge.

This mechanism is particularly useful to support the development of new ideas and initiatives that cannot be funded by traditional modes of financing, especially in the case of SMEs who assume new role as investors, to obtain financial and/or intangible returns such as social esteem. At the society level, ideas are shared to solve a problem or efforts are pooled to generate an environment that is conducive to exchange, for the benefit of the community (Ordanini et al., 2011). When crowdfunding is used to support socially responsible investment and projects using equity, it fosters trust, participation, and collaboration that yield meaningful social outcomes.

Promote Investment in a Pool of SMEs to Enhance Stock Market Access and to Diversify Risk

Sheng and Singh (2013) recommend establishing Islamic stock markets initially in a few Muslim countries on a national basis, rather than centralizing liquidity through sheer scale in the form of "mega-markets." In so doing, focus should be placed on the financing needs of the financially excluded,

especially the SMEs, which are the propellers of growth in many countries. A strong (social) network of SMEs can be formed at several levels to achieve the optimal volume, liquidity, and scale in tapping the stock market. Risk is shared and diversified at two levels, first, the pooling of SMEs itself, and second, the investment in the pool of SMEs by investors through the stock market. Special incentives, such as tax exemption or rebate, can be provided for SMEs to establish networks and trade associations in order to participate in the stock market. Likewise, incentives may also be provided for those investors who invest in such stocks, particularly when the market is still in its embryonic stage.

Fourth Dimension: Reputational Intermediaries

Strengthen the Oversight of Reputational Intermediaries to Reinforce Self-Regulating Behaviors

Reputational or trust intermediaries are institutions such as accounting firms, investment banks, news media, law firms, *Shari'ah* boards, and stock exchanges who can credibly assure information quality of particular securities and reduce information asymmetry in securities markets. Reputational intermediaries are repeat parties who will suffer from reputational damage and loss of trust if they falsify information. Initiatives that aim to strengthen and oversee these intermediaries are important so as to reduce information asymmetry, reinforce self-regulating behaviors, and instill accountability, particularly in cases where regulation does not explicitly impose sufficient accountability. On this premise, the following six initiatives can be recommended for implementation.

First, as indices provide valuable information that is reflective of a firm's performance, regular and reliable trust indices that measure the level of trust toward reputational intermediaries, firms, stock exchanges, and regulators can serve as a natural self-monitoring measure. An excellent example is the recently developed Chicago Booth/Kellogg School Financial Trust Index (Financial Trust Index) that measures the confidence of Americans in private institutions. There are also cross-country trust and credibility surveys such as the Edelman Trust Barometer, which is an annual exploration of trust in institutions, industries, and leaders worldwide. The Barometer examines trust in non-government organizations (NGOs), media, government, and business in a sample of 26 countries, and identifies a variety of factors beyond economic performance, namely, industry category, nationality or location of headquarters, and size, that contribute to trust in business.

Building on these existing indices, future trust indices can be formed to measure the level and progress of trust toward (i) reputational intermediaries; (ii) firms that are listed on the stock exchanges; (iii) stock exchanges; and (iv) regulators of stock exchanges. It is expected that financial trust indices will be an important indicator of financial stability, governance, and performance, in addition to traditional prudential indicators.

Second, the creation of second-tier reputational intermediaries in the form of voluntary or mandatory self-regulatory organizations (SROs) can vouch for the first-tier intermediaries, as advocated by Black (2001).[6] Examples of SROs include the New York Stock Exchange and the National Association of Securities Dealers. In the Islamic financial industry, the recently established Association of *Shari'ah* Scholars in Islamic Finance, a United Kingdom-registered charity, acts as a self-regulating professional association that would work toward developing a unified set of standards and qualifications including a code of best practice for the industry of *Shari'ah* advisory globally.[7]

Third, industry social capital and ethics groups or bodies can be created to collectively drive, oversee, and coordinate social capital and ethics development across the financial services industry. Membership of the body can be drawn from the industry, particularly reputational intermediaries, regulatory agencies, academic institutions, NGOs, and intellectuals. Such bodies can foster greater strategic focus, coordination, and collaboration to develop social capital and ethics for the financial sector.

Fourth, issuance of shares on local instead of national stock markets so that shareholders and directors are known to one another and default on implicit obligations would entail financial as well as social costs. Large and impersonal public stock markets are often characterized by a more distant relationship between investors and corporations. It is easier for the moral dimension to be eroded when the human relationship is more distant (Sheng and Singh, 2013).

Fifth, the inclusion of prominent people with strong and trustworthy reputations on the boards of firms to monitor ethical performance can help to sustain trust relations. Mayer (2008) emphasized such need by drawing lessons from the role of business coordinators in the Japanese financial industry at the beginning of the twentieth century. Sixth and finally, there is a need to strengthen business and law schools to produce many of these reputational intermediaries. Firms should be encouraged to provide regular training to employees in ethics and trust relations from graduate level to senior management level in order to instill a sense of ethical and trust sensitivity, particularly in financial transaction.

Table 8.1 Summary of Recommendations

Key Dimensions	*Broad Recommendations*	*Specific Initiatives*
A. Principles and values	1. Adopt and implement ethical principles that underpin the stock market.	a. Adopt and implement well-recognized ethical principles, integrity measures, and voluntary codes of ethics that govern financial activities. b. Make public declaration or corporate pledge to advocate the values and principles that stock exchanges and firms stand for.
B. Trust-reinforcing regulation	2. Institute trust-reinforcing regulation to facilitate the development of relationship based on responsibility and mutuality.	a. Develop and maintain constructive dialogue between regulator and regulated firm on respective duties and expectations in interpreting and applying principles-based regulation. b. Adopt educative, advisory approach to supervision and enforcement, as well as encourage senior management of firms to be more closely involved in developing business objectives in line with regulatory aims.
C. Investment opportunity and infrastructure	3. Implement recommendations of the Kuala Lumpur Declaration. 4. Promote equity-based crowdfunding to support socially responsible investment. 5. Promote investment in pool of SMEs to enhance stock market access and to diversify risk.	a. Finance government's development budget through equity participation securities that can be traded in the retail market. b. Develop regulatory framework and introduce incentive to protect and spur equity crowdfunding activities and SMEs pool investment. c. Enhance market education in equity crowdfunding and SMEs pool investment. d. Create community network comprising various stakeholders to facilitate coordination and cooperation in equity crowdfunding and pooling of SMEs.

D. Reputational or trust intermediaries	6. Strengthen the oversight of reputation intermediaries to reinforce self-regulating behaviors. 7. Enhance transparency and openness of stock market and business practices of reputational intermediaries.	a. Develop regular and reliable trust indices of stock exchanges, firms, and reputational intermediaries to serve as a self-monitoring measure. b. Create a multiple reputational intermediaries system by enhancing voluntary and mandatory self-regulatory organizations and imposing sufficient risk of liability to investors on reputational intermediaries. c. Establish industry social capital and ethics bodies to collectively drive, oversee, and coordinate social capital and ethics development across the financial services industry. d. Issue shares on local stock markets where shareholders and directors are known to one another and default on implicit obligations would entail financial as well as social costs. e. Include prominent people with strong and trustworthy reputations onto the boards of firms to monitor performance. f. Invest in human capital to produce competent, trustworthy, and ethical reputational intermediaries by investing in the establishment of world-class business and law schools, as well as encouraging firms to provide regular training to employees in ethics and trust. g. Promote sustainability reporting to improve firms' reputation and to integrate with local and global communities.

Enhance Transparency and Openness of Stock Market and Business Practices of Reputational Intermediaries

Policies that enhance stock market transparency can reduce the negative effects of low trust and induce stockholding among households (Georgarakos and Pasini, 2011). Transparent processing can also help to address problems of "dark" social capital, which give rise to corruption norms (Graeff, 2009). Hence, amid the many reforms in the financial markets demanding for enhanced disclosure, sustainability disclosure is highlighted in this chapter as one of the best practices recently employed by firms worldwide. According to the Boston College Center for Corporate Citizenship and Ernst & Young 2013 study, governments or stock exchanges of 33 countries have required or encouraged some level of sustainability reporting as of 2012. At least 44 percent of capital worldwide is in exchanges that either mandate or encourage reporting (see table 8.1).

Conclusion

Building a trustworthy and ethical stock market is a big undertaking (Stout, 2010, p. 521) as it entails concerted effort from various stakeholders and huge amounts of resources. Building social capital is as difficult to do as social capital is to define. It is precisely because of this challenge that proposals to develop social capital in stock markets are meaningful. Seven broad recommendations and 15 specific initiatives within a four-dimensional framework have been proposed in this chapter to fill the gap. A web of multipronged initiatives that is mutually reinforcing is desired, considering the multifaceted dimensions of social capital and the various possible transmission channels by which social capital influences Islamic finance.

Finally, contractual design in financial markets as a formal legal institution may have an impact on financial stability, along with the informal institutions of social capital and trust. The prevailing contractual forms in modern financial markets facilitate diversification through passing on risks to many counterparties down the chain. On the other hand, risk sharing under the rubric of Islamic contracts rests on having "skin in the game" until uncertainty is resolved and profits or losses are realized. Developing modern contractual forms that enable risk sharing may improve financial stability and reinforce trust in financial transactions by eliminating, to a great extent, the moral hazard problems emanating from asymmetric information.

CHAPTER 9

Financial Inclusion: Implications for Public Policy

Introduction

A growing body of evidence suggests that financial development and improved access to finance (also referred to as financial inclusion) is likely not only to accelerate economic growth but also to reduce income inequality and poverty in a country. Despite the essential role played by financial services in the progress of efficiency and equality in a society, 2.7 billion people (70% of the adult population) in emerging markets still have no access to basic financial services, and a great many of the them come from countries with predominantly Muslim populations (Demirgüç-Kunt, Beck, and Honohan, 2007). In conventional finance, financial access is especially an issue for the poorer members of society, including potential entrepreneurs. They are commonly referred to as "nonbanked" or "unbankable," and in the case of potential entrepreneurs, they invariably lack adequate collateral to access conventional debt financing. While access to finance may be important for economic growth, the private sector may not be willing to provide financing to some areas or some segments of the economy because of the high cost associated with credit assessment and credit monitoring and because of the lack of acceptable collateral.

Conventional finance has developed mechanisms such as microfinance, SME finance, and microinsurance to enhance financial inclusion. Conventional techniques have been partially successful in enhancing access, but are not without challenges (see Box 1). The core principles of Islam place great emphasis on social justice, inclusion, and sharing of resources between the haves and the have-nots. Islamic finance addresses the issue of financial

inclusion from two directions: one by promoting risk-sharing contracts that provide a viable alternative to conventional debt-based financing; and the other through specific instruments of redistribution of wealth in society. Both risk-sharing financing instruments and redistributive instruments complement each other to offer a comprehensive approach to enhance financial inclusion, eradicate poverty, and build a healthy and vibrant economy. With these instruments, the poor are not forced to rely on their low income, or cope with an absence of income, as they endeavor to maintain a decent level of subsistence living for their families. Increasing access to financial services holds the promise of reducing poverty and improving development outcomes by enabling the poor to smooth consumption, start or expand a business, cope with risk, and increase or diversify household income.

Why Financial Inclusion Matters?

Many poor families in the developing world have limited access to formal financial services, including credit, savings, and insurance. They rely instead on a variety of informal credit relationships with moneylenders, relatives, friends, or merchants. Traditionally, banks and other formal financial service providers, including insurance companies, have not considered the poor segment of the population a viable market, and penetration rates for formal financial services in developing countries are extremely low.

Given the significance of financial inclusion, a developed financial sector in a country can play a critical role in promoting growth and in reducing poverty by enabling the poor to borrow to finance income-enhancing assets, including human assets such as health and education, and to become microentrepreneurs to generate income and ultimately move out of poverty (DFID, 2004). In addition, financial sector development could enable the poor to channel savings to the formal sector: that is, to maintain bank accounts and other saving schemes and insurance, which would allow the poor to establish a buffer against future shocks, thus reducing their vulnerability and exposure to adverse events that otherwise would put undue strain on future income prospects.

The main problems in delivering credit are linked to risks arising out of information asymmetries and the high transaction costs of processing, monitoring, and enforcing small loans, leading to an increase in the break-even interest rates for these loans. These asymmetries can result from adverse selection (the inability of the lender to distinguish between high-risk and low-risk borrowers) or from moral hazard (the tendency for some borrowers to divert resources to projects that reduce their likelihood of being able to repay the loan, and the inability of the lender to detect and prevent such

behavior). Depending on the specific information asymmetry and the ability of potential borrowers to pledge collateral, lenders may try to use the interest rate or a combination of the interest rate and collateral as a screening and sorting mechanism. If collateral is not available, lenders are forced to rely only on the interest rate, but in doing so, they risk excluding, or crowding out, safe borrowers.

The experience with conventional microcredit or microfinance has been mixed, as there is growing consensus that the expectations were overestimated and there are serious challenges in achieving sustainable impact on poverty alleviation. Although microfinance has been touted in the literature, there is now empirical evidence suggesting that while these contracts help reduce poverty in low income countries by providing small un-collateralized loans to poor borrowers, there is no evidence to suggest that microfinance contracts allow businesses to grow beyond subsistence. Aside from high interest rates that reduce available resources, it is thought that the structure of typical microfinance contracts have features such as peer monitoring and joint liability designed to reduce the risk of moral hazard, which create tension between risk taking and risk pooling. The latter, allows greater opportunity for informal risk sharing because of repeated interaction among the borrowers. Although joint liability and peer monitoring help repayment of loans, they do not reward successful borrowers and thus discourage risk taking and entrepreneurial development (Amendariz De Aghion and Morduch, 2005; Chowdhury, 2005; Fischer, 2010). In addition to saving mobilization and encouraging microfinance, better financial access through microcredit and insurance markets in rural and poverty-stricken regions are promising avenues for public policy to develop risk sharing and allow households to cope with risk.

Box 9.1 Issues with Conventional Approach to Financial Inclusion

The experience with micro-credit or micro-finance has been mixed as there is growing consensus that the expectations were overestimated and there are serious challenges in achieving sustainable impact on poverty alleviation. The key challenges facing micro-finance industry are summarized below:

a) *High interest rates*. Conventional micro-finance institutions are often criticized for charging very high interest rates on the loans to poor. These high rates are justifies due to high transaction

costs and high risk premium. However, this imposes undue stress on the recipient to engage in activities which produce returns higher than the cost of funding which may not be possible in many cases.

b) *Not every poor person is a micro-entrepreneur*. Merely making the capital accessible to poor is not the solution without realizing that not every poor or recipient of micro-credit has the skills set or the basic business sense to become an entrepreneur.
c) *Diversion of funds.* There are chances that the funds will be diverted to non-productive activities such as personal consumption. In some cases, micro-credit may lead the poor into a circular debt situation where borrowing from one micro-lender is used to pay off the borrowings from another lender.
d) *Large-scale fund mobilization*. While some of micro-finance institutions (MFIs) have had a significant impact on poverty, others have been less successful, making it difficult because MFIs generally cannot mobilize funds on a large scale and pool risks over very large areas in the way that more traditional, formal financial institutions can.
e) *Product design*. The financial services needs of poor households may require different product features with different payment and delivery structures as opposed to typical debt based lending to micro-borrower.
f) *Absence of private sector participation*. As mentioned above, due to limited supply, coverage, products set, and funding by the informal, semi-formal and non-commercial sectors, effectiveness of MFIs is often compromised.

Source: Iqbal and Mirakhor (2013).

One of the leading indicators of access to finance is the existence of formal bank accounts or receiving credit from a financial institution. Although, degree of access to finance is a serious issue for all developing countries, the problem is more severe for Muslim countries. In a sample of 41,922 individuals in 39 countries with Muslim populations between 5 and 95 percent of total population, self-reported Muslims are less likely (i) to have a formal account, and (ii) to save at a formal financial institution, after controlling for individual characteristics and country fixed effects.[1] Figure 9.1 compares use of formal bank accounts between Muslims and non-Muslims. Low level of access can be attributed to several factors including absence of Islamic finance.[2]

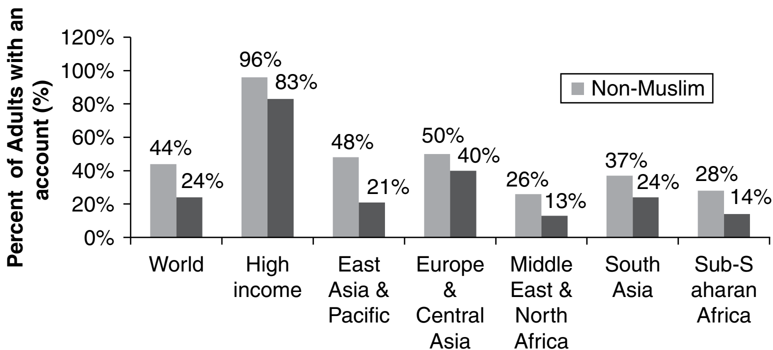


Figure 9.1 Differences in Financial Inclusion between Muslims and Non-Muslims, 2011.

Note: The difference between Muslims and non-Muslim is statistically significant at 1% level. Analysis is based on 64 countries.

Source: Global Financial Inclusion (Global Findex) Dataset. Mohseni-Cheraghlou (2014).

The Concept of Financial Inclusion in Islam

The central economic tenant of Islam is to develop a prosperous, just, and egalitarian economic and social structure in which all members of society can maximize their intellectual capacity, preserve and promote their health, and actively contribute to the economic and social development of society. Economic development and growth, along with social justice, are the foundational elements of an Islamic economic system. All members of an Islamic society must be given the same opportunities to advance themselves; in contemporary terms, there must be a level playing field, which in the Islamic view includes access to the natural resources provided by God. For those for whom there is no work and for those that cannot work (including the handicapped), society must afford the minimum requirements for a dignified life by providing shelter, food, health care, and education.

Islam emphasizes financial inclusion more explicitly. However, two distinct features of Islamic finance differentiate its path of development significantly from the conventional financial model: the notions of risk sharing, and redistribution of wealth. According to Islamic perspective, risks are mitigated in various ways. First, the economic system is a rule-based system, which has provided rules of behavior and taxonomy of decisions: actions and their commensurate payoffs based on injunctions in the Qur'an. Complying with these rules reduces uncertainty. Clearly, individuals exercise their freedom in choosing to comply with these rules—or not.

That rules of behavior and compliance with them reduce uncertainty is an important insight of the new institutional economics. Rules reduce the burden on human cognitive capacity, particularly in the process of decision making under uncertainty. Rules also promote cooperation and coordination (Mirakhor, 2009). Second, Islam has provided ways and means by which those who are able to mitigate uncertainty by sharing the risks they face by engaging in economic activities with fellow human beings through exchange. Sharing allows risk to be spread and thus lowered for individual participants. However, if a person is unable to use any of the market means of risk sharing because of poverty, Allah (swt) has ordered a solution here as well: the rich are commanded to share the risks of the life of the poor by redeeming their rights derived from the Islamic principles of property rights (Iqbal and Mirakhor, 2011; Mirakhor, 1989). Islam ordains risk sharing through three main venues:

- contracts of exchange and risk-sharing instruments in the financial sector
- redistributive risk-sharing instruments through which the economically more able segment of the society share the risks facing the less able segment of the population
- inheritance rules specified in the Qur'an, through which the wealth of a person at the time of death is distributed among current and future generations of inheritors

The Islamic system advocates risk sharing in financial transactions, and a financial system based on risk sharing offers various advantages over the conventional system based on risk shifting. Use of risk-sharing instruments could encourage investors to invest in sectors such as micro, small, and medium enterprises (MSMEs), which are perceived as high-risk sectors. Given an enabling environment, investors with an appetite for taking on such higher risk will be attracted to providing capital for these sectors. This argument can be supported by growing the market for the private equity. If funds for these sectors become more available, financial inclusion in the system could be expected to increase.

The second set of instruments meant for redistribution are used to redeem the rights of the less able in the income and wealth of the more able. Rules of redistribution ensure that those unable to benefit by participating directly in production and consumption in the market, through a combination of their labor and their right of access to resources provided by the Supreme Creator for all humans, are redeemed their rights through *zakah*, *khums*, *sadaqat*, *waqf*, and other redistributive mechanisms. Once

these rights have been redeemed out of the income and wealth of the more economically able, the latter's property rights to the remaining income and wealth are held inviolable. These rights, however, expire at the point of passing of a person. At death, the person loses the right to allocate his/her wealth as he/she pleases except on one-third of income, which believers can use to make *waqf*, *sadaqat*, or other transfer contributions as the person wishes. The remainder is broken up and must be distributed among a large number of persons and categories according to strict rules of allocation specified in the Qur'an (see 4:1–13).

Box 9.2 Key Redistributive Instruments in Islam

Sadaqah **(recommended contributions)**

The *sadaqah* is intended for redeeming the rights of less privileged in the society. *Sadaqat* is the plural of the term *sadaqah*, a derivative of the root meaning truthfulness and sincerity. *Sadaqat* are a very important redistributive institution in Islam for two reasons: first, they operationalize the truthfulness of one's belief in Allah (swt) in voluntarily giving of one's income and wealth; second, the importance of this institution derives from the fact that the receiver is not the person to whom *sadaqat* is given, but Allah (swt).

Zakah **(mandatory levy)**

Zakah is one of the pillars of Islam and is ordained to mobilize funds for the welfare of the poor. *Zakah* is considered a component of *sadaqat*, but it has been given a special status in the Qur'an because it is ordained with obligatory prayer in at least 20 verses (see, for example, chapter 2, verse 110). Moreover, its collection was enforced by the governments in early Muslim history following the passing of the Messenger.

Qard-al-hassan **(benevolent loan free of any charge)**

Qard-al-hassan is a loan mentioned in the Qur'an as "beautiful" (*hassan*). It is a voluntary loan, without any expectation by the creditor of any return on the principal. In addition, while the debtor is obligated to return the principal, the creditor, of his own free will, does not press the debtor for an exact timing of its return. Allah (swt) promises multiple returns to the "beautiful loan."

***Waqf* (endowment)**

A *waqf* is a trust established when the contributor endows the stream of income accruing to a property for a charitable purpose in perpetuity. In addition, legality of cash *waqf* (endowing the future income stream of a cash trust instead of a physical property) has been recognized in most Muslim countries.

Contrary to common belief, these are not instruments of charity, altruism, or beneficence, but instruments of redemption of rights and repayment of obligations. The Qur'an considers the more able as trustee-agents in using these resources on behalf of the less able. In this view, property is not a means of exclusion but inclusion, in which the rights of those less able to the income and wealth of the more able are redeemed. The result would be a balanced economy without extremes of wealth and poverty. The operational mechanism for redeeming the right of the less able in the income and wealth of the more able are the network of mandatory and voluntary payments such as *zakah* (a 2.5% levy on asset-based wealth), *khums* (a 20% levy on income), and payments referred to as *sadaqah* (recommended contributions).[3]

Unfortunately, the full potential of *qard-al-hassan* institution to mobilize substantial resources for the empowerment of the economically weak or dispossessed has not been realized. Much has been written about microfinance and its potential to reduce poverty. However, it is an irony that institutions of microfinance are growing rapidly in Muslim countries, but it is seldom realized that Islam's own institution of *Qard-al-hassan* is a more effective means of providing credit to those who cannot access formal credit channels.

The third dimension of distributive justice in the institutional scaffolding of an Islamic society is the institution of inheritance, which is crucial in the intergenerational justice framework envisioned by the Law Giver. Rules governing production, consumption, and distribution assure conservation of resources for future generations

Moheildin, Iqbal, Rostom, and Fu (2011) estimate the resource shortfall to fill the poverty gap through *zakah* collection based on domestic and remittance contributions to determine whether the *zakah* collection is sufficient to cover the estimated shortfall. Using this estimation, they find supporting evidence that 20 out of 39 OIC countries can actually alleviate the economic hardships of the poorest, those living with income under $1.25 per day, out of the poverty line simply with *zakah* through domestic collection and remittances. This does not mean that it is a totally new source of

poverty reduction mechanism using *zakah* as it is already distributed to the poor in several Islamic countries, but one can make an argument that proper collection, streamlining, accountability, prioritization, and allocation to productive activities can have significant impact on enhancing access and opportunity for the poor segment of the society, which will ultimately lead to reduction in poverty.

Another study, IRTI (2014 provides other evidence of whether and to what extent the resource shortfall required for poverty alleviation may be met by potential *zakah* collection. Using different methods of zakah calculations and applying different methodologies ranging from conservative to liberal estimates, this study shows resource shortfall as a percentage of the annual GDP for incomes below $1.25 a day (extreme poverty) can be covered by the most conservative estimates of zakah in case of Malaysia, Pakistan, and Indonesia. However, resource shortfall for incomes below $2 per day (poverty line) is covered by *zakah* in Malaysia and Indonesia but not for other countries. Finally, the resource shortfall in the case of Bangladesh is much higher than its potential *zakah* collection, while in the case of other Muslim countries in the study, resources needed for poverty alleviation can easily be provided by potential *zakah* collection.

It is an undeniable fact that a number of Muslim countries are faced with the extremes of poverty alongside unimaginable wealth. Such an outcome is in total contradiction to the teachings of Islam, which promotes a market system that would reduce risk and increase trust and cooperation in order to enhance economic growth and development. However, unlike the Western model that supports rapid growth as the engine to alleviate poverty, Islam recognizes human frailties and recommends a number of instruments to alleviate poverty and improve income and wealth distribution. Islam differentiates among those with low incomes because the less fortunate do not all face the same roadblocks and hurdles in life. As a result, Islam recommends different modalities and instruments to address the specific difficulties faced by members of society. Islam takes this enlightened and targeted approach to poverty alleviation.

The poor need transfer payments, as they invariably cannot earn sufficient income for a dignified life; such transfers are a right and not charity. The recipient must not feel beholden to such transfers. These transfers must come from obligatory payments (such as *zakah*) as well as from voluntary post-distribution transfers. Here we must stress that all members of society (including the future generations) have equal rights to the natural resources that *Allah* (swt) has bestowed on human beings. Thus, the benefits of these must be equally shared among all the members of society. There are those who are at or below the poverty line and cannot find

employment; their need is sufficient income for subsistence and the ability to improve their lives; the latter endeavor (besides government provision of quality education/training) would require interest free loans and risk sharing avenues for individuals to invest in improving their lives. Lastly, there are those that are poor relative to the very fortunate members of society. Here, Islam again preaches a level playing field and risk sharing investment opportunities as the preferred instruments. In the event that there is a significant chasm between the rich and the poor, Islam calls for higher voluntary transfers from the rich to the poor and state taxation and redistribution. Thus, we see that Islam takes a three-pronged approach to poverty alleviation: (i) efficient institutions based on rules to enhance economic growth and development, (ii) targeted instruments for the various categories of less fortunate humans, and (iii) sharing by the more fortunate members of society.

Figure 9.2 summarizes the Islamic approach to poverty alleviation by enhancing financial inclusion and access to finance. As mentioned earlier, there are two pillars that constitute the framework for financial inclusion. One pillar consists of core principle of risk sharing, which is promoted through permitted contractual agreement for undertaking business transactions as well as through the concept of risk sharing with less fortunate members of the society through self-help and exhibitions of solidarity during difficult and unexpected periods of economic distress. The second pillar consists of instruments of distribution and re-distribution as explained above. These two pillars can be combined in varying degrees, depending on

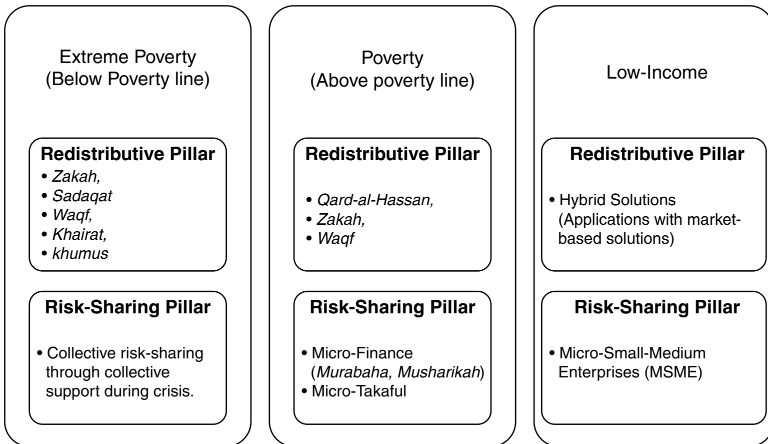


Figure 9.2 Targeted Approach to Enhance Inclusion.

the problems faced by those without access, to support different segments of the society who are denied access to finance. For example, there is segment of society facing extreme poverty, that is, those who are below the poverty line will be most eligible for receiving financing and financial assistance through the redistributive pillar rather than engaging in risk sharing in business transactions. However, during an economic crisis or natural calamity, fellow Muslims are expected to go beyond their minimum prescribed contribution and share their wealth and income in the form of voluntary contributions to alleviate the impact of such unforeseen economic risks for the less fortunate. For those who face the pains of poverty but are above the poverty line, the objective would be to use the redistributive instruments to provide sustainability, basic needs, and training to prepare them for active participation in economic activities, and use risk-sharing instruments to develop micro-finance and micro-insurance (*takaful*) schemes. Research has shown that such a combination could be a catalyst for getting people out of poverty and into the mainstream economy. Finally, there is a third segment of those with low-incomes, namely those comfortably above the poverty line and not facing the daily pangs of poverty, would have less need for redistributive instruments and would be good candidates for risk-sharing instruments to develop small and medium enterprises (SMEs) to provide higher levels of sustainable income. There have been suggestions made that in order to stimulate growth through the micro- and SME sectors, financial engineering can be used to develop hybrid solutions where some of re-distributive instruments are combined with risk-sharing instruments to find market-based financing solutions.[4]

Islamic finance highlights the significance of profit-sharing finance, which can have positive economic effects, similar to direct investment leading to strong economic development.[5] Promotion of entrepreneurship and risk sharing are two key features of Islamic finance and, given that SMEs require both encouragement to entrepreneurship and risk sharing, there is a natural fit for Islamic finance and SME financing. Islamic SME finance concepts can be seen to provide a comprehensive asset-based economic and equitable model that fulfills expectations such as social justice and human centered sustainable development. Tools required for SMEs' finance are not found to be different from the mainstream forms for Islamic financing in general. The necessary and sufficient conditions for full compliance with *Shari'ah* should be satisfied in terms of risk sharing (lenders and borrowers share profits and losses), in addition to the fact that return on capital should not be fixed.[6]

Financing modes that best suit SMEs include *mudarabah* (principle/agent) and *musharakah* (equity partnership). Both forms serve a useful

purpose: they provide investors with high liquidity at low risk. Islamic banks were recently encouraged to provide more profit-sharing finance and are developing arrangements to reduce risks and the costs of funding. Many innovative ways have been suggested including setting up specialized institutions, as well as introducing new consistent products with the aim of reducing risks through pooling the funds and establishing *Wikalah* agencies to perform monitoring and to minimize moral hazard. However, *Shari'ah* compliant SME finance is not limited to these instruments; innovative approaches tend to involve more comprehensive financing schemes that mix the aforementioned saving as a tool for insurance hedging against future turbulence. *Ijarah* has been one of the most widely used forms of financing SMEs as it reduces the startup cost in addition to providing security to lenders.

Islamic finance provides a comprehensive framework to enhance financial inclusion by promoting microfinance, SME financing, and micro-insurance structured on the principles of risk sharing, and through Islam's redistributive channels, which are grossly underutilized in Muslim countries. Instruments offered by Islam have strong historical roots and have been applied throughout history in various Muslim communities. Islam offers a rich set of instruments and unconventional approaches, if implemented in a true spirit can lead to reduced poverty and inequality in Muslim countries plagued by massive poverty. Policy makers in Muslim countries who are serious about enhancing access to finance or "financial inclusion" should exploit the potential of Islamic instruments to achieve this goal.

Public Policy Implications

Analysts suggest that public policy and strengthened institutional framework in developing countries can go a long way to enhancing financial inclusion. Examples of policy improvements include better corporate governance, including supervision, monitoring, and management, which can reduce damage to households due to economic and financial mismanagement; achieving and sustaining economic and political stability; and developing the financial sector. In terms of institutional framework, clear and secure property rights; contract enforcement; and the securing of trust among people and between government, citizens, and other institutions can reduce risk, uncertainty, and ambiguity; strengthen social solidarity; bring private and public interests into closer harmony; and ensure coordination to improve risk sharing (Mirakhor, 2009, 2010). Public policy could also help in mobilizing the savings of poor households and thus reduce their vulnerability to income shocks.

With regard to microfinance, as discussed, there is empirical evidence suggesting that while these contracts help reduce poverty in low-income countries by providing small, uncollaterized loans to poor borrowers, there is no evidence to suggest that those contracts allow businesses to grow beyond subsistence. High interest rates can reduce available resources Moreover, the structure of typical microfinance contracts have features that can create tension between risk taking and risk pooling, such as peer monitoring and joint liability designed to reduce the risk of moral hazard risk. Risk pooling allows greater opportunity for informal risk sharing due to repeated interaction among the borrowers. Joint liability and peer monitoring are common to most microfinance programs; small groups of borrowers become responsible for one another's loans, and all members are held responsible for the consequences of one member's failure to repay the loan, but do not reward other members in case of success. This arrangement can have the unintended effect of discouraging risk taking and dampening the development of entrepreneurial impulses among borrowers (Amendariz De Aghion and Morduch, 2005; Chowdhury, 2005; Fischer, 2010).

In addition to mobilizing savings and encouraging microfinance, better access to the financial sector by developing microcredit and insurance markets in rural and poverty-stricken regions are promising ways by which public policy can assist the development of risk sharing to allow households to cope with risk.

There are powers available to a government that the private sector does not have. For one thing, in its capacity as the risk manager of the society and as its agent, government can promote risk sharing broadly. It can reduce information problems, such as moral hazard and adverse selection, through its potentially vast investigative, monitoring, and enforcement capabilities. Through its power of implementing civil and criminal penalties for noncompliance, a government can demand truthful disclosure of information from participants in the economy. It can force financial concerns that would attempt to appropriate gains and externalize losses by shifting risks to others to internalize them by imposing stiff liabilities or taxes. Using its power to tax and to control money supply, a government has the significant ability to make credible commitments on current and future financing issues. It can use its power to tax to create an incentive structure for intergenerational risk sharing, whereby the proceeds from taxation of the current income-earning generation are redistributed to reduce risks to human capital of the youth of current and future generations. Without government intervention, individuals are unable to diversify the risk to their most valuable asset: their human capital. The young have significant human capital but insufficient financial capital. For the old, the opposite is the case.

Government as the Risk Manager Promoting Risk Sharing

It could well be argued that in contemporary societies, risk management is the central role of government, and therefore, government is the ultimate risk manager in a society. In most economies, governments play a major role in bearing risks on behalf of their citizens. For example, governments provided social safety net measures and insurance for a variety of financial transactions. The history of economic explanation for government's role in the economy spans more than a century, as economists have attempted to justify the role as being necessitated by the divergence between public and private interests. Some six decades ago, Arrow and Debreu (1954) focused on finding precise conditions under which public and private interests would converge, as envisioned in Adam Smith's conjecture of the invisible hand. The result was the elegant proof that competitive markets would indeed have a stable equilibrium, provided some stringent conditions were met. It was clear, however, that even under the best of actual conditions, markets did not perform as envisioned either by Smith or Arrow-Debreu. Consideration of violations of the underlying conditions spawned a voluminous body of literature on the theory and empirics of market failure. This concept became the starting point of analytic reasoning that justifies government's intervention in the economy to protect the public interest (Stiglitz, 1993).

The reason that contemporary societies implement social safety nets, such as social security, health care, and public unemployment insurance programs, is that individual households face substantial risk over their life span, such as mortality risk, wage and other income-wide risks, and health risks. Because private insurance markets do not provide perfect insurance against all risks, there is said to be a market failure and government intervention is called for to correct it. What has become clear in the wake of the global financial crisis is that even in the most advanced industrial economies, existing social safety nets have become incapable of coping with the adverse consequences of the crisis. Not only has the crisis shaken previous level of confidence in markets, but also nearly all analyses of its causes attribute it to market failure in one dimension or another. This has intensified calls for government interventions to counter the adverse effects of the crisis on income and employment, to strengthen the social safety nets, and to reform the financial sectors. The most important lesson of the crisis has been that people at large carry too large a risk of exposure to massive shocks originating in events that are beyond their influence and control. Hence, attention has been focused on ways and means of expanding collective risk sharing.

Before the recent subprime crisis, it was assumed that government intervention, in the form of activities such as providing social safety nets, public goods, and deposit insurance, was solely for the purpose of addressing various kinds of market failure. While this is a crucial justification for intervention, there is an important dimension of government's role that has not attracted much attention. Many of the steps to provide a social safety net, from a minimal amount in some countries to substantial amounts in welfare states, are also about collective risk sharing. This dimension has been particularly neglected in the analysis of government provision of social insurance and services, in which the sole focus has been on the issue of trade-off between equity and efficiency: the issue at the heart of debates about the roles of the state versus the market.

Need for Developing a Supportive Institutional Framework

As discussed, access to finance is hampered by informational asymmetries and market imperfections, which need to be removed before one can think of enhancing finance. When it comes to developing countries, where the financial sector is not highly developed and the formal financial sector is underdeveloped, it is important that attention be paid to improving institutions critical for financial sector development. Improved access to finance in many developing countries is constrained by an underdeveloped institutional framework, inadequate regulations, and lack of a specialized supervisory capacity. Policy makers need to take steps to enhance key institutions such as the legal, informational, and regulatory institutions in the country.

Regulators should make financial inclusion a priority. Despite the significance of financial inclusion, it is still not a priority for financial regulators in most of the 57 member-countries of the Organization of Islamic Cooperation (OIC). OIC countries need to develop a regulatory and supervisory framework that supports wide financial inclusion based on sound risk management and with sufficient consumer protections. Financial inclusion should be considered as a goal alongside prudential regulation and financial system stability. The survey of financial regulators worldwide concerning financial access (CGAP and World Bank, 2010) found that regions that include financial access in their strategies and mandate their financial regulators to pursue such agendas are also the countries that reform the most. Regulators with a financial inclusion strategy are more likely to have more financial inclusion topics under their purview and more resources and staff dedicated to working on these matters (Pearce, 2010).

Priority should be given to improving financial infrastructure, especially the current credit information system. Core components of the financial

infrastructure such as credit information, investors' rights, and insolvency regimes are essential, irrespective of the type of financing: conventional or Islamic. Deficiencies in financial infrastructure are one of the major obstacles blocking further SME lending in Middle East and North Africa region. The Doing Business Report, as the most comprehensive measurement of business environment faced by SMEs across countries, shows that OIC countries as of 2011 on average rank 118, much lower than the average developing countries (100) in terms of ease of doing business (World Bank, 2011). In addition, OIC countries lag far behind in all four aspects of ease of getting credit: depth of credit information, public credit registry coverage, strength of legal rights, and private credit bureau.

Sharing borrower information is essential to lowering the costs of finance and overcoming information constraints. Lack of access to credit information and the fact that only a small portion of the population has established a credit history (low coverage ratio) are two main features that contribute to financial exclusion in OIC countries, especially for SME financing. Muslim countries interested in enhancing financial inclusion need to improve their financial infrastructure, which will entail expanding the range of collateral, improving registries for moveable assets, and improving enforcement and sales procedures for both fixed assets and movables. Public credit registries should be upgraded. More importantly, private credit bureaus should be introduced; they are capable of significantly expanding coverage and the depth of credit information (Rocha and others, 2011). Improvements in financial infrastructure will reduce the information asymmetry that constrains access to credit and raises the costs and risk of financial intermediation.

Infrastructure conducive to products compliant with *Shari'ah* should be developed. The growth of Islamic microfinance will depend to a large degree on whether financial institutions can develop sufficiently attractive financial products and services that are competitive with conventional products in terms of pricing, transparency, processing time, and burden on the client. *Shari'ah*-compliant microfinance and SME financing is limited in its scope and scale because of lack of knowledge concerning *Shari'ah*-products, absence of accounting and regulatory standards for *Shari'ah*-compliant microfinance, and adequate monitoring and supervisory setups. Integrating *Shari'ah*-compliant products and customer information into the formal financial sector will not only enhance access, but will also help integrate Islamic finance with conventional finance. For example, by bringing borrowers' information to credit bureaus, financial institutions of all types could extend access to new customers, while managing risks and costs more effectively. This will also help *Shari'ah*-compliant financial institutions expand their funding source and enhance their risk-sharing mechanisms,

as institutions that make their clients' credit information available to the public they can establish their reputation much more easily that institutions with a system based an informal credit histories.

Microinsurance should be developed and promoted. There is evidence of a positive causal relationship at the country level between insurance penetration and economic growth. At the individual level, the policyholder benefits from increased access to a wider range of products with increased coverage and greater sustainability; and the partnering insurance company has access into a new market without taking on extensive marketing, distribution, or administration costs. More importantly, the partner-agent model facilitates the pooling of risks between the formal and informal sectors. Despite the success and rapid growth of Islamic insurance (*Takaful*) and the contribution of microinsurance to poverty reduction, micro*Takaful* institutions are still significantly underdeveloped in OIC countries. Like low-income individuals, SMEs are also less covered by insurance services in poorer OIC countries. In the Middle East and North Africa (MENA) region, 34 percent of SMEs in Gulf Cooperation Council (GCC) countries have access to insurance services, compared to only 19 percent of the SMEs in non-GCC countries (Rocha and others, 2011). One major reason for the slow expansion of micro*Takaful* may be linked to the fact that microfinance institutions in populous Muslim countries are less likely to offer insurance services that are *Shari'ah*-compliant (Kwon, 2010). If the policy makers in Muslim countries wish to promote Islamic microfinance and SMEs, these measures need to be complemented by promotion of micro*Takaful,* by designing adequate regulatory frameworks and by providing incentives to insurance carriers to enter into this market. A study by the Islamic Development Bank rightly suggests that *Qard-al-hassan* funds could be used to develop micro*Takaful* capacity in a country, in addition to credit guarantee systems (Obaidullah, 2008). Similarly, *zakah* funds can be utilized to cover the default risk of microenterprises run by poor microentrepreneurs, to build capacity and skills and to reduce operating costs of microfinance and microinsurance. Implementation of such ideas and innovations require development of institutions that support transparent governance to ensure the effectiveness of such mechanisms.

Engagement by the formal sector should be encouraged. Based on the experience of microfinance, the development community is shifting the emphasis away from microcredit institutions to an array of other financial institutions, such as postal savings banks, consumer credit institutions, and—most importantly—the banking system, with the view that this broader approach can lead to overall financial system efficiency and outreach to the entire population. Widening of financial services to the poor

and small enterprises by private sector institutions (particularly commercial banks) in the formal financial sector requires proper incentives and removal of regulatory barriers, without sacrificing promotion of stability or security of the financial system (DFID, 2004).

Institutionalization of Islamic Redistributive Instruments

By institutionalization of Islamic redistributive instruments, we mean building nation-wide institutions and the related legal infrastructure to maximize the effectiveness of these redistributive mechanisms. This institution-building exercise can take place in three steps. The first step is the development of institutions. An institution is nothing more that the legalization of the rules of behavior, and therefore, would require crafting rules pertaining to these instruments as envisioned by *Shari'ah*. The second step would be to establish these institutions and to integrate them with the rest of the economic and financial system. In this process, either existing channels of distribution, such as banks and post offices, can be utilized to interact with the customers, or new means can be introduced, leveraging new technologies. Finally, there should be mechanism to ensure enforceability of rules through transparent means.

The objective of institutionalization of redistributive instruments is to formalize and standardize the operations to facilitate each instrument. For example, for *zakah*, *khairat*, and *Qard-al-hassan*, a formal network of institutions needs to be developed to collect, distribute, and recycle the funds in the most efficient and the most transparent fashion. The use of *Qard-al-hassan* for the microfinance sector should be exploited further. Many of the characteristics of the *Qard-al-hassan*–based funds could be shared by microfinance institutions. Therefore, the infrastructure of the latter can be utilized to effectively achieve the objectives of the former. While it is difficult to explain why this very important Islamic redistributive institution is so underutilized in the Islamic world—and requires some research effort by sociologists and economists to investigate the behavioral causes—one can speculate that lack of knowledge, in the first instance, and concerns about safety and security of the contributed principal, in the second, may be important factors. The latter could be addressed by a credible Islamic financial institution by issuing financial instruments that would provide safety and security to the contributors. The Islamic financial institution could also instrumentalize the asset side of its balance sheet. Furthermore, it could provide *Qard-al-hassan* resources to existing microfinance institutions to reduce the burden of their interest rate charges on their borrowers. How would such an Islamic financial institution cover its administrative

costs? There are two possible sources. The first is by investing a fraction of the mobilized resources. The second is through profit sharing via *Qard-al-hassan* resources. The Islamic financial institution could invest in productive investment projects of young entrepreneurs that have no access to formal credit markets.

Policy makers need to pay attention to this set of tools to enhance access. They should encourage development of such institutions through development of the legal framework to protect the institutions, donors, and stakeholders, and to ensure transparent governance. With well-developed redistributive institutions, supplemented by formal and semi-formal sector financial institutions, a more effective approach to poverty reduction could be undertaken.

Financial Engineering

Financial innovation and financial engineering have changed the face of the global financial landscape in the last three decades. Although, some of the innovations have been criticized and have been the source of volatility in the markets, their positive contribution cannot be denied. There is no reason why financial engineering cannot be used in the area of financial inclusion and to enhance financial access. One way would be to securitize assets generated by microfinance and SMEs. *Sukuk* (Islamic bonds) are a successful application of securitization. Along the same lines, a marketable instrument could be introduced to provide funding for much-needed microfinance and SME financing. With the introduction of securitization of microfinance and SME financing, financial institutions would be able to pool their assets and issue marketable securities. In this way, they could share risks with the market, as well as free up the capital for further mobilization of microfinance and SME financing.

Several researchers have suggested ways to formalize and institutionalize Islamic modes of redistribution through an integrated approach, by applying financial engineering and by combining different modes (see Modeildin, Iqbal, Rostom, and Fu, 2011 for details). These approaches include establishing a nonprofit financial intermediary based on the *Qard-al-hassan* model or establishing microfinance institutions based on hybrid of *zakah*, *awqaf*, and *sadaqat*. The institution of *awqaf* (trust or endowment) was once a very well established institution in Muslim societies, but with gradual decline, the institution has lost its effectiveness. Policy makers need to encourage revival of these institutions and should encourage financial engineering to create hybrid solutions whereby Islam's redistributive instruments are mixed with market-based instruments to address the issue of sustainable development.

Consider an example of financial engineering where a market-based solution is combined with a redistributive instrument to strengthen its viability in the market. As argued, securitization could be used to securitize assets in the micro, small, and medium enterprise (MSME) sector and to mobilize funding from the market. However, given the perception of high risk for such undertakings, and the lack of credit enhancement tools—which are a standard feature in conventional securitization—both the originators and structurers shy away from securitization of such portfolios. In addition to conventional credit enhancement techniques through tranching, sufficient funds could be raised based on *qard al-hassan* to provide an additional buffer of security to the investors against the credit risk. If the securitized portfolio consisted of microlending, a default by the microborrower could be covered by the *Qard al-hassan*, which could be forgiven if a business loss occurs despite the earnest efforts of the borrower.

Similarly, issuing an equity instrument on the portfolio of domestic development projects has the added advantage of improving domestic income distribution. Provided that these instruments are issued in low denominations sold in the retail market, these instruments could serve households and firms in their attempts to hedge their idiosyncratic risks. In essence, they would be macro-market instruments similar to those proposed by Shiller (1993, 1999, 2004). These instruments could anchor the development of the high-end of the risk spectrum. Islamic financial institutions should explore innovative techniques, such as these, further. Policy makers should aim to develop a financial system where financial innovation is encouraged, but where there are checks and balances as well as incentive mechanisms to avoid misuse of financial engineering. An enabling environment and the supporting institutions are prerequisites, and should be developed before such innovations could take place.

In conclusion, it is important to stress that mal income distribution and poverty alongside extraordinary wealth are common features of most OIC countries. This is in total contradiction to Islamic teachings. Moreover, Islam has provided mechanism and instruments for addressing these societal ills. While policies that promote economic growth are encouraged through a rules-based system, economic growth and trickle-down equality does not necessarily result in a society that is just. Islam recognizes that the Creator did not create humans with the same inherent abilities, that luck and circumstances (and unfortunately corruption and cronyism) play a part in the outcome of our daily lives and human beings may be selfish in their obligations towards the less fortunate. Thus, Islam has given humans a variety of instruments—*Zakah, Khums, Waqf, Qard-al-Hassan*, voluntary transfers and numerous risk-sharing financial instruments—that would alleviate all

manifestations of poverty, protect the rights of the less fortunate, improve income and wealth distribution, enhance economic growth and development, and create societies that are harmonious and just. Unfortunately, reality has turned out to be very different from theory. Individual Muslims have not adhered to the divine teachings. In such a case, the state can, and should, step in to collect mandated *zakah* and *khums* payments, and even impose taxes to achieve a just solution. However, before a state (and rulers) contemplates such actions it must itself first adhere to two fundamental requirements: it must eliminate corruption and cronyism and develop efficient institutions that underpin sustainable economic growth and include an incorruptible collection and redistribution of mandated transfers. In the absence of these two prerequisites, Muslims would be further oppressed by what are unjust societal organizations.

CHAPTER 10

Environmental and Natural Resource Policies

Introduction

The first principle of property rights in Islam is that Allah (swt) is the ultimate owner of all things in His creation. The most important of the property rights principles have been presented earlier and are summarized here that: (i) the Creator has ultimate property rights in all things; (ii) Allah (swt) has created resources for all humankind of all generations and no one can be denied access to, or be deprived of, these resources; (iii) work (and voluntary transfer) is the only means by which individuals gain rightful possession of property when they combine their physical/mental abilities with natural resources to produce a product; (iv) since natural resources belong to all humankind, a right is created in the products produced by the more able for the less able; in effect the less able are silent partners in the products, income and wealth produced by the more able whose shares has to be redeemed; (v) all instantaneous property rights claims, such as theft, bribery, interest, gambling, are prohibited; and (vi) a person can transfer property rights claim to another via exchange, inheritance, or the redemption of the rights of the less able.

Human beings have been given the right of combining their labor with natural resources to remove barriers to physical and spiritual development. Concurrently, they have been given the responsibility of agent-trustee of His creation (*khilafa*). Environmental considerations come from rules prescribed for property rights and those governing uses of resource, whereas in contemporary thought these are derived from considerations of human welfare. Islamic rules have implications for natural resources and how they should be managed. This chapter presents the broad environmental considerations

discernible from teachings of Islam and implied policies for managing the created resources.

Environmental Conditions and Concerns

Most experts agree that the state of nature is on a downward trajectory. This negative outlook can be broadly attributed to generally irresponsible behavior on the part of individuals, businesses, and governmental bodies when it comes cleaning up their negative fallouts, recycling and other measures that enhance environmental sustainability. The imminent threats to the environment and fallouts of global warming have placed new pressures on humanity to make productive, and hopefully fruitful, efforts toward environmental sustainability. Environmental degradation is further accentuated in certain parts of the world as it is closely linked to poverty, deprivation, and social malaise.

Fundamentally, the fallouts of environmental damage have disproportionally affected, and will likely continue to affect, the world's poorest countries, which too often have little choice but to concede their natural resources to more economically endowed countries, especially in times of economic distress. Inevitably, this leads to resource exploitation and subsequent environmental degradation, especially since many poorer countries lack the necessary means to recover from economic and natural disasters.

It is estimated that climate change is directly responsible for 150,000 deaths annually. Additionally, another two million person are estimated to die from sicknesses—such as respiratory infections, heart disease, and lung cancer—brought on by air pollution.[1] Unfortunately, all these numbers are predicted to increase. It is estimated that by 2020, between 75 and 250 million Africans will face water shortages, which will likely lead to catastrophic outcomes in the form of famines, displacements (refugees), and resource conflict.[2] The global community will have to find effective solutions to climate change. Principles of Islam demonstrate concerns with environmental preservation and the equitable sharing of Allah's bounty with all generations of humans.

Environment in the Quran

As mentioned, Islam is a rules-based system with guidance for all human behavior including toward the environment. The Qur'an declares that the creation of the physical universe is purposeful:

> "*We have not created the heavens and the earth and all that is between them for mere idle play...*" (44:38–39)[3]

If for nothing else, Allah's words make plain the fact that the environment was not a byproduct of human creation, or in any way random, but rather, its creation was incontrovertibly purposeful.[4] "*The creation of the heavens and the earth is far greater than the creation of mankind. But most of mankind do not know it*," is another Quranic verse that establishes the notion that man's ability to analyze may lead him into thinking humans are superior to other species found in the environment.[5] This is not to say that the Quran does not consider human beings, endowed with the intelligence to know their Creator, to be the crowning achievement of Allah's Creation. However, the Qur'an specifically indicates the fact that the significance of the environment should, in no way, be made reductive.[6]

In Surah 30:30, Allah (swt) says, "*Devote thyself single-mindedly to the Faith, and thus follow the nature designed by Allah, the nature according to which He has fashioned mankind*."[7] The Creator makes known that, "*Whoever plants a tree (on his earth) and diligently looks after it until it matures and bears fruit is rewarded*."[8] Unfortunately, man's presence on earth has altered Allah's Divine Creation in directions that are arguably negative when it comes to the environment and its depletable natural resources, as well as, more generally, their preservation for generations to come. This is especially ruinous to the developing world, which relies largely on water, wood, and other commonly exploited resources for their economic survival. As a result of greed, the absence of sharing among current generations, and the stocking up of provisions for future generations, some natural resources are rapidly deteriorating from waste and exhaustion. Aside from the obvious environmental issues, the economic stability of many regions of the world will continue to likely be impaired by changes in resource availability. However, conventional economic policies for growth and development invariably ignore pertinent environmental issues. However, in Islam, the physical development of the earth is an integral component of development that includes the human and the social dimensions.

The development of the physical-material world and the human collectivity alike can only be achieved if the actions of humans are made in consonance with the environment.[9] Islamic development includes individual human development, physical-material development, and development of the human collective.[10] The simple fact that the physical world is integral to the first and third concepts makes clear its unquestionable importance. Therefore, environmental preservation is essential for the wellbeing of all humans today and for future generations. It is in part for this reason that Islamic teachings direct humans to modest living (avoiding opulence) limiting their wants to only their needs, and to sharing (with current and future generations). Excessive consumption, *israf, is prohibited explicitly as it* leads

to the unbalancing of the earth's harmonies: "*O Children of Adam! Take your adornment (by wearing your clean clothes) while praying and going round the Ka'bah, and eat and drink but waste not by extravagance, certainly He (Allah) likes not Al-Musrifin (those who waste by extravagance).*"[11] Highlighted in this passage is the important implication of creating a harmonious balance between the environment and man in prohibiting "extravagance." Similar explicit prohibitions against opulent consumption underline the need for balance in use of resources.

The central axiom of Islam is Tawhid—the Unity and Uniqueness of the Creator. An important corollary of this axiom is the unity and uniqueness of the One and Only Creator. In essence, the axiom and its corollary imply that the universe is one since it Creator is One. In recognition, the entire creation adores and glorifies the Creator: "*The seven Heavens and the Earth and all that they contain glorifies Him*."[12] The glorification is represented by rule-compliant behavior, the most important attribute of which is movement toward human unity and solidarity as well as respect and care for the rest of the creation. The Qur'an admonishes humans to understand the tremendous responsibility that Allah has conferred upon them thus giving them human dignity, or *karamah. Walayah, the Love of Allah (swt) for His creation,* and *karamah, human dignity,* together provide the basis for the gift of *khilafah,* agency-trusteeship. If as a result of rule violation, individual behavior damages the resources endowed to all humans by their Creator, the terms and conditions of the agency-trustee contract are violate[13]

Another fundamental axiom, *al-akhira*, speaks to the concept of accountability and a Day of reckoning when humans are called to account.[14]

"The world is sweet and verdant green, and Allah appoints you to be His regents in it, and will see how you acquit yourselves…"[15] As "Regents," humans are ordered to act preemptively and reactively to natural resource-related environmental events. Moreover, in cases where benefits and drawbacks of certain actions are similar in weight (Nasr, 2013) individuals must carefully decide the course of action that furthers Allah's love. In *Al-An'am,* (6:38), Allah states, "*There is not an animal on earth nor a flying creature with wings which do not form communities…*" This powerful statement represents Allah's all-encompassing and all-inclusive *'ummah,'* one not limited to specific species but to all species, not to one creature but to all creatures, and not to one location on earth but to everywhere on earth (with all its Allah gifted resources) that they inhabit and must share now and with all future generations to come. within the wide range of Allah's creation, we find a host of similarities and differences, and despite these idiosyncrasies, the impenetrable bond between Allah and His creation is embraced by the purpose of carrying out the Supreme Creator's Will on earth.[16] The primary

duty of the human community on earth is to facilitate the Divine Purpose, that is, enjoining rule compliance, that is, encouraging good, while discouraging rule violation, that is, preventing and forbidding evil[11]: "*let there be a community among you who call to the good, and enjoin the right and forbid wrong. They are the ones who have success*"[17] Indisputably, enjoining environmental protection and discouraging its degradation are covered by this capstone rule of Islamic teachings.

Professor Sayyed Hossein Nasr was one of the earliest scholars to warn about the environment crisis. His seminal work "The Encounter of Man and Nature: The Spiritual Crisis of Modern Man" published in 1968 remains one of the earliest writings by any conventional or Muslim writers.[18] He cites gross ignorance as a leading cause of the ongoing crisis, which he believes can be alleviated if the global community begins to recognize the multiple states of being that are possible within the environment.[19] Equally regrettable is that rules associated with Islamic environmental teachings have not been established explicitly in any Muslin society.[20] The fact that the Western world has not seen a working example of a truly, or ideal, rule-compliant Islamic society may be the likely reason for continued skepticism towards the Islamic economic, financial, and policy designs.

Empirical studies have demonstrated the relationship between levels of economic development and environmental awareness. In the United States, for example, Boyce, Klemer, Templet and Willis (1999) found that among the 50 US states, those with more equitable distributions of power, as measured by voter participation, educational attainments, tax fairness and Medicaid access, typically implemented sounder environmental policies and subsequently had better environmental outcomes.[21] Another study, which looked at the relationship between residential segregation and cancer risks from air pollution in the United States, found that higher levels of segregation along racial and ethnic lines is correlated with generally unfavorable health conditions for people of all demographics.[22] It can be posited that more equitable distribution of societies resources will not only improve economic growth, but also increase concerns for environmental quality. The overriding emphasis of the Qur'an on rule compliance that leads to emergence and preservation of justice in human societies cannot be overemphasized. This goal should be a focus of all policy design, including those related to the environment.

Policy Concerning Depletable Resources

As stated a number of times in this book, property relations in Islam are governed by a set of rules regarding rights and obligations. The first rule governing property relations is that everything in creation, including humans,

is the property of the Creator. He has created natural resources for the benefit of all of humankind. The second rule asserts the rights of the human collective to these resources: *He it is who created for you all that is in the earth* [29:2]; and: *Do not give your resources that Allah has made you (responsible as) its preserver on to the foolish* [5:4]. These two verses, and a number of others, establish the right of access to these resources by all human beings. The third rule establishes that once the property is accessed and combined with work by individuals, a full right of possession of the resulting product is established for the individual without either the Creator losing His original property right or the collective losing its initial right of possession to these resources. The fourth rule recognizes only two ways in which individuals gain legitimate property rights: (i) through their own creative labor, and/or (ii) through transfers—via exchange, contracts, grants, or inheritance—from others who have gained the property rights title to an asset through their own labor. Fundamentally, therefore, work is the basis of the acquisition of right to property.

Just as work is a right and obligation of all humans, so is access to and use of natural-physical resources provided by the Creator for producing goods and services. If an individual, for whatever reason, lacks the ability to work, it does not deprive him of his original right to resources granted to every human. Therefore, the rule of the "immutability of property rights" is another rule of property rights. Before any work is performed on natural-physical resources, all humans have an equal right and opportunity to access these resources. When individuals apply their creative labor to resources, they gain a right to priority in the possession, use and exchange of the resulting product without nullifying the original property rights of the Creator or the rights He granted to all humans in the final product or the proceeds from its sale. This is the justification for the rule of sharing [33:4; 180:3; 36–37:4; 5–11:92]. There is a duty of sharing the product or the income and wealth proceeding from its sale, which relates to property ownership rights as a trust. This rule is operationalized through the ordained duties imposed on income and wealth, which must be paid to cleanse income and wealth from the rights of others, or *zakat*.

The management of depletable resources has become perhaps the most divisive issue in a number of Muslim communities around the world and the major impediment to establishing effective institutions and achieving sustained economic and social development. Some of these countries are blessed with enormous reserves of oil and natural gas, but these resources have not been used to benefit all citizens equitably. In fact, corruption and greed have prevented the development of effective institutions, as these would deny privileged access to these resources. As a result, inhabitants have

received limited benefits from natural resource exploitation and have been denied policies that would establish the foundation (effective institutions) of sustained growth and development. From the brief discussion above, it is evident that unlike some Western societies, Islam does not assign the rights to minerals to the landowner where a depletable mineral may be found. Allah (swt) gave all minerals as a gift to *all* humankind.

The first point of dispute in this discussion is invariably the identity of the intended beneficiaries? Is it all humans in a region, in a country (a nation state) or in the entire world? To our mind, the correct answer is all humans the world over. The reasons are many. First and foremost, the unity of His creation is the bedrock of Islam. All humans—Muslims and non-Muslims, men and women, disabled and able bodied—have equal rights to Allah's gifts of all natural resources, both depletable and non-depletable. Second, in the Quran there is no recognition afforded to the concept of nation states and borders. Third, in Islam, sharing is an important test for humans. Fourth, with justice at the heart of Islam, it is unimaginable that justice could be served by assigning all the world's stock of a particular depletable resource to a single man or woman. However, in a world where nation states and borders are the order of the day, no leader would propose to share a nation's wealth without reciprocity. Thus at a minimum, the depletable resources of a nation belong equally to all of its citizens.

The second point that must be addressed is the rights of future generations. What rights do future generations—humans that have no vote of any kind today—have to these natural resources? The simple answer is that these resources belong to this and all future generations. In addition to the four justifications mentioned above in support of the rights of all humans above, the fundamental basis for this statement is the concept of *khilafa*: agent-trustee (something that we omitted on purpose as the fifth justification for universal access to natural resources above in order to highlight its importance to support the rights of future generations). Allah bestows the agent-trustee role on humans. It is a solemn duty that must be carried out to avoid harm and injustice to the Unity of His creation.

Thus, we can surmise that Islam imposes the following constraint on the management of depletable natural resources. All depletable natural resources must be managed so as to provide every citizens of a country (in an ideal world all humans on earth) in this and in *all* future generations the same (more or less) level of benefit. Though redundant, for emphasis we should add that this does not mean rulers or any other individuals or special interest groups have special access. Moreover, given the Islamic preoccupation with honesty and trust, this policy must be managed in an open fashion and be subject to public scrutiny. How could this policy be put into practice?

In all Muslim countries that we are familiar with, we believe that the government's stated policy is as we have outlined with one exception. Such resources do not belong to any individual or group; the state will assume control (sometimes compensating the landowner a token sum for the mineral rights); and the policy is to afford all citizens the same benefit from their exploitation. The exception is that *there is no formal recognition of the equal rights of all future generations*!

How can Islamic teachings on the management of these natural resources be put into practice? The state takes over all depletable resources and establishes three companies: (i) the State Mineral Resource Company (SMRC), (ii) the State Intergenerational Investment Fund (SIRF) and (iii) the State Intergenerational Transfer Company (SITC), each with an elected board of directors and full transparency of company books and records for public scrutiny. SMRC is entrusted with the task of developing, extracting and selling the mineral resources, and placing all the proceeds (minus its operating costs) into the account of SIRF. SIRF is entrusted with managing the proceeds it receives from SMRC as a diversified investment fund, with largely foreign investments in equity, real estate, equity participation in Greenfield projects around the world, and in other securities (with the possible exception of interest bearing debt and alcohol, gambling, and sex industries to comply with Islamic prohibitions). SITC is entrusted with the task of issuing an annual check to each and every citizen that complies with the following guideline: the annual check should have the same (as close as possible) real purchasing power every year. Before we outline how the size of this annual check can be approximated, let's state the obvious. The size of the check will have to be continually updated as new information comes in on long-term price trend of the mineral (oil, natural gas, gold, copper, etc.), population growth, inflation and return on SIRF investments.

Let's first look at some of the important economic issues facing major mineral exporters, why this is the *only* way to manage depletable resources in compliance with Islamic teachings, briefly outline how the size of this annual check can be approximated, and then turn to some fallouts of such a transfer fund.

Mineral Depletion and Economic Management

In productive economies that do not rely heavily on depletable resources such as oil, economic output, or Net National Product (NNP), does not diminish with time, but indeed can normally be expected to increase with time. In an oil-based economy, if the income from oil is consumed (and, as is the practice, if oil output is counted as a part of NNP), then NNP declines as oil

reserves are depleted. So at least a part of current oil revenues must be saved and invested, domestically or abroad, to even out NNP and thus to avoid a decline in national output in the future.[23] Put differently, the normally or conventionally measured NNP in an oil producing country diverges from the "theoretically correct" measure of NNP for a country that has no depleting resource such as oil. In a sense, the conventionally measured NNP for a depletable resource-based economy usually overstates theoretically correct NNP because, at some point in the future, the depletable resource will run out and will no longer contribute to NNP. The higher the return on investments, that is, the more compensation made for resource depletion, and the longer the resource will last at the current rate of extraction, the closer (more comparable) are the conventionally measured and theoretically correct NNP. In essence, mineral exporting economies need to save more while the mineral is being exploited in order to smooth out its impact on national output for inhabitants of all generations.

In the case of a country that does not rely heavily on exhaustible resource extraction, economists generally believe that a government should nurture institutions and adopt policies that promote private sector growth. Governments cannot be the engine of economic growth and development but have a critical and supportive role to play, especially in creating the business and regulatory environment. At a minimum, essential institutions should include legal and judiciary, tax collection, an entity to provide a minimal social safety net, government expenditure control, and promotion of competitive factor and product markets. If they are to be effective, these essential government activities must be largely free of corruption and they must treat all citizens the same. They must uphold all property rights, enforce all contracts, enforce tax collection according to the law, and spend government revenues as stipulated. A free and independent press and media provide a helpful check on transparency and the effectiveness of institutions. Countries need flexible labor markets with laws that encourage employment. Other indispensable elements for growth are competitive financial markets that provide appropriate incentives and security for savings and channel resources to the most productive investments.

Governments play an important role in the provision of education. A highly educated labor force is almost a precondition for growth in today's global economy. It is not just the quantity of education but also its quality that matters. Adequate healthcare for all is an important input for an efficient labor force and something that can be provided in a public-private partnership. The government should adopt tax policies to raise revenues efficiently and fairly, while affording incentives that encourage research and development. The government should provide, or ensure, that the private

sector provides, the basic infrastructure for a modern economy—roads, power, and communication. The government must provide basic security. Governments should adopt and implement sensible trade and consistent macroeconomic policies. A good starting point is to reduce protectionism and to enhance competition and efficiency. An important element of trade policies is a sound exchange rate policy resulting in a competitive exchange rate to encourage exports and the diversification of exports. The opening up of financial markets to international capital flows should be coupled with sound prudential banking regulations. In this way, bad lending practices can be avoided and the inflow of hot short-term funds can be deterred. As for macroeconomic policies, a good starting point is to have a central bank that is independent from the government in its decision-making. Structural budget deficits and excessive credit creation are to be avoided, and double-digit inflation should not be tolerated. More recently, economists agree that reform for reform's sake will not necessarily enhance growth.[24] However, the above are general prescriptions that must be *adapted* to a particular country's conditions. Policy formulation and application to a particular country is more of an art than a mechanical proposition. The sequencing of reforms should endeavor to remove the binding constraint to a country's growth. The above provides a reasonable basis for development and for growth to emerge and be sustained.

How does significant oil, gas, diamond reserves, or for that matter, any other exhaustible resource, change these policies? We have mentioned the imperative of higher than normal savings and investment to compensate for future declines in revenue as the mineral is depleted and there is a need for reducing the overbearing role of the public sector to encourage private sector growth. However, there is more. The major mineral exporting countries must diversify their sources of economic output away from the mineral by encouraging export diversification, to stabilize government revenues and diversify the government's sources of revenues away from oil, and to protect intergenerational equity in the depletion of oil resources.

Export diversification requires sound exchange rate policies, limited production (not input) subsidies, access to foreign markets, and the other supportive policies. In the case of exchange rate policies, major mineral exporters face a particular problem, namely, the undesirable appreciation of their real exchange rate (commonly known as the Dutch Disease in the economics literature), which in turn discourages the development of a diversified and competitive export base.[25] Governments can counter such a real exchange rate appreciation by reducing government expenditures, giving production subsidies to favor tradables and thus exports, or an appropriate combination of the two.[26] Others argue that there are more fundamental problems than

the Dutch Disease that mitigate the development of a vibrant private and export sector. Some make the case that major mineral export is so overbearing that entrepreneurial activity is trumped.[27] Given the magnitude of vast oil, oil, diamond, gold etc. wealth, entrepreneurs find it more profitable to devote their energies to get a chunk of the mineral wealth as opposed to creating new wealth apart from the minerals being extracted. Some economists argue that because volatility has been shown to be counterproductive towards growth and mineral, such as oil, revenues are volatile, then oil hampers private sector growth and diversification.[28] Still others argue that a large oil sector promotes specialization in non-tradables, not because of the traditional Dutch Disease, but because of the impact of financial market imperfections on specialization.[29]

While production and export diversification away from mineral extraction are necessary, so is government revenue stabilization and diversification. In a number of major oil (gas) exporting countries, oil provides the lion's share of revenues and it has fluctuated considerably from year to year. Relatively stable fiscal revenues are essential for macroeconomic management and in turn for sustained economic growth. Countries that achieve sustained long-term growth on average experienced less volatility in growth:[30]

> Developing countries experience a year of negative per capita growth roughly once every three years-whereas in East Asia, the average is one-half that rate and, in OECD countries, one-third that rate.

To stabilize mineral exporting revenues, countries can, and have, adopted some form of a stabilization fund. A portion of revenues are placed into the fund in a year of above a calculated average (moving or otherwise) expected oil revenues/prices and can be "theoretically" drawn down when revenues/prices fall below the average. Alternatively, an oil-exporting country could hedge its exposure to oil price volatility through the futures market. While such funds and hedging may be used to stabilize available oil revenues from year to year, they do not diversify the basic source of government revenues.[31] Government revenue diversification ultimately requires a healthy and growing economy with an effective income tax system.

The issue of equity and social justice is another important consideration for non-Muslim countries that have large oil, gas, and other mineral resources also. Economists have long ago addressed the issue, at least on the theoretical level. Robert Solow in his famous article concluded by saying:[32]

> The finite pool of resources (I have excluded full recycling) should be used up optimally according to the general rules that govern the optimal

use of reproducible assets. In particular, earlier generations are entitled to draw down the pool (optimally, of course!) so long as they add (optimally, of course!) to the stock of reproducible capital.

Note that Solow concludes that exhaustible resources should be optimally drawn down and replaced by reproducible capital (for future output) optimally for future generations. What if they cannot, or will not, optimally add to the stock of reproducible capital? The clear need is to find an alternative to Solow's prescribed optimal draw down and optimal addition to reproducible capital. We propose to achieve this by taking mineral revenues away from the government and creating a fund to address issues of equity. Thus, Solow's prescription is essentially that which should be followed in these countries.

Many countries and states (within countries) have adopted funds for future generations. These funds generally take but a small percentage of revenues of exhaustible resource depletion; their operations are generally opaque; and in some cases there are no rules for the portion to be saved, in cases where there are rules, the rules for the portion to be saved, its management, and/or its distribution are highly imprecise. These funds do not follow Solow's prescription of intergenerational equity, as they do not replace all of the drawn down resource with future sources of output. Most egregiously, in many Muslim countries, the ruling families or the elite takes a significant portion of the revenues even before it becomes available for public expenditures or for placement in any sort of a fund, whether the fund be for revenue stabilization or for future generations.[33]

The *de-linking* of oil revenues from government coffers may avoid some other problems normally associated with the exploitation of depletable natural resources. Easy oil revenues tend to fuel military expenditures.[34] Military expenditures, in turn, could be associated with a number of other adverse developments. Civil wars and conflict are more likely if military expenditures are high; and the risk of civil war is higher if natural resource endowment is double the average.[35] Civil wars in turn lead to higher military expenditures, capital flight, loss of social capital, slower economic growth, and more poverty and refugees, an almost impenetrable vicious circle. The adverse role of natural resources is generally accepted. While some advocate an "international template for the acceptable governance of natural resource revenues to which a government with significant revenues could chose to subscribe."[36] We believe that a fund that takes all revenues away from the government should be an integral and primary component of any template.

State Intergenerational Investment Fund (SIRF)

Let's assume that the Fund, F, were established, and proceeds from the Fund were distributed to every citizen immediately (starting at time 0). The inflow to the Fund would be current oil revenue and the outflow from the Fund would be an annuity payout to every citizen in the country. There would be a positive balance in the Fund if there were more oil revenues than the total payout in the first year. Therefore, the Fund at the end of the first period, F_o, would be:

$$F_o = R_o - Y_o = R_o - P_o Z \quad (1)$$

Where:

F_o: Oil Fund at time 0
R_o: Oil revenue at time 0
F_o: Total annual payout to citizens at time 0
P_o: Population at time 0
Z: Real annual payout per citizen, assumed constant over time

At the end of the first year the size of the Fund, F_1, would be the oil revenues minus the payout to citizens plus the balance carried over from previous year (year 0), if any, grown by appropriate reinvestment rate i. Therefore, we can write F_1 as:

$$F_1 = R_1 - Y_1 + F_o e^i \quad (2)$$

Alternatively, equation (2) can be rewritten as:

$$F_1 = R_o e^r - P_o e^g Z + (R_o - P_o Z)e^i \quad (3)$$

Where:

i: Annual real return on Fund investments, assumed a constant
g: Annual population growth rate, assumed a constant
r: Annual real growth rate in oil revenues, assumed a constant

In year two, the year-end balance of the Fund would be oil revenues from year two minus payout to citizens plus any residual balance from the previous two years. Therefore, the Fund in year two or F_2 would be:

$$F_2 = R_2 - Y_2 + F_1 e^i \quad (4)$$

Equation (4) can be rewritten as:

$$F_2 = R_o e^{2r} - P_o e^{2g} Z + \left(R_o e^{r} - P_o e^{g} Z\right) e^{i} + (R_o - P_o Z) e^{2i} \tag{5}$$

Accordingly, the Fund in any given year n would be a summation of (i) oil revenues from year n or $R_o e^{nr}$, (ii) minus the payout to the citizens, $P_o e^{ng} Z$, and (iii) accumulation of reinvested Fund resources from previous years:

$$R_o \sum_{k=0}^{n-1} e^{kr} e^{(n-k)i} - \sum_{k=0}^{n-1} P_o e^{kg} e^{(n-k)i}.$$

In other words F_n can be expressed as:

$$F_n = R_o e^{nr} - P_o e^{ng} Z + R_o \sum_{k=0}^{n-1} e^{kr} e^{(n-k)i} - \sum_{k=0}^{n-1} P_o e^{kg} e^{(n-k)i} \tag{6}$$

When there is no inflow of oil revenues, oil reserve is depleted, the payout Z will simply be made from the accumulated balance from previous years. We can derive Z by rearranging equation (6):

$$Z \leq \frac{R_o}{P_o} \left[\frac{e^{nr} + \sum_{k=0}^{n-1} e^{kr} e^{(n-k)i}}{e^{ng} + \sum_{k=0}^{n-1} e^{kg} e^{(n-k)i}} \right] \Rightarrow Z \leq \frac{R_o}{P_o} \left[\frac{\sum_{k=0}^{n} e^{kr} e^{(n-k)i}}{\sum_{k=0}^{n} e^{kg} e^{(n-k)i}} \right] \tag{7}$$

Where:

$$F_n > 0$$

It can be shown that equation (7) can be simplified using geometric algebra as follows:

$$\sum_{k=0}^{n-1} e^{kc} e^{(n-k)i} = e^{ni} \left[\frac{1 - e^{(c-i)n}}{1 - e^{(c-i)}} \right] \tag{8}$$

where c is a constant.

Using (8), and substituting c for r and g, respectively, equation (7) becomes:

$$Z \le \frac{R_o}{P_o}\left\{\frac{e^{ni}\left[\dfrac{1-e^{(r-i)n+1}}{1-e^{(r-i)}}\right]}{e^{ni}\left[\dfrac{1-e^{(g-i)n+1}}{1-e^{(g-i)}}\right]}\right\}$$

Equivalently:

$$Z \le \frac{R_o}{P_o}\left[\frac{1-e^{(r-i)n+1}}{1-e^{(g-i)n+1}}\right]\left[\frac{1-e^{(g-i)}}{1-e^{(r-i)}}\right] \qquad (9)$$

Finally, as n approaches infinity ($n \to \infty$), Z becomes:

$$Z \le \frac{R_o}{P_o}\left[\frac{1-e^{(g-i)}}{1-e^{(r-i)}}\right] \qquad (10)$$

where:

$r < i$, and $g < i$.

Two assumptions are made regarding the relationships between g, r, and i in deriving equation (10). First, we assumed r is less than i. In equilibrium one could assume that the long-term growth rate of oil revenues, r, would be equal to the long-term reinvestment rate, i. However, we know that the output of oil, and thus oil revenues, will eventually decline to zero. Hence, in the long run, we expect oil revenue growth to be somewhere between zero and the long-term reinvestment rate, i. Second, g is assumed to be 2 percent and less than i. This assumption is reasonable because the historical long-term average growth rate of mankind has been in the 2 percent range.[37] We can use this result to calculate what the payout could be for inhabitants of a country for a range of assumed oil prices (oil revenue growth) and return on investments. Under conservative assumptions (on oil revenue growth and on real return on investments), the annual constant level (real purchasing power) check in countries such as Qatar and the UAE would be in excess of $200,000 per citizen, while those for Iran and Iraq would be in the range $5,000-$10,000.

Intergenerational Fund Operations and Payouts

While the broad outlines of an intergenerational fund—the beneficiaries and the calculation of equitable real payments—are relatively straightforward, the details need attention.

The Beneficiaries

Should payouts be given to adults only? If payouts are given to all citizens regardless of age, it is unreasonable to assume that a minor would be sufficiently responsible? Should the payment then be made to the parent or the guardian of a minor? If yes, then it could encourage population growth (and the more children one has the larger the share of the Fund's payout). On the other hand, if the first payment (representing the accumulated annual payouts from the prior to 16 or 18 years of age) to a citizen is set contemporaneous to the attainment of adulthood, would that expectation of such a financial "windfall" create moral hazards and result in unintended waste?

Moral Hazards and Conditionality

Given the moral hazard issue identified above, one could argue for instituting compensating factors that would serve to minimize unintended consequences. Specifically, the first payment from the Fund could be tied to some socially acceptable (or desirable) criteria/condition/state. For instance, for those in the 18-to-30 age bracket, the first and subsequent payouts could be made conditional to the citizens' achieving a minimum level of educational proficiency, or indeed, for having a history of productive and legal employment if not attending school. Such a condition would encourage literacy amongst the populace and could support economic growth. Another condition that could be attached to a citizen's right to receive current and future payouts from the Fund is the maintenance of a clean civilian record. Depending on the nature of the offense, a felon may forfeit his or her right to further payouts from the Fund.[38]

A potentially interesting application of the Fund is to explore the design of the Fund to mimic the role that social security plays in the wealthier countries. Thus, payouts could be higher when a citizen reaches a certain given (retirement) age. These and other features could have a significant effect on a number of related factors, such as birth rates.

Societal Productivity

An obvious attack on any scheme is that individuals would become lazy, would not work and, in the process, society would become less productive. While this is a legitimate concern, it need not become a fact of life. If

governments develop effective institutions, adopt rational and consistent economic policies, and generally provide a supportive business climate, citizens will be more motivated (and will have the resources) to invest and invigorate private sector growth. At the same time, the eligibility to receive payments can be tied to definable, objective, and socially desirable achievements.

Investments, Payouts, and the Use of Funds

The payout objective of an intergenerational fund must be set with the ultimate goal of making reasonably constant and fair payouts to current and future generations of the citizenry. To that end, the fund should invest the unpaid balance into a portfolio of well-diversified mix of the real and financial investments across a broad range of countries, currencies, asset classes, and non-oil industries. The size of the payout would need to be re-calculated periodically and the various input assumptions would need to be pegged to some pre-determined moving average, as does Alaska.

Another issue that could arise is government borrowing from the fund (or collateralization of the fund to borrow from third parties). We stress that the key tenet is the separation of all future mineral revenues from the hands of governments and ruling families. To make the assets of the fund available either directly or indirectly to these governments would open the Pandora's box and undermine the effectiveness of the fund.

Effective Tax Policy

The success of the intergenerational fund also depends on efficient income tax policy and an effective system of taxation in place. In Islam, taxation by the state to fulfill social requirements is clearly envisaged and endorsed. Yet numerous Muslim countries do not have an effective income tax system to address social and economic needs.

Fund Administration

The operations of the fund must be completely transparent. A fund needs to have clear independence and authority with respect to investment decisions and general management. These requirements may seem obvious, but they cannot be overemphasized. The fund's administrators must have direct reporting lines to the governing board, and their employment/succession, performance, and compensation be determined solely by the board. The administration of the fund and the formal processes it adopts should not be a part of the civil government structure, be reliant on the any government entities nor have any connection to ruling families and elites. Accordingly, governments should not have real or ostensible authority over the management of the fund.

Governance and Control
A fundamental concern with the establishment of such a fund is the governance structure of the fund. There needs to be integrity among those who can influence strategy and financial performance. The governance body (possibly a Board of Directors not dissimilar to a modern corporation) should comprise of individuals with a balance of skills, experience, and independence, appropriate for the management of the fund. Mandatory and periodic disclosures with respect to the fund's balances, investment policies and results, flow of funds, material matters, and even personal financial disclosures of the board members would instill public confidence and minimize potential malfeasance. Further, the rights of citizens, the fund's beneficiaries, need to be clearly articulated and upheld. Effective internal control mechanisms must be put in place to ensure the proper functioning and governance of the fund.

Transitional Phase
The cutback of oil revenues to the government may have to be made on gradual basis over a transitional period of, say, 10 years. Given the gross reliance of governments on revenues today, it would be unrealistic to expect a sudden withdrawal from it to be politically and structurally feasible.

Provision of Government Services
In many of the countries, payouts would be sufficient to cover private funding of education, healthcare and retirement. In cases where they are insufficient, governments should provide them and they should be financed by taxation. The danger of allowing governments to take some mineral revenues for "specific and noble causes" is that governments can then use funds from taxation in wasteful areas as they have done in the past with oil revenues; money is, after all, the most fungible of commodities. It should also be remembered that we support a transition period of up to ten years for taking all oil revenues from governments.

Clearly, the range of potential issues in implementing an intergenerational fund is far-reaching and different for each country, and a comprehensive assessment and analysis would, in itself, occupy a volume.

Supporting Arguments for an Intergenerational Investment Fund At the outset, we should state that many major mineral exporters have used these export revenues to give subsidies (in addition to fuel subsidies in the case of oil/gas exporters) to consumers. Fuel subsidies are wasteful as they encourage fuel consumption and are regressive because the wealthy benefit more than the poor; and other consumption and input subsidies are wasteful in

that they also encourage waste and consumers and producers would be better served with direct cash subsidies. However, subsidies have been favored for an unrelated reason. Rulers and governments have used subsidies to buy off the citizenry; pretending that they are transferring something to citizens that are not (already) theirs. Iran, under President Ahmadinejad, tried to eliminate subsidies in favor of direct cash payments. It was not a fund as we are recommending but simple subsidy reform that failed. Moreover, the two or three Muslim countries that have arguably put in place an investment fund fall far short of what we have outlined above; the fund is not publicly classified as the birthright of the citizenry of all generations (rulers have direct access to its resources); there is no clarity in their goals, management, or operations; and they are not open to the scrutiny of citizens. They are funds, but for what and for whom?

Some countries have argued that the best way to compensate for oil depletion is not a fund as we have proposed but to employ mineral revenues domestically to develop domestically to provide alternative sources of income. This approach has not worked and cannot be equitable to all citizens of this and future generations. The reasons are many. Governments have not succeeded in their attempt to replace the private sector. Even when it came to infrastructure, the best that governments have been able to do is to predict medium term needs. They over build, resulting in expenditures to maintain idle infrastructure. Moreover, when governments undertake the support of specific industries and sectors, it is invariably accompanied by corruption and the industries that are invariably inefficient and uncompetitive. As important, when the government spends mineral proceeds today to support or establish certain industries and sectors, those in business today receive more benefits than the disadvantaged do. They get lucrative contracts. At the same time, the current generation may receive employment and related opportunities, but there is no guarantee that the same would be available to future generations. Future generations may receive little or no benefits and definitely not the same benefit. The magic of our proposal is that it encourages the private sector (citizens can invest their annual proceeds as they wish), it reduces corruption associated with mineral extraction, and it is equitable and preserves the rights of all generations.

Summary

Property relations in Islam are governed by a set of rules covering rights and obligations. Everything is the property of the Creator. He has created natural resources for the benefit of all of humankind. Thus access to and use of natural-physical resources provided by the Creator for producing goods

and services must be made available to all human beingss of all generations, including the disabled. Realistically, however, and in the absence of reciprocity, the sharing of natural resources may be limited to citizens of a country and its future generations. If an individual, for whatever reason, lacks the ability to work, it does not deprive him of his original right to resources granted to every human (citizen). Before any work is performed on natural-physical resources, all humans (citizens) of all generations have an equal right and opportunity to access these resources. There is a duty of sharing the product or the income and wealth proceeding from its sale, which relates to property ownership rights as a trust.

In the spirit of Islamic teachings, Muslim countries must devise an operational method to exploit depletable resources in such a way that rewards all citizens of all generations equitably. The only way to do this is to establish an intergenerational fund that takes in all mineral revenues, invests these revenues in a diversified portfolio of international assets and issues an annual check of real purchasing power to every citizen of every generation.

There can be little doubt that most mineral exporting countries of the world have failed economically and socially. While export revenues have supported government finances, economic and social injustice has become all pervasive. It is time for a change while minerals in the ground are still available. Our proposal would take easy money away from the hands of governments and of rulers, waste and corruption would by definition be reduced, there would be better chance of adopting and implementing rational economic policies, and equity across generations would become a reality. As we have argued, effective institutions (rule compliance) are the key for sustained development and prosperity. However, as long as rulers abuse their power, Muslims do not stand up to corruption, vast mineral revenues tempt human beings and natural resources are not managed according to Islamic teachings, effective institutions will not be established.

We end by repeating and emphasizing that the attractions of our approach are that it encourages private sector development, reduces corrupt practices, is equitable and preserves the rights of all generations, and is in full conformity with Islamic teachings.

CHAPTER 11

Benchmarking Islamic Finance–Enabling Policies

Introduction

The development of desirable and targeted policies should not occur in a vacuum. Policy makers must first determine their policy goals—be they healthcare, education, nutrition, income distribution, and the like. Then they should assess where the country stands. What are the areas of success and failures? Then devise efficient policies to achieve their desired goals and targets. In this process, an in between step, is to assess where the country stands relative to other countries. Such a benchmarking gives a more practical idea as to what is possible and how to get there. For instance, where does the country stand, relative to other countries, in eliminating poverty? Once extensive (in many dimensions) benchmarking is developed, the policy maker can look into which policies have succeeded in other countries and why. From this examination, the policy maker can devise policies that are best suited and most efficient in his country context.

While research has highlighted the strong growth of the Islamic Financial industry and the determinants of such growth, serious work is needed to examine the future potential and growth of the industry. To that effect, there is a need to put the future prospects for the industry's development within the overall context of financial and institutional development especially in member states of Organization of Islamic Cooperation (OIC). Several scholars have raised the concern that the development of Islamic finance as an industry has been lopsided, mainly focusing on banking, mostly driven by business motives, and most importantly, ignoring its key feature of the risk-sharing. In its current form, sustainable growth of the industry to realize

the full potential of inherent features of an Islamic financial system seems challenging.

The Islamic financial system is characterized as a "risk-sharing" financial system that offers the benefits of financial stability, enhanced financial inclusion, and leading to sustainable development. However, a risk-sharing financial system has certain pre-requisites such as transparency, contracts enforcement, effective monitoring, well-structured economic institutions, good governance, and efficient financial markets. The current state of affairs shows that a majority of the OIC countries do not meet these pre-requisites, which raises the question of viability of further development of Islamic finance in these countries. Given that the financial system in OIC countries is dominated by conventional form of "risk-transfer" financial system, viability of developing "risk-sharing" friendly system is a serious challenge.

In Section 2, we review the state of financial development and institutional infrastructure of the financial sectors in OIC countries from the perspective of risk sharing. This analytical framework benefits from key World Bank global databases that incorporate economic and financial indicators such as World Development Indicators, Global Financial Development Indicators, Global Financial Inclusion Indicators, Doing Business Indicators, in addition to the database on International Country Risk Guide (ICRG) that well serves an institutional quality proxy database. The key research question is to determine how friendly toward risk sharing the financial systems of these countries are. In Section 3, we provide a benchmarking system against *Maqasid al-Shariah* or the objectives of *Shariah* for OIC countries to assess their broader socio-economic conditions and to provide the needed basis for policy makers as they devise policies to improve their societies. The system described here is from an earlier paper (Alaa, Iqbal, and Rostom, 2014). While a number of different benchmarking indices could be developed for assessing particular economic and social segments, this index may be less prone to criticism as it is based on *Maqasid al-Shariah*.

Developing a Risk-Sharing, Friendly Financial Sector

A healthy growing economy requires an efficient financial system that provides savers with a wide array of financial instruments to encourage savings and channels funds from savers to investors. It also needs to ensure that the economy's savings are directed to the most productive and rewarding investment. The structure of the modern, heavily regulated financial system is characterized by complexity and involves many financial-service-providing institutions. This includes banks, insurance companies, mutual funds, and stock and bond markets. While banks and bond markets are the main source

for the predominant debt-based financial services, stock markets and mutual funds are the main sources of equity-based instruments of risk sharing.

There is an emerging consensus that Islamic financial system is a "risk-sharing" system as elaborated by Islamic jurist-scholars:

> a. *The Shari'ah emphasizes risk sharing as a salient characteristic of Islamic financial transactions... Risk transfer and risk shifting in exchange contracts violate the Shari'ah principle that liability is inseparable from the right to profit.*

An excerpt from the Kuala Lumpur Declaration, endorsed by reputable *Shari'ah* scholars, renowned Muslim economists and industry practitioners on September 20, 2012

> *b. The essential function of this [Islamic finance paradigm] would be to spread and allocate risk among market participants and not to allow a select group to avoid it by transferring it to other stakeholders.*
>
> Jeddah Declaration
>
> April 1, 2013

There is a critical need to put the future prospects of the industry's development within the overall context of countries' financial and institutional infrastructure, where information asymmetry and weak institutions are used to justify the debt-based risk transfer system. Risk sharing is, in essence, a "contractual or societal arrangement whereby the outcome of a random event is borne collectively by a group of individuals or entities involved in a contract, or by individuals or entities in a community" (Askari, Iqbal, Krichene, and Mirakhor, 2012). Therefore, unlike debt-based risk-shifting or risk-transferring modes of finance that effectively detach liability from the right to profit, by the virtue of complicated legal debt documents that place substantial restrictions on the behavior of the borrowers, the equity-based risk sharing instruments of finance are state-contingent, with their payoffs dependent upon the outcome of economic activities (Mirakhor, 2011a).

In theory, a debt contract is a contractual agreement by which the borrower promises to pay the lender an amount at regular intervals. The amount of profit made by the firm *ex-post* will not affect how much the lender will be receiving. Therefore, whether the managers have been hiding or stealing profit or engaging in activities, which do not increase the level of profit, it is of no concern to the lenders, as long as the firm is able to make its contractual payment. Only when the firm is unable to make payments as promised, will the lenders have to know how much profit or losses the firm is realizing

to assess potential risks and vulnerabilities of bankruptcy and insolvency. As such, less monitoring is required for debt contracts and therefore, lowering the cost of state verification. A debt contract with deterministic monitoring (in case of default) (Diamond, 1984) or stochastic monitoring (Townsend, 1979) has been shown to be more cost-efficient for financial intermediation. While enabling segregation of ownership and management duties, equity contract, on the other hand, allows the providers and users of funds to share the firm's profits and losses, in accordance to a predetermined agreement, which renders the equity holders as genuinely concerned in the profitability of the firms' operational and investment activities (Iqbal and Mirakhor, 2007).

Islam has long endorsed risk sharing as the preferred organizational structure for all economic activities, specifically the most comprehensive application of risk sharing and going well beyond anything put forward by modern theories. On the one hand, Islam prohibits, and without any exceptions, explicit and implicit interest-based contracts; on the other hand, it lauds risk sharing in all its forms as the structure for economic activities. It goes even further to require mandatory risk sharing with the poor, the deprived, and the handicapped based on its principles of property rights, which specify a right for the less able to share in the income and wealth of the more able, as the latter use more resources to which all are entitled

Turning to the prerequisites of a risk sharing financial system, the discussion is to proceed within the distinctive ambit of 4 broad areas of: (i) institutional scaffolding and participants' rules of behavior; (ii) governance and the legal environment; (iii) financial sector development; and (iv) financial inclusion and redistribution of income.

The Institutional Scaffolding and Participants' Rules of Behavior

The Islamic institutional scaffolding, including faithfulness to the terms and conditions of contracts and promises, transparency, truthfulness and trust, among other things could effective internalize incentive compatibility and allow it a dimension of self-enforcement. This, along with other rules of behavior such as the duty to strive and work hard (Sa'iy) (5:93, 38:24&28, 40:58), belief that trust betrayal is a cause of (swt) Allah's anger (3:161), and belief that lying, cheating, violating promises and contracts, and hiding information, are all rule violations that are punishable (39:60, 29:68) are expected to promote cooperation and reduce the high transaction costs, associated with equity based contracts, which are partially due to agency costs and informational problems. Thus, promoting the use of equity based contracts, in particular, and risk sharing, in general, are supportive of human and economic development (for more details see Askari et al., 2012;

Mirakhor and Hamid, 2009; Mirakhor and Askari, 2010). Consciousness and self-accountability can lend support to risk sharing by instilling righteousness and internal incentive mechanism. Though all of mankind possesses the potentiality to attain the above, they can be further developed by upbringing and religion. Social exclusion—and social segmentation, in a clear violation of the unity of creation—itself a corollary of the axiom of the oneness and uniqueness of the Creator, is found to negatively influence risk sharing, by discriminating against women or ethnic minorities, for example, or along caste or arbitrary religious lines.

As argued by Granovetter (1985), market transactions are entrenched in a social context, where reputation and trust are of prime consideration. Social capital, therefore, plays an important multidimensional role in enhancing risk sharing modes of finance, through its widely accepted components of trust, social networks, social structures, and shared norms (Ng, Ibrahim, and Mirakhor, 2013).[1] Fafchamps (2000) and Fafchamps (2003), for instance, provide evidence that social networks facilitate market exchange. Similarly, De Weerdt and Fafchamps (2007) found that blood relations and geographical proximity enhance the opportunity of risk sharing. More recently, Hong and Kacperczyk (2009) showed that social norms dissuade funding of operations that promote vice in the society, such as production of tobacco and alcohol. Social capital is found to be effective in aiding the flow of information and reducing, as a consequence, the problems of adverse selection and moral hazard in the financial market. Social capital can also increase contract enforceability by way of deterring non-compliance for fear of communal sanction and loss of reputation. Such feature is particularly paramount in settings where formal legal institutions are absent or unreliable.

The relative unpopularity of equity-based contracts is arguably due to high transaction costs arising, in part, from the costly verification of contract information. History has shown that if the state were able to verify contract information at no cost to traders, contracts would be optimal risk sharing (Mirakhor, 2012). Such was the case in Late-medieval Venice. Institutional arrangements that enhanced the State's ability to verify information expanded the set of contracts that the Venetian State could enforce and enabled the transition from the debt-like sea loan contract to the equity-like commenda contract. In Islam, transparency is upheld and terms and conditions of contracts and promises are required to be strictly honored. Hence, the probability of asymmetric information and moral hazard is minimized. That risk sharing takes place via contracts of exchange places high importance on such things as property rights, contract enforcement, and trust among the parties that the terms and conditions of exchange will be met and enforced (Mirakhor and Hamid, 2009; Mirakhor and Askari, 2010; Mirakhor, 2010, 2012).

Governance and the Legal Environment

Given the inherency of informational problems in exchange contracts, a well-functioning legal system and prudent governance frameworks become necessary to ensure rule enforcement. The need is even more pronounced in equity-based contracts, where the contingent nature of risk sharing and the limitation of human foresight render writing a *complete* contract, allowing for all contingencies, an almost impossibility (Askari et al., 2012; Mirakhor, 2012). So important is the role of the legal system in finance that a vast body of literature continues to evolve with regards to the same. Beck and Levine (2002) reported that countries with more efficient legal systems undergo higher level of financial development that is more market-based and less state-owned bank centric. Levine et al. (2000) distinguish between the French, English, German, and Scandinavian laws and examine their effects on secured creditors, the efficiency of contract enforcement and the quality of the accounting standards and find that financial development is related to the governing legal and regulatory framework. An earlier attempt was made by La Porta et al. (1998), who found that common-law countries generally have the strongest protection of shareholders and creditors and the best enforcement quality, followed by Germany and the Scandinavian countries, and finally, the French civil-law countries. La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) showed that there are larger and broader capital markets in countries with good investor protection laws. English common law countries, for example, have on average stock market capitalization[2] that is 60 percent of their GNP. French civil law countries, on the other hand, have a ratio of 21 percent only.

Contrary to the plethora of studies on financial contracts, the role of Islamic contracts is not adequately captured, except in the context of historical institutions and contract theory literature. Islamic rules cover all dimensions of human life including economic, social, cultural, and political relations. As such, the Islamic law of contract may have a strong distinctive character, if implemented with full account to all necessary aspects of spirit, rules, regulations, and institutions. Where a country's legal system is weak, firm-level corporate governance provisions are found to matter more (see, for instance, Klapper and Love, 2003; Durnev and Kim, 2005).

Property relations are governed by a set of rules regarding the rights of the human collective to these resources (2:29) and the obligations of the individual towards them. Islam establishes the right of access to resources by all humans. Once accessed and combined with work, individuals obtain a full right of possession over the resulting product. Only two ways of legitimate property rights' acquisition are recognized by Islam: (i) through one's

own labor, and/or (ii) through lawful transfer from others who have legitimately gained property rights title to an asset through their own labor, that is, via exchange, contracts, grants or inheritance. Islam forbids gaining instantaneous property rights without commensurate performance of work. This rule prohibits property rights to assets gained via gambling, theft, earning interest on money lent, bribery, or, generally, from sources considered unlawful. Furthermore, Islam imposes limitations on the right of disposing of property—a right which is presumably absolute in the western conception of property rights. In this regards, extravagant spending (*Tabdheer*), opulence (*Taraf*), wasteful spending (*Israf*), destructive behavior (*Talaf*), unproductive accumulation of wealth (*Kanz*), and not acknowledging blessings are all rule violations and damage or destroy economies.

Financial Sector Development

While bank borrowing and bonds' issuance are the most common debt-financing instruments, which are centered upon risk transfer and risk shifting. As the first-best instrument of risk sharing, developing an active and efficient stock market can promote international as well as domestic risk- sharing which render the economy and its financial system resilient to shocks. A well-functioning stock market is, thus, very important. It would allow for the mobilization of savings for investment and provide means for liquidity to individual shareholders. However, existing stock markets in non-Islamic economies have many drawbacks. They generate practices such as speculation and fluctuations in share prices, which are not related to the economic performance of enterprises. These practices are inconsistent with Islamic teachings. Difficulty remains in the form of self-dealings such as insider trading, unregulated short sales that promote unnecessary speculation, lack of protection of minority shareholder rights, weak regulation and supervision, and weak enforcement of contracts and regulations (Askari et al., 2012). The development of the stock market is also dependent upon developments in institutional infrastructure such as the effective protection of investors' rights and enforcement of contracts

Kandori (1992) illustrates how sharing simple information about past behavior can be used to deter cheating in a repeated game setting. This point has been further expanded on by Taylor (2000) and Raub and Weesie (1990) to information sharing within networks. Market efficiency in general depends on the type and extent to which accurate information is shared, and on the inference that economic agents draw from past actions, a point made by Ghosh and Ray (1996) and by Fafchamps (2002). It follows that information sharing networks play an important role in market efficiency,

even when they do not directly enforce contracts, because they circulate information that is relevant to reputational mechanisms.

Recent empirical studies have argued that, while necessary, financial liberalization may not be sufficient to foster an environment where the financial sector could function effectively. The strength of the legal environment, institutional reforms related to property rights and creditor information are crucial. Yet, the most common measure for financial development—private credit—does not directly capture these dimensions (see Acemoglu and Johnson, 2005; Cottarelli et al., 2003; Dehesa et al., 2007; McDonald and Schumacher, 2007; Singh et al., 2009; and Tressel and Detragiache, 2008).

Financial Inclusion and Redistribution of Income

Reference to the Islamic property right of access to resources by all humans, access to finance could be viewed as a corollary that well serves Islam's objectives of social solidarity and risk sharing. Islamic instruments of risk sharing are not exclusive to contracts of exchange but extend to redistributions, transfer payment programs, and intergenerational risk sharing through the institution of inheritance, as Islam ordains the duty of sharing the product or its sale proceeds, which relates to the conception of property as trust held to affect sharing.

Profiling of Risk-Sharing Friendliness in OIC Countries

Table 11.1 lists key components of an index that could determine how attractive a financial sector for risk-sharing finance would be. This includes the components described in the earlier section and the key indicators and proxies used to construct an index.

Figures 11.1–11.4 shows relative standing of different regions of OIC and developed countries represented by OECD countries. Figure 11.5 shows a composite result of the index. These are preliminary benchmark results assessing the conditions of financial markets in OIC countries. There is a lack of data for a number of countries and the data quality varies significantly from country to country. As important is the fact that we do not have data on the recommended instruments in Islam for distribution and redistribution—Zakah, Khums, Qard-al-Hassan, the institution of Waqf, and private charities. Moreover, moving beyond data, we need further refinement in the aggregation of heterogeneous indicators and especially their weighting. Still the results are quite startling. In all areas of financial development—the scaffolding and foundation (institutional structure, governance, legal structure), financial sector development, financial inclusion and risk sharing friendliness, OIC countries perform badly. While, the

Table 11.1 Key Components of Index

Components	*Indicators*	*Proxies*
Institutional scaffolding	Transactional justice	Resolving insolvency recovery rate (cents on the dollar)
	Contract enforcement	Enforcing contracts cost (% of claim)
	Information quality	Depth of credit information index (0–6)
Governance and legal environment	Regulatory quality	Regulatory quality
	Rule of law	Rule of law
	Corporate governance	Strength of investor protection index
Financial development	Alternative risk-sharing based assets	Mutual fund assets to GDP (%)
	Financial market depth	Stock market capitalization to GDP (%)
	Financial market liquidity	Stock market total value traded to GDP (%)
Financial inclusion	Financial access	Adults with an account at a formal fin. inst. to total adults (%)
		Adults saving at a fin. inst. in the past year to total adults (%)
		Number of listed companies per 10,000 people

Source: Alaa, Iqbal, and Rostom (2014).

GCC countries, namely the richer OIC countries that are in a capital surplus position from oil revenues perform much better than the other OIC countries, they fall behind the OECD and especially the G-7.

As conditions stands in OIC countries today, it is unlikely that a truly Islamic financial system that is based on risk sharing will mature in any of the countries anytime soon. Three foundational policies would go a long way to supporting an Islamic financial system and economic development more generally. First, and a good starting point to start the process—one that would also support their wider economic development and growth—is to develop efficient institutions, and in particular, an independent judiciary and strongly-established rule of law, as without it, everything and anything that follows is sure to collapse in time; and an integral component of the

rule of law is a serious effort to combat and reduce corruption. Second, these countries must start developing rational regulations and monitoring rules, and thus regulate compliance more effectively. Third, governance must be improved in all areas. These steps will improve the financial and economic environment and afford fertile ground for the development of a truly Islamic financial system.

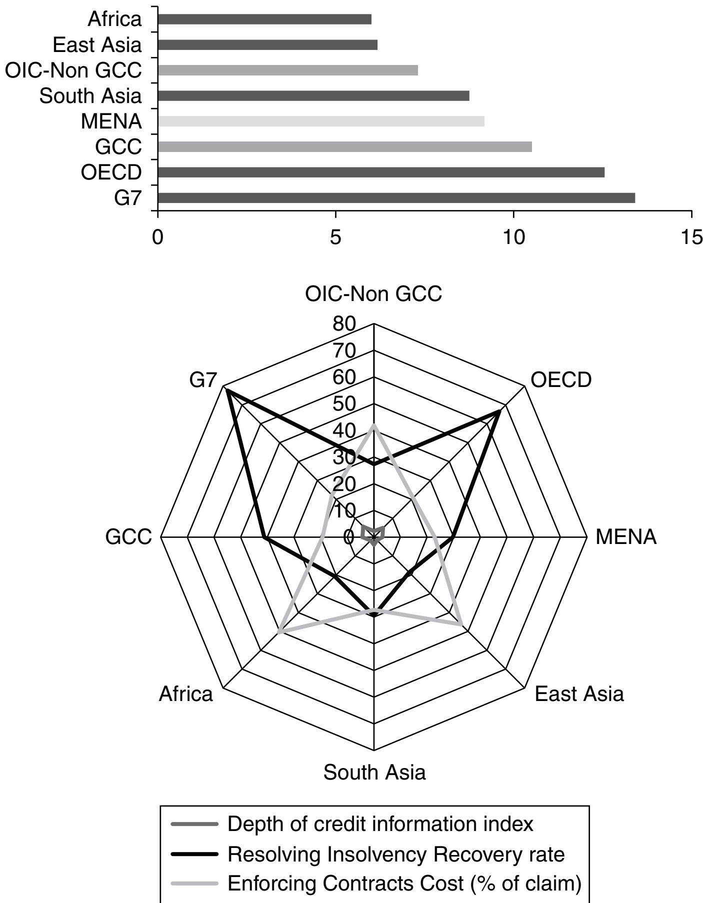
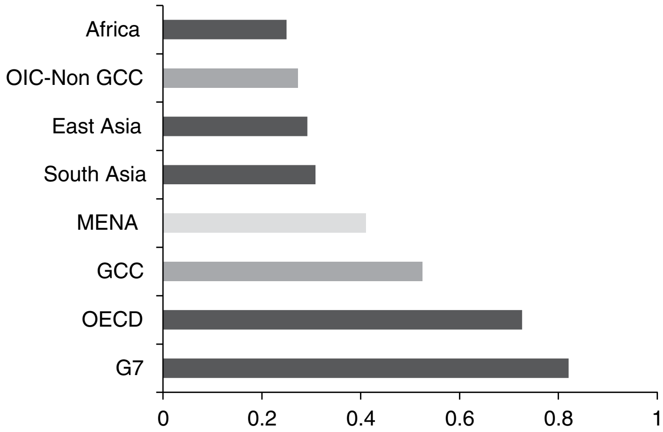
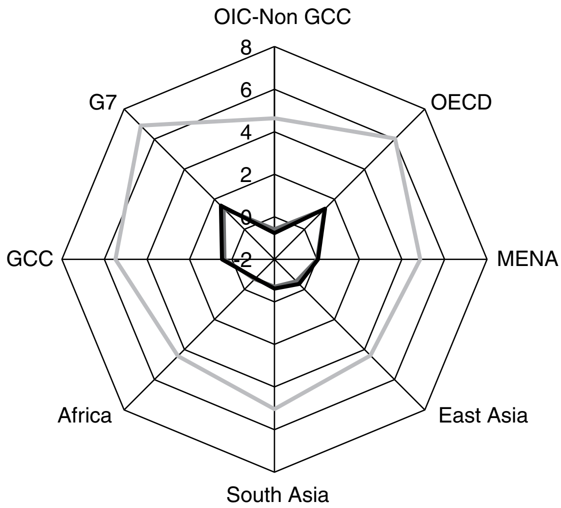


Figure 11.1 Institutional Scaffolding.





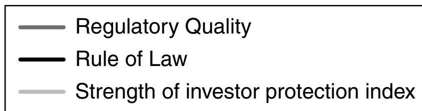
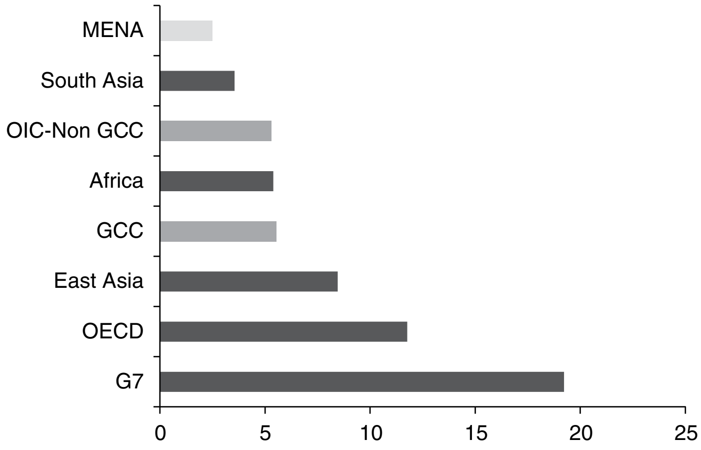


Figure 11.2 Governance and Legal Environment.



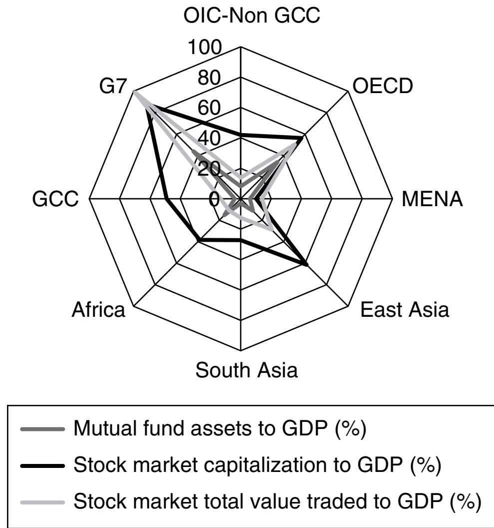
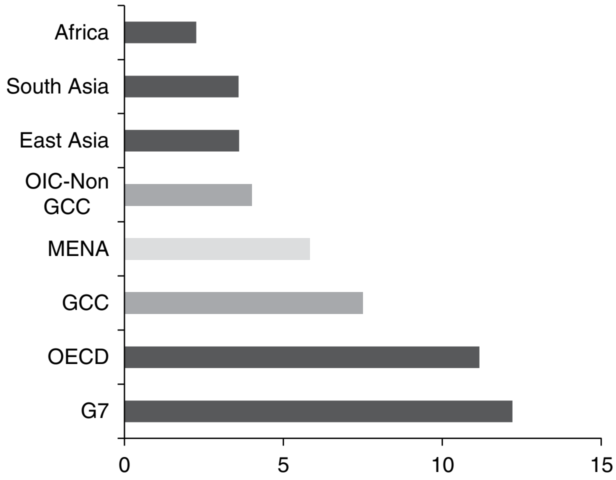


Figure 11.3 Financial Sector Developments.



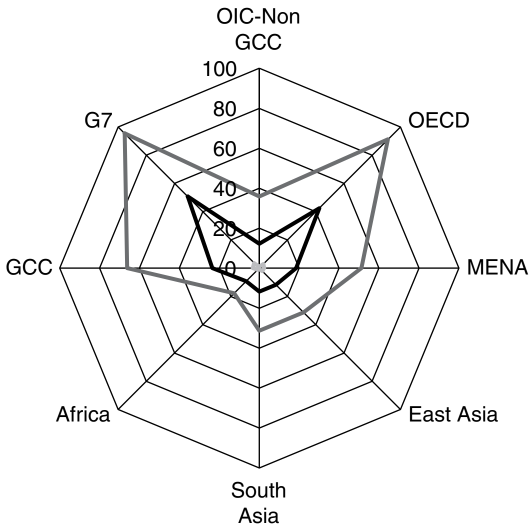


Figure 11.4 Financial Inclusion.

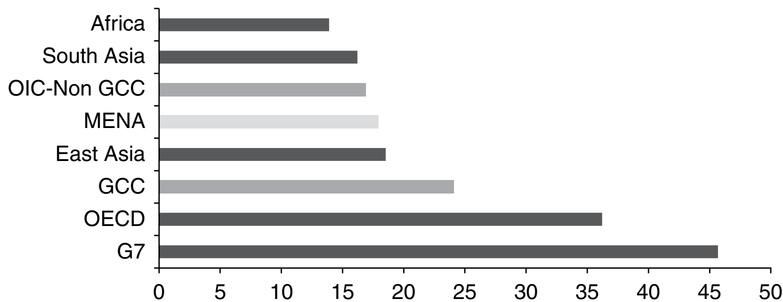


Figure 11.5 Risk-Sharing Friendliness of Financial Systems.

Benchmarking Objectives of Shari'ah (Maqasid al-Shari'ah)

While benchmarking financial sector development and friendliness towards Islamic finance was presented above as important for the development of Islamic finance, a more far-reaching benchmarking is needed to assess the wider economic setting of Muslim countries. Finance cannot function in a vacuum, but needs a strong and vibrant economy to thrive and grow. Indeed, the financial and economic sectors are locked into what is best described as a symbiotic relationship. In the case of Muslim countries, it would be unfair to benchmark them on the basis of Western philosophy and ideology. Their achievements and circumstances are more fairly assessed in relation to what are their goals and purposes in life. One such basis of comparison or benchmarking is *Maqasid al-Shariah*, or the goal and purpose of *Shariah* in Islam.

Despite vast natural resource endowments and young populations, the majority of Muslim countries are confronted with socio-economic ills. On average, the Organisation of Islamic Cooperation (OIC)[3] countries have lagged behind the rest of the world for the last 30 years in a multitude of social and economic development areas such as literacy, quality of education, life expectancy, employment, standard of living, gender equality, political participation, disparity between the haves and have-nots, and institutional infrastructure (Askari and Rehman, 2013; OIC Economic Outlook, 2013). In addition to the legacy of colonialism and the plethora of post-colonial inefficient institutions, the Muslims' state of affairs are further aggravated by ethnic divisions and sectarian violence at the national and regional levels; and in an outright violation of Islam's axiom of the unity of creation (Mirakhor and Hamid, 2009; Al-'Alwani, 1990).

As of January 21, 2014, out of the world's remaining 48 least developed countries (LDCs)[4] were members of OIC (UNCTAD, 2014). However,

a considerable gap persists between the rich and the poor, with the richest OIC member country, Qatar, posting an average per capita GDP based on purchasing power parity of USD102,900 in 2012; equivalent to 17.1 times of OIC's overall average of USD5,900 (OIC Economic Outlook 2013). As with other intellectually dependent and previously colonized states, Muslim countries tend to import alien western policies and models of socio-economic development. These models fail to recognize the primordial nature of Man (*Fitrah*), his psychological underpinnings and societal culture, thus, producing short-lived results and contributing to unsustainable inequitable development in the long run.

While the importance of socio-economic development is well established, the search continues for a development model that is all-inclusive and perpetually sustainable. From the predominant faith in the equilibrating power of the market, prior to World War II and the Great Depression, to latter calls for necessary government intervention to address market failure in generating full employment, development thinking has further matured to recognize the insufficiency of these measures and the need for structural market reform in pursuit of development. Widespread poverty and mounting debt burden, in the absence of morality, fairness, and justice, have recently questioned the latter policy recommendations and their underlying conception of development as material growth. This has made way to the notion of human development and the ideology of New Institutional Economics—an ideology that echoes some concepts closer to Islamic principles (Askari, 2013; Mirakhor and Askari, 2010; Mirakhor and Hamid, 2009).

In this context and in contravention to common misconceptions, Islam offers a sustainable and comprehensive development model, which incorporates the three inter-related dimensions of the self, the material world, and the society. The model consists of rules of behavior, institutions, incentives, and enforcement mechanisms that can be systematically categorized as promoting the higher objectives intended by the Creator and Lawgiver; that is, *Maqasid al-Shari'ah*. In spite of all this, and Muslim countries' claim of Islamicity and the heterogeneity of their growth and development prospects,[5] the current state of affairs and underdevelopment are prima facie evidence of non-compliance with the rules of Islam. It is the promise of *Allah* (swt) that:

> *If the people of townships were to believe and be consciously aware (of Allāh), surely we should have opened for them blessings from the heaven and from the earth, but they gave the lie (unto every messenger) and so we seized them on account of what they earned.* [7:96][6]

This bitter reality confirms the notion that whereas significant work has been done in the area of identifying *Maqasid*, limited work has been done in measuring the progress of achieving such objectives. This poses a research challenge of transforming subjective goals (*Maqasid*) into measurable and quantifiable indicators, which can be observed so that the tools can be developed to assess the absolute and relative performance of Muslim (and/or non-Muslim) communities against a benchmark. Alaabed, Alaa, Askari, Iqbal, and Ng (2014) provide an analytical framework to meet this challenge by proposing a multi-dimensional *Maqasid* Benchmark Index (MI) as a transparent and measurable benchmark that can be maintained over time. The choice of *Maqasid al Shari'ah* is justified on the basis of its simplicity, immutability, and importance with respect to the essence of the *Shari'ah*, without being saddled with the technicalities and particulars of the legal theory of the sources, *Usul al Fiqh* (Kamali, 1998).

Against this backdrop, this section highlights the merit of developing *Maqasid* Benchmark Index (MI) by (i) providing a self-inspection tool for policy-makers and researchers; (ii) devising a transparent framework and methodology of monitoring economic, social and policy development within the scope of *Maqasid*; and (iii) developing a benchmark for relative comparison and progress of Islamic countries in the OIC. It should, however, be recognized that this index as with all research could be modified and improved over time.

Literature on *Maqasid*[7]

Despite representing a relatively late formal development in the Islamic legal thought in the fifth Islamic century (Kamali, 1998), research on *Maqasid* has had a long and distinguished intellectual history with the purpose of designating the objective of the teachings prescribed by *Allah* (swt) for individual humans and their societies (*Shari'ah*). The idea of specifying objectives for *Shari'ah* was necessitated by the observation of Imam Al Haramayn Al Juwayni (d.478H/1085CE) also considered as the father of *Maqasid* (Yasmeen, 2010). Having been born in Juwayn, modern day Afghanistan, Al Juwayni observed that in the non-Arab Muslim lands, peripheral to the central places of Islam in the Arabian peninsula, lack of knowledge of the Arabic language had led to widespread confusion and misinformation about the objectives of the laws prescribed by *Allah (swt)*. Therefore, he felt the urgency to specify in simple language the major and necessary objectives (*Maqasid*) of *Shari'ah* (Bakkali and Smolo, 2012). Al Juwayni was, therefore, the first to classify the three categories of *Maqasid* as *Dharuriyaat*, *Hajiyyat* and *Tahsiniyyat* (essentials, needs and enhancements) and to define

the essential objectives of *Shari'ah* as the protection of people's "faith, souls, minds, private parts, and money," in his "*Al-Burhan fi Usul al Fiqh*" (Al-Juwaini, 1977 cited in Auda, 2008a).

His student al Ghazali (d.505H/1111CE) further expanded and developed these concepts in his famous works, *al-Mustasfa* and *Shifa'u al Ghalil*, introducing a more sophisticated categorization of the latter two *Maqasid* into progeny and wealth. While there were a number of other writers after Ghazali, the profound development of the theory of *Maqasid* is, however, attributed to Al Shatibi's (d. 790H/1388CE) seminal work of *al-Muwafaqat fi Usul al-Shari'ah*, where he instrumentalized the inductive reading of the *Qur'an* to identify the higher objectives, intents, and purposes of *Shari'ah* in preserving public interest. Al Shatibi is also accredited for emphasising *Maqasid* as being the fundamentals of Islamic jurisprudence and of all human thought (Auda, 2008c; Lahsasna, 2013; Yasmeen, 2010).

Al Shatibi's thoughts dominated *Maqasid* thinking well into modern time, when interest in *Maqasid* has been arguably renewed by the work of the Tunisian scholar Shaykh Muhammad Al-Tahir Ibn Ashur (d. (d.1393H /1973CE), author of *Maqasid al Shari'ah al Islamiyyah*. Advocating the importance of dynamic and timely expansion of *Maqasid*, Ibn 'Ashur made a compelling argument that the five *Maqasid* specified by his predecessors were insufficient and did not represent the true objectives of the Law Giver. In his view, the most important objectives are protection of pure human nature (*Fitrah*), system, equality, freedom (both political and religious freedom), and human rights (Kamali, 1998; Lahsasna, 2013; Yasmeen, 2010).

In Ibn 'Ashur's view, the five *Maqasid* suggested by Ghazali were not the core necessity protections because what the *Shari'ah* intended to protect are those without which the society would disintegrate. This was not the case with the *Maqasid* he himself specified, negation of any of which would lead to societal chaos.

After Ibn 'Ashur there were many more writers on *Maqasid*. Virtually all writings on *Maqasid*, up to the end of the last century and early part of this century, suffered from two major shortcomings: (1) lack of practical value with respect to public policy undertakings, and (2) lack of relevance beyond intellectual exercise to allow for empirical studies. However in 2001, Sheikh Taha Jaber Al 'Alwani, an accomplished and a credible *Usuli* and *Shari'ah* scholar, made a major contribution to the field by reducing the number of *Maqasid* to the three most essential and absolute minimum principles on the basis of inductive reasoning of the *Qur'an*. This stands in contrast with the derivation of the traditional *Maqasid* on the basis of deduction from the Islamic legal heritage, itself, rather than the original texts (Auda, 2008a; Yasmeen, 2010).

In effect, Al-‘Alwani has "overcome the historicity of *Fiqh* pronouncements and represent[ed] the scripts' higher values and principles" (Auda, 2008a, p. 8). In addition, he overcame any contentions over literalism and *Qhiyas*. Termed as the "supreme and prevailing *Maqasid*" (Auda, 2008a), these *Maqasid* are *Tawheed*, individual and society's right to self-purification, and individual and societal right to development, perhaps in a pioneering effort that explicitly linked development with *Maqasid* for the first time. Al-‘Alwani refers to the classical *Maqasid* as *Maqasid al Mukallafin*, rather than *Maqasid al Shari'ah*, and ranks them third in the hierarchy of *Maqasid*. A number of values are proposed to serve as the second level of *Maqasid*, such as justice, freedom, and equity. These values are deemed necessary to achieving the supreme objectives.

In 2008, Umar Chapra provided an "Islamic vision of development in the light of the *Maqsid al-Shari'ah.*"[8] Development, in Chapra's view, aims at promoting "*falah*" or human well-being, and is attainable through the enrichment of the human self, faith, intellect, posterity, and wealth; the five original *Maqasid*. While accepting the original *Maqasid*, Chapra further provided a list of corollaries to each objective. The preservation and enrichment of posterity, for instance, is seen as multidimensional, involving the institution of family, moral upbringing and intellectual advancement, and extending to considerations of present generations' consumption, saving, investment, and borrowing decisions. Environment, too, is given precedence and regarded indispensable for the health and sustainability of future generations. The achievement of the corollaries is deemed requisite for the achievement of the ultimate *Maqasid*. Such an attempt, thus, made it possible, with effort, to avoid the two problems of the traditional Maqasid positions.

The *Maqasid* Benchmark Index (MI)

The Conceptual Framework

The conceptual framework sets out the organization of concepts and ideas in context of what underlie the design and methodology of the *Maqasid* benchmark index. It is particularly useful as an organizing device in research and as a practical tool that assists policymakers when developing areas identified as critical in the *Maqasid* benchmark index. The objective of the conceptual framework is to improve the *Maqasid* benchmarking by providing benchmark developer and reviewer with a comprehensive and updated set of concepts to apply in the development or revision of the benchmark.

The *Maqasid* benchmark index is conceptualized based on the fact that all classifications of *Maqasid*, whether classical or contemporary, are products

of *Ijtihad* that could be described as each scholar's conception of reform and development of the Islamic law; none could claim to be according to the Divine Will nor to have a set number or a set prioritization among them. This is most pronounced in Ghazali's refusal to ascribe independent juridical legitimacy (*Hujjiyyah*) to any of his proposed *Maqasid*. An integrative approach (Arabic term: *Talfiqh*) is, thus, followed to develop the proposed benchmark index; integrating various databases and perspectives in a Matrix format, which allows the benchmark user the flexibility of adopting any conception of *Maqasid* he/she deems reasonable, whether classical or contemporary; of three or more constituents. We believe that this open design is one of the strengths of the index.

The Design of Maqasid *Benchmark Model*

Design of MI is proposed as an iterative bottom-up process. Following the above analytical framework and taking a bottom-up approach, the design of the benchmark index proceeded with the collection of more than 180 possible variables, found in conventional and Islamic literature on well-being and socio-economic development. This provided a universe of indicators relevant to socio-economic development. The universe of variables was then filtered and screened in light of the features of a good indicator, such as observability, measurability, comprehensiveness, accuracy, and transparency. Another objective of this review was to eliminate variables that may be serving a similar purpose or may be reflected in another aggregate variable. For example, variables excluded were the likes of:

a. happiness, which despite being used in some studies concerned with well-being and socio-economic development, is exposed to a great deal of subjectivity in its definition and measurement. Also, the concept of happiness in conventional economics may differ from the same in Islamic economics and therefore, the use of a conventional variable on happiness could be misleading and potentially misrepresenting *Maqasid al Shari'ah*;
b. various economic indicators such as savings, inflation and unemployment whose effect are indirectly captured in other measures of economic development such as GDP per capita; and
c. various other proxies that essentially measure the same thing and overlap in content, such as a wide array of governance indicators.

After applying our filtering rules, 62 indicators were selected in the 2nd iteration. These 62 indicators are identified as the superset or constituents of

the ideal *Maqasid* Benchmark Index, in recognition of data availability and observability constraints. These indicators[9] support the empirical examination of the benchmark and are sourced, in general, from well-established international index providers, ensuring the quality, integrity, continuity, and reliability of data provision.

The next step or iteration in the process deals with clustering domain of Index constituents into a reduced number of broad dimensions which can be closely identified to the tenets and teaching of Islamic economics. Indicators pointing to similar aspects were clustered into 44 broad dimensions, which were further aggregated to 13 *Maqasid* indicators.[10] These indicators reflect the multi-faceted dimensions of the problems faced by Muslims at present; and clear injunctions from the *Qur'an* and Prophetic *Sunnah* with regard to the socio-economic behavior of Muslims, where available. The choice of *Maqasid* indicators provides ease of reference for policy formulation and lends itself to any conception of *Maqasid*.

Final dimensions (**D**), thus, represent the constituents of several indicators (**P**) and can further be grouped into different aggregated *Maqasid* indicators (**I**). Given core building blocks, a benchmark can be constructed by recognizing significance of each indicator, or *Maqasid* indicator, or *Maqasid* by assigning certain weight to each (figure 11.6).

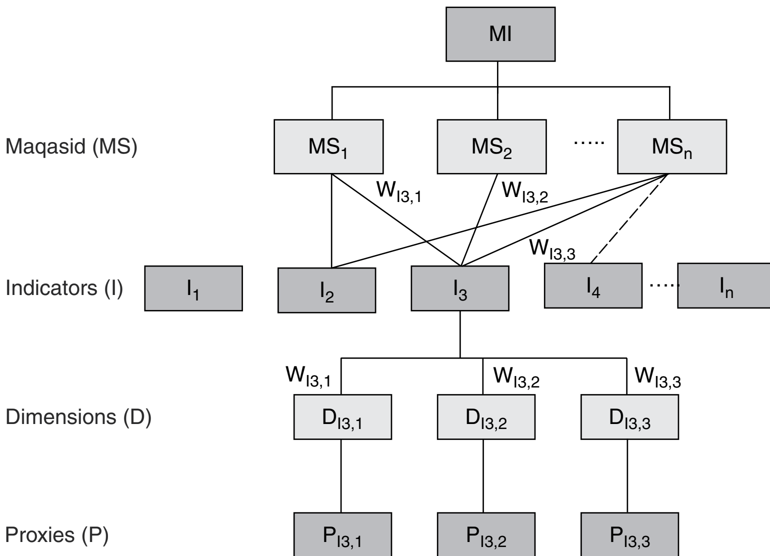


Figure 11.6 Weights' Assignment to the Index's Core Building Blocks.

As depicted above, the mapping of the individual indicators to selected *Maqasid* indicators and therein to the selected *Maqasid* is designed in a weighted manner as follows:

$$MI = \sum_{MS=1}^{N\ of\ MS} W_{MS} \cdot \left(\sum_{I=1}^{N\ of\ Ind} W_{MS,I} \cdot \left(\sum_{P=1}^{N\ of\ Pro} W_{I,P} \,.\, P_{I,P} \right) \right)$$

Where:

MI is the *Maqasid* benchmark index
W is the respective weight assigned
MS is the *Maqasid*
I is the *Maqasid* indicator
P is the proxy used for each indicator

If equal weights are preferred, then $W_{MS} = \frac{1}{Total\ of\ MS}$ for the respective *Maqasid*, $W_I = \frac{1}{I}$ for the respective *Maqasid* indicator, and $W_P = \frac{1}{P}$ for the respective indicator

Overall, the design of the proposed benchmark takes into consideration the desirable characteristics of accuracy, comprehensiveness, observability, and transparency.

Construction of Benchmark—Building Blocks

The following indicators were chosen so as to reflect the multi-faceted dimensions of the benchmark based on clear injunctions from the *Qur'an* and Prophetic *Sunnah* with regard to the socio-economic behavior of Muslims, where available. The selected *Maqasid* indicators are discussed below (Summarized in Tables 11.1 and 11.2):

Compliance with Islam's Core Axioms

The foremost *Shari'ah* requirement is commitment to one's Islamic beliefs. The acceptance of Islam's fundamental axioms of *Tawheed* (unity), *Nubuwwah* (Prophethood), and *Ma'ad* (accountability) requires manifestation through commensurate action. *Tawheed* is recognising *Allah (swt)* as the one and only Creator and Sustainer of the entire creation. It also implies the unity of creation and refusal of any kind of discrimination and disunity. *Nubuwwah* refers to the Prophets and Messengers entrusted with divine revelations for the guidance of mankind. *Ma'ad* establishes accountability and justice, for mankind will be judged and rewarded in accordance to their rule compliance or non-compliance (Mirakhor and Hamid, 2009).

Table 11.2 The Ideal Maqasid Matrix (Based on Alaabed, Askari, Iqbal, and Ng (2014))

1. Compliance with Islam's axioms	*Tawheed* (Unity)	*Tawheed* (Unity)	Binary variable to be assigned and weighted in accordance with the ratio of Muslim population
	Nubuwwah (Prophethood)	*Nubuwwah* (Prophethood)	Binary variable to be assigned and weighted in accordance with the ratio of Muslim population
	Ma'ad (Accountability)	*Ma'ad* (Accountability)	Binary variable to be assigned and weighted in accordance with the ratio of Muslim population
2. Spiritual and moral uplift	Values	Religion important in life	World Values Survey (WVS)
		Thinking about meaning and purpose of life	World Values Survey (WVS)
	Long-term perspective of self-interest and individual's accountability	Long-term orientation (Limited Data Availability)	Hofstede's cultural dimension
	Personal freedom (including freedom of religion)	Personal freedom	Prosperity Index
		UN HDI The International Covenant On Economic, Social And Cultural Rights	UN HDI

3. Equitable distribution of income and wealth	Charity and philanthropy	Charity	Prosperity Index
	Intergenerational sustainability	Fiscal freedom	Heritage Foundation
		Social security system and safety net	Data to be sourced
		Intergenerational funds or savings (sovereign wealth funds)	Data to be sourced
	Quality of Islamic Redistributive Instruments (*zakat, qard-al-hassan*, etc.)	Data to be sourced	Data to be sourced
4. Safety and security	Freedom from fear, conflict, and crime	Safety and security	Prosperity Index
5. Socioeconomic justice	Gender equality/ women development	UN HDI Gender inequality index	UN HDI
	Social equality	UN HDI International Convention on the Elimination of all forms of racial discrimination	UN HDI
	Financial freedom	Financial freedom	Heritage Foundation
	Removal of poverty	UN HDI multidimensional poverty index	UN HDI
		Total factor productivity growth	Penn World Table
	Social responsibility	Corporate social responsibility	Data to be sourced
	Financial inclusion	Affordability of financial services	Global Competitiveness Index
		Availability of financial services	Global Competitiveness Index

Continued

Table 11.2 Continued

		Ease of access to loans	Global Competitiveness Index
		SME Lending—Loan value (% of GDP)	Financial Access database by CGAP and the World Bank Group
6. Social capital	Social capital (including trust)	Social capital	Prosperity Index
		Satisfaction with community	UN HDI (Social Integration)
		Property rights protection	Heritage Foundation, Fraser Institute, Global Competitiveness Index
		Contract enforcement	World Bank's Ease of Doing Business Index/ Fraser Institute (EFW)
	Family solidarity	Divorce rate	The United Nations Statistics Division (UN Demographic Year Book)
		Perception of life—family important	World Values Survey
7. Environmental sustainability	Environmental sustainability	UN HDI Environment	UN HDI
8. Healthcare	Nutrition and life expectancy	UN HDI Life expectancy at birth (years, HDI)	UN HDI
		Malnutrition prevalence, height for age (% of children under 5) +	World Development Indicators (WDI)
		Malnutrition prevalence, weight for age (% of children under 5)	
	Reproductive health	Fertility rate, total (births per woman)	World Development Indicators (WDI)
	Health financing	Health expenditure per capita (current US$)	World Development Indicators (WDI)
	Access to health	Hospital beds (per 1,000 people)	World Development Indicators (WDI)

		Personally paid for health insurance (% age 15+)	Global Findex (Global Financial Inclusion Database)
9. Education	Literacy	Literacy rate, adult total (% of people ages 15 and above)	World Development Indicators (WDI)
	Access to education	Net intake rate in grade 1 (% of official school-age population)	World Development Indicators (WDI)
	Quality of higher education	Quality of higher education	UN HDI
	Research and technological advancement	Research and development expenditure (% of GDP)	World Development Indicators (WDI)
		Innovation and technology	UN HDI
10. Institutional quality	Governance (political)	Worldwide Governance Indicators (WGI)	Worldwide Governance Indicators (WGI)
	corporate governance	Investors' protection	Global Competitiveness Index/World Bank's Ease of Doing Business Index
	Rule of Law	Rule of Law	Worldwide Governance Indicators (WGI)
	Transparency (public sector including corruption)	Corruption Perception Index	Transparency International
		Transparency in government policymaking	Global Competitiveness Index
	Transparency (private sector)	Ethical behavior of firms	Global Competitiveness Index
	Quality of legal institutions	Integrity of the legal system	Fraser Institute (EFW)
	Access to legal system	Civil justice	Rule of Law Index—The World Justice Project

Continued

Table 11.2 Continued

11. Economic development	Per capita income	GDP per capita, PPP (current international $)	World Development Indicators (WDI)
	Economic mobility	Economic mobility	Data to be sourced
	Services sector development	Emploument in services (% of total employment)	World Development Indicators (WDI)
			World Development Indicators (WDI)
12. Financial development	Leverage stock market	Total debt (% of GDP)	World Development Indicators (WDI)
	development	Market capitalization of listed companies (% of GDP)	Global Development Finance Database
	Financial literacy	Stocks traded, turnover ratio (%)	Global Development Finance Database
		Financial literacy	Data to be sourced
13. Business environment	Ease of doing business	Ease of doing business	World Bank's Ease of Doing Business Index
	Entrepreneurship and opportunity	Entreprenneurship and opportunity	Prosperity Index
	Access to finance	% SME with an outstanding loan or line of credit	World Bank's Enterprise Surveys
		% SME with an account ar a formal financial institution	World Bank's Enterprise Surveys

Spiritual and Moral Uplift

From the Islamic perspective, self-purification is not only crucial for professing *Tawheed* but also to enable development. At the working level, it requires present consciousness and awareness of the self and its Creator. This ultimately leads to embodying Islamic virtues (*Akhlaqh*) and compliance with the rules and principles prescribed by *Allah* (*swt*) in every act and speech (Chapra, 2008; Mirakhor and Askari, 2010; Mirakhor and Hamid, 2009). The Prophet (*Salla Allah-u 'alaihi wa Aalih-i wa Sallam*) is reported to have said: "*Indeed I have been sent to complete the best of character (akhlaq).*"

Equitable Distribution of Income and Wealth

The concentration of wealth in the hands of a few is strongly denounced by the holy *Qur'an* (59:7). Hence, Islam has mandated instruments that guarantee fair distribution of income and wealth. This is achieved through adherence to the risk sharing contracts of *Mu'amalat, Zakat, Khums,* and *Sadaqhat*, among others. Any sign of poverty and significant income inequality is unequivocally evidential of non-compliance with the rules of Islam and the obligation to redeem the rights of others' in one's wealth. Poverty and income inequality are also detrimental to economic development as it deprives the society of both its human and social capital.

Safety and Security

Human life is so valuable that *Allah (swt)* equates the killing of one person to that of the entire mankind, and the saving of one life to the saving of that of the collectivity (5:32). The Prophet (*Salla Allah-u 'alaihi wa Aalih-i wa Sallam*) also acknowledged the sanctity of life in his last sermon: "*Your lives, your property and your honor are as sacred as this Day of yours (Hajj), in this month of yours, in this city of yours.*" The preservation of life, thus, serves the objectives of Islam.

Socioeconomic Justice

Islam emphasizes justice (*Qhist*) in social interaction, so much so that it considers it one of the divine objectives of the Prophets and Messengers' appointment on earth. In a direct relation to this, *Allah (swt)* declares:

> *Verily we sent our Messengers with clear proofs, and sent with them the book and the scale, so that humans may stand forth (establish themselves) with Qhisṭ.* [57:25]

The growth of the individual and the collectivity is dependent upon fostering unity and amicability and rejecting all forms of injustice and

discrimination (Askari, 2013; Mirakhor and Askari, 2010; Mirakhor and Hamid, 2009).

Social Capital

Staring with Man's relationship with *Allah (swt)* and extending to all Man-to-Man relationships, Islam embeds relationships in a contractual context that is assigned utmost sanctity. Faithfulness to contracts' terms and conditions strengthens trust and mutual cooperation. Together with social networks, social structure and shared norms, trust forms social capital; which is essential for promoting social cohesion and facilitating economic development (Mirakhor and Askari, 2010; Mirakhor and Hamid, 2009; Ng, 2014).

Environmental Sustainability

Whereas mankind is ordained to utilize the resources, entrusted to it by *Allah (swt),* for the development of the earth and betterment of society, it is also urged to do so efficiently and with regards to future generations. Man's freedom to act is subject to the Islamic rules of property rights, including no waste, no harm infliction, nor harm reciprocity (*la Dharara wa la Dhirar*). As such, consumption, production, and distribution activities must not be detrimental to the environment and third parties (Chapra, 2008).

Healthcare

As with all the gifts endowed by *Allah (swt)*, a human being's life, body, and health, too, belong to Him *(swt)* and humans are encouraged to maintain them duly. It follows that Islamic society must facilitate and provide the best means of healthcare to preserve one's health and ability to fulfil his religious and worldly duties. After all, "a strong, powerful *Mu'min* is better and more beloved to *Allah* than a weak *Mu'min*." Strength can be interpreted as relating to both mental and physical health.

Education

Verily, the first revelation of the *Qur'an* to our beloved Prophet (*Salla Allah-u 'alaihi wa Aalih-i wa Sallam*) was a command to "read" (*Iqhra'*). Similarly, Islamic teachings encourage the pursuit of both religious and mundane education, irrespective of age and gender. While the former is necessary for attaining felicity in both this world and the hereafter, the latter is directly related to equipping man with knowledge and skills necessary to honor his duties as a vicegerent on earth. Likewise, contemporary economic thought emphasizes education and enrichment of human capital as a major factor in economic growth and development (Vejzagic and Smolo, 2011).

Institutional Quality

While Islam delegates the responsibility of enjoining good and forbidding evil (*al-Amr bi al-Ma'ruf wa an-Nahy 'ani al-Munkar*) to individuals at the society level, it further promotes justice by requiring full transparency and impartiality of the governance system. All individuals are to be equal in the eyes of law. This and other aspects of institutional quality are found to be conducive to economic growth in the context of modern economic theories.

Economic Development

Economic theory has generally identified a number of determinants that are essential for economic development. These have not been ignored while constructing the benchmark, as they are found to be broadly compatible with Islamic rules and principles. Examples include per capita income, savings, investment, economic mobility, and the development of the services sector.

Financial Development

A healthy growing economy requires an efficient financial system that channels funds from savers to investors. It also needs to ensure that the economy's savings are directed to the best productive and rewarding investment. The Islamic financial system is fundamentally different from that of the conventional system. For one, it is free from interest and it is also based on risk sharing. In this regard, stock markets are regarded as the first best instrument of risk sharing.

Business Environment

While guaranteeing the rights of the less-able in the wealth and production of the more-able, through the instrumentality of *Zakat, Sadaqhat, Khums, Waqhf,* and others, Islam has made it a duty incumbent upon every capable Muslim to work hard and seek one's sustenance and that of his family. In addition to their economic implications, work and employment are also believed to be beneficial to one's mental and physical health. Unemployment and dormancy are often associated with a number of socioeconomic problems. Islam incentivizes work by considering it an act of worship and upholding entitlement to equal opportunity for all (Askari and Rehman, 2010b; Chapra, 2008; Mirakhor and Askari, 2010; Mirakhor and Hamid, 2009; Soleimani et al., 2013). Furthermore, Islam has laid down rules to foster free and competitive business conduct. These rules include transparency, contracts' sanctity, information dissemination, and removal of participation barriers, among others. These rules are particularly relevant to promoting private sector ventures. The private sector, in some parts of the world, provides employment to approximately 90 percent of the working population. Having an enabling business environment is, therefore, important for the development of the economy and the community.

Construction of Benchmark—Methodology

A hypothetical ideal Islamic state is introduced into the analysis, as the ultimate benchmark for *Maqasid-al-Shari'ah*-compliant socioeconomic development. This also facilitates distance-based ranking and measurement of each country's absolute distance to the best performance on each *Maqasid* indicatior and *Maqsid*.

In congruence with conventional index construction methodology, data from the positive indicators is first normalized into comparable unit-free values in the range of zero to one, using the formula below:

$$\text{Normalized indicator} = \frac{\text{actual value- min value}}{\text{max value- min valu}}$$

Where actual value is the actual value corresponding to the indicator's level in a country, max value is the maximum value assigned to the hypothetical Ideal Islamic state with regard to that indicator, and min value is the minimum observed value of the same indicator in the sample of OIC countries. The use of minimum observed value, rather than a pre-determined static value, introduces dynamism in the index.

Normalization of negative indicators, such as CO_2 emissions and cost of contract enforcement, is, however, obtained using the following formula:

$$\text{Normalized negative indicator} = \frac{\text{actual value- max value}}{\text{min valu}}$$

Once all indicators are normalized, the score for each sub-*Maqasid* index is calculated by aggregating its respective weighted indicators, as discussed above. The final MI is, therefore, the sum of the three sub-*Maqasid* indices; development, self-purification and *Tawheed*. 'Alwani's three minimum principles are used as the main *Maqasid* in conformity with Occam's razor's parsimony principle.[11] Though 'Alwani's conception and order of *Maqasid alSharia'ah* are intuitively plausible, we are inclined to overweigh the development dimension in view of the subjectivity of the *Tawheed* component and inadequacy of judging by available indicators. After all, *Tawheed's* manifestation goes beyond the statistical numbers of Muslims, Mosques or pilgrims. Indeed, a collectivity's *Shari'ah*-compliant deeds and actions serve as a better indication of their religiosity, as emphasized by the holy *Qur'an* (Mirakhor and Hamid, 2009). Overweighing development is, therefore, hoped to achieve the dual purpose of overcoming indicators' subjectivity and indirectly measuring the essentially inseparable *Tawheed* component.

The Ideal Islamic state achieves the maximum score of 100. Countries are ranked accordingly with reference to their distance to the former. A narrowing distance represents improving socio-economic development conditions from *Maqasid-al-Shari'ah*'s perspective. Unlike aggregate ranking that compares countries' compliance with *Maqasid al-Shari'ah* with one another, the distance to frontier measure benchmarks countries to the ideal *Maqasid*-compliant socio-economic development level. Aggregate ranking, therefore, shows only the relative change in a country's socio-economic environment when compared intertemporally, while the distance to frontier measure shows its absolute change. Intratemporally, the distance to frontier measure can identify the gaps between countries (World Bank, 2013).

Results

The main challenge with this undertaking is the data limitations for some of the variables, especially those related to spirituality and instrumentality of Islamic distributive and redistributive institutions, such as *Zakat Khums, Sadaqhat, Qardh-al-Hasan* and others, and the availability of otherwise measurable data for all of the OIC member countries. As a result of data limitations, the final list of variables used to compute the actual benchmark index was shorter than the ideal that had been hoped for. In particular, only 27 indicators were used, for which data were readily available across 37 OIC member countries.[12]

Table 11.3 summarizes the results of the *Maqasid* Benchmark Index; measuring the compliance of 37 OIC member countries with *Maqasid* in their socio-economic affairs. For ease of reference, the table summarizes the respective country's development level[13]; the composite index's distance to frontier rankings; the three individual sub-indices' rankings; as well as rankings of possible dual combinations of the sub-indices. The disaggregation of our multidimensional measure is aimed at enhancing its transparency and guiding reformatory initiatives. The data is for 2010, except in few cases where the time-series was missing. In such cases, consistency was assumed and the closest older or newer observation was reported where available else the value of a neighboring country with similar socio-economic conditions was assumed.

As anticipated, the Index shows a wide range, the composite index's aggregate scores range from a minimum of 38 (Chad) to a maximum of 67 (UAE), indicating a considerable divergence from a *Maqasid*-compliant state of affairs. As a result, the OIC member countries, under review, mainly fall under the poor (7 countries) and unacceptable (29 countries) clusters of development. The rankings conform to the bitter reality of Muslims today

Table 11.3 Summary Results of the Maqasid Benchmark Index (MI)

Country	*Score*	*Adj. Score*	*DtF*	*Ranking*
Ideal Islamic state	0.969	1.000		
Albania	0.483	0.498	0.502002	8
Algeria	0.369	0.381	0.618673	31
Azerbaijan	0.482	0.497	0.502601	9
Bangladesh	0.462	0.476	0.524436	18
Benin	0.479	0.491	0.508623	10
Burkina Faso	0.467	0.480	0.520333	14
Cameroon	0.441	0.454	0.545794	22
Chad	0.320	0.331	0.668982	36
Cote d'Ivoire	0.351	0.361	0.639204	34
Egypt, Arab Rep.	0.402	0.416	0.584309	28
Guinea	0.406	0.417	0.583136	27
Indonesia	0.529	0.544	0.455892	4
Iran, Islamic Rep.	0.359	0.370	0.629560	33
Jordan	0.455	0.471	0.529371	19
Kazakhstan	0.551	0.566	0.433517	3
Kuwait	0.553	0.568	0.431942	2
Kyrgyz Republic	0.472	0.488	0.512189	12
Lebanon	0.453	0.467	0.533113	20
Malaysia	0.517	0.535	0.464793	5
Mali	0.465	0.477	0.523291	16
Mauritania	0.378	0.389	0.610885	30
Morocco	0.461	0.476	0.523831	17
Mozambique	0.399	0.412	0.588372	29
Niger	0.407	0.418	0.581618	26
Nigeria	0.409	0.422	0.578268	25
Pakistan	0.347	0.359	0.640903	35
Saudi Arabia	0.467	0.483	0.517060	13
Senegal	0.436	0.448	0.552199	23
Sierra Leone	0.411	0.423	0.577401	24
Tajikistan	0.507	0.522	0.477541	6
Togo	0.369	0.381	0.619109	32
Tunisia	0.443	0.458	0.542231	21
Turkey	0.471	0.488	0.511779	11
Uganda	0.463	0.478	0.522242	15
United Arab Emirates	0.604	0.621	0.379334	1
Uzbekistan	0.494	0.508	0.491943	7
Yemen, Rep.	0.320	0.330	0.669698	37

and are in line with the findings of Askari and Rehman's Islamicity and Economic Islamicity indices and other relevant studies, which again suggest a deep chasm between Islam's prescription for socio-economic development and Muslim well-being, in general, both in this world and the hereafter and the current conduct in Muslim countries.

Moreover, the individual sub-indices' rankings reveal disparity in the compliance with the individual *Maqasid*, *Tawheed*,[14] self-purification, and development, at the national level. While UAE ranks high is the development and self-purification *Maqasid*, for example, it lags in the *Tawheed* component because of its socio-economic injustices. Uganda, on the other hand, ranks very high on the *Tawheed Maqasd* but lags in the other two *Maqasid*.

Far from being ideal, MI is only an initial attempt at measuring a society's level of socio-economic development in the spirit of *Maqasid al Shari'ah*, on the basis that *Maqasid al-Shari'ah* can systematically be categorized as both the means as well as the ideal ends of an Islamic development model. To be practically useful, this study should be expanded in a number of dimensions, including:

(i) reconstruction of the benchmark using more robust techniques, such as the principal component and data imputation for missing variables;
(ii) collection of additional data for dimensions that are not sufficiently represented by the currently available dataset; and
(iii) expansion of the analysis so as to include the OIC that were not represented in the Index and Non-OIC member countries.

Policy Implications

As a group, it would appear that OIC countries lack effective institutions, rational rules and regulations, their monitoring and enforcement, and sound governance. This is the initial conclusion of a number of benchmarking efforts on broad-based, economic, developmental, and financial indicators. The absence of these foundational elements for human, economic, and social development should be the first priority of policy makers and governments of these countries. Further and more refined benchmarking efforts would reveal more targeted policies and areas for policy focus. However, as things stand today in most OIC countries, it would be difficult to envisage a thriving Islamic financial system or effective and sustainable human and social development as indicated from the teachings of Islam.

CHAPTER 12

Policy Challenges: Building Institutions

Introduction

The one thing that all economists and financial experts can surely agree upon is the importance of institutions in all areas of economic activity. In the case of Islamic finance, as its operational essence is risk sharing, it is essential to promote the development of an institutional environment that is conducive for market participants to implement risk-sharing principles. An enabling environment where risk and reward are shared in a fair and systematic manner, rather than being transferred or shifted, can further foster trustworthiness, social solidarity, cooperation and the protection of property rights.

Therefore, the question before policy makers is no longer "do institutions matter?" but "which institutions matter and how does one acquire them?" (Rodrick, 2000). Given the important implications of social capital, it is essential to identify the key features of social capital development in order to strengthen the market's institutional structure for risk sharing. For example, in view of the strong interdependence between contracts and trust as reflected in the *Qur'an* (e.g., Chapter 23, verse 8 and Chapter 5, verse 1), contracts become difficult to negotiate and conclude, and costly to monitor and enforce, in the absence of trust. Consequently, complex and expensive legal and administrative mechanisms would be required to enforce contracts and resolve disputes (Mirakhor, 2009; Mirakhor and Hamid, 2009). Trust can mitigate such costs. Further, property rights and the right not to be harmed can be associated with positive social norms and social structure. Positive norms of reciprocity imbedded in society, compliance with the

rules prescribed by the Creator, culture and resolutions of social conflict strengthen these pillars of the market's institutional structure. Having a cohesive and strong social network can also assist in the sharing of information for market activities, thus promoting the free flow of information. In essence, social capital can play a reinforcing role in strengthening these pillars of the market's institutional structure to reduce uncertainty and transaction costs as well as to facilitate cooperation and collective action (Mirakhor, 2009).

As formal and informal institutions are interrelated, initiatives to develop different forms of institutions may overlap especially where there is a complementary relationship between these institutions. According to Black (2001, p. 785), "the institutions that support securities markets coevolve and reinforce each other. Weakness in one can sometimes be offset by strength in another. Formal legal rules are only part of a large web of market-supporting institutions." Institution building, particularly those that are highly specific to local conditions and have a high level of tacitness, demands the reliance on local knowledge, and that best practice blueprints should not be overemphasized at the expense of experimentation (Rodrick, 2000). In this context, Prusak and Cohen (2001, p. 23) postulate that "building social capital cannot be legislated or managed. It requires the kind of intervention that encourages natural development that orients rather than orders, that provides nourishment rather than blueprints." Institution has to be homegrown and can precede the development of the market (Black, 2001). In turn, institution building works best within participatory political and economic systems, which is the prerequisite for the development of social capital.

In fairness, however, it should be recognized that criticisms of the present configuration of the Islamic finance industry do not give due recognition to major challenges and constraints under which the industry operates. These constraints place the IFI at a significant disadvantage that makes competition within a centuries-old and well-entrenched interest rate-based debt system highly challenging. First among these constraints are the general advantages and incentives granted to interest rate-based debt and credit contracts within the conventional system dominated by a fractional reserve banking system with its deposit guarantees. Biases in favor of interest rate-based debt and credit extend to fiscal and monetary policies, legal, and administrative structures. As is well known, interest rates are perhaps the most important variable in monetary policymaking. These advantages are not granted to equity returns. A second important operational constraint on the IFI is that the industry lacks recourse to *Shari'ah*-compliant liquid, long-term, credible, competitive, and widely used instruments for hedging and liquidity purposes. In the conventional system, government "risk-free"

assets like treasury bonds perform these functions. Third, fiscal and monetary policies in Muslim countries are conducted with interest rates. Hence, in addition to a lack of *Shari'ah*-compliant instruments issued by the government, macroeconomic policies strengthen interest rate-based debt finance. In effect, governments in Muslim countries define exogenously competitive conditions for IFI without leveling the playing field of competition between conventional finance and IFI. Finally, IFI cannot operate in isolation from the international financial markets. At present, political attitudes in some major global financial centers are a hostile environment that imposes constraints on the global growth and expansion of IFI. These constraints have created challenges that must be overcome if the industry is to maintain its momentum to become a significant player in the international financial system.

Features of Islamic Finance and Impediments to Its Development

The operational characteristics and requirements of Islamic finance include: (i) transparency, trust and faithfulness to terms and conditions of contracts; (ii) a close relationship between finance and real-sector activities such that the rate of return to the latter determines that of the former; (iii) asset/liability risk matching; (iv) coordinated asset/liability maturity structure; (v) asset/liability value matching such that the value of both sides of the balance sheet move simultaneously and in the same direction in response to changes in asset prices; and (vi) limitation on credit expansion and leverage. It has been demonstrated that such a system would be stable and capable of generating high employment, income and growth (Askari et al., 2010). This implies that the litmus test of the usefulness of Islamic finance would be its ability to induce growth and reduce poverty through its chief characteristic: risk sharing.

The evolution of Islamic finance thus far points to its development as a new asset class intended to remedy a market failure in conventional finance to develop instruments demanded by Muslim investors. Rooted in conventional finance, the practitioner-designers of this new asset class had to design instruments that resembled those prevalent in the host system without violating the 'no-*riba*' sufficient condition. More often than not, the relationship of these instruments to the real sector has been one of 'marriage of convenience' where, out of necessity, a backward linkage was created between the instrument and the 'book' purchase of a real product. A large number of conventional instruments were thus reverse-engineered, retrofitted, and re-designed. Demand-driven energies of financiers and financial engineers

were thus focused on the design of instruments that served the lower-end of the spectrum: low-risk, short-term, and liquid instruments. These have been generally large-denomination securities placed mostly in the wholesale markets. They have not been available in the secondary, retail markets to serve the risk hedging needs of ordinary households and firms. Very few are of high enough quality to meet the liquidity needs of the market. Those that are of high quality are bought and held. Many of the *Sukuk* have tenuous or weak relations to the real sector, and there is a problem of asset concentration in both the short-term and the medium-to-long-term maturities. In the case of the former, assets are concentrated in *murabahah*-type contracts while in the case of the latter they are concentrated in real estate. Additionally, there is the more worrisome question of uncertainty created by lack of clarity regarding the existence of speedy resolution and workout mechanisms compatible with the *Shari'ah*. Without concerted efforts aimed at development of the high-end of the spectrum of Islamic finance instruments, there is the real possibility of emergence and persistence of a path-dependent process whereby the industry continues churning out more—albeit in greater variety for branding purpose—of the same types of instruments.

Faced with these and other challenges and constraints, the contemporary Islamic finance industry was confronted with a stark reality: either adapt to the conventional banking system or become non-mainstream and only cater for a very small segment of the financial system. In order to achieve mainstream relevance, the only viable option for Islamic finance was to adapt or "acclimatize" Islamic finance contracts with conventional financial products. This acclimatization was necessary, if not critical, to attract customers accustomed to conventional banking to migrate from the conventional model to the Islamic banking model. The illustration with regard to a common Islamic banking product known as *murabahah* (mark-up sale) will highlight the acclimatization process. In a classical *murabahah* contract, the financier will usually be the supplier of the goods. The customer will go to the supplier and will buy his goods on credit terms. The classical *murabahah* trade is not a risk-transfer financial intermediation transaction, since the supplier-financier is engaged in a real trading activity. Conversely, in a contemporary *murabahah* contract, the financier will typically appoint a customer as its agent to buy the goods at cost from a supplier and the financier will pay the cost to the supplier directly or through the customer as its agent. Upon such purchase, the financier will immediately sell the goods to the customer at cost plus a margin payable on deferred terms. In contemporary *murabahah* trades, the financier is merely a credit intermediary, as a conventional bank. Unlike the classical *murabahah* contract, the financier neither supplies the goods nor procures the goods. The financier usually

appoints the customer as its agent to procure the goods and sells them on the day of the purchase itself. In addition, the customer will always irrevocably promise to the financier that he will buy the goods from the financier at the agreed price immediately upon the goods being acquired on behalf of the financier. This acclimation process reduces the risks borne by the financier to pure credit risk, similar to a risk-transfer debt transaction.

Building Institutions and the Islamic Financial System

In rules-based societies, rule-violation is always possible and has consequences. On the one hand, if the monitoring of rule compliance is effective and the probability of exposure and sanction is high, everyone in society would expect that others will take action-decision "within the set of permitted and required action," and the social order will be stable. On the other hand, when monitoring is ineffective and the probability of exposure and of being sanctioned is low, rule compliance will be weak and social order unstable.

Although the Islamic economic system is a market-based system, an Islamic society cannot depend on the market alone to produce a just solution to the economic dimension of life. An Islamic system integrates into the market system Islamic values, which are the rules (institutions) prescribed by Allah and implemented by His Prophet. Islamic economics is based on a set of rules, which in turn are at the foundation of Islamic institutions. These rules and institutions are the foundation of Islamic economics and finance and set the Islamic system apart from the conventional. While conventional economics assumes scarcity of resources, Islam acknowledges scarcity only at the micro level and this due to misdistribution of income and wealth resulting from non-compliance with the rules of conduct; while conventional theory adopts the market and assumes that consumers maximize their own utility and producers maximize profits, the Islamic vision, although embracing the market-based system and proposing rules that enhance its functioning, includes a spiritual and moral foundation that attaches overriding importance to the welfare of society and of each and every individual in this and in future generations. Risk sharing is important in of itself as it promotes trust and brings humankind closer together—in support of the unity of Allah's creation—and affords a number of other potential benefits if fully developed, including financial stability. Moreover, sharing of goods and services with the less fortunate is an essential duty of all humans.

The central goals of Islam for society are the welfare of all its members and socioeconomic justice. All members of an Islamic society must be given the same opportunities to advance, a level playing field, including access to

the natural resources provided by Allah. For those for whom there is no work and for those that cannot work, society must afford the minimum required for a dignified life: shelter, food, healthcare, and education. The rights of future generations must be preserved. Thus, Islam advocates an environment where behavior is molded to support the goals of an Islamic society: societal welfare and socioeconomic justice, with the goal of making humankind one, confirming the unity of Allah's creation. If the rules prescribed by the Creator are followed (i.e., institutions developed), then the outcome will be a just and unified creation. It is with the Unity of Creation as the goal that the *Qur'an* advocates risk sharing as the foundation of finance to enhance trust and sharing in general to bring all humans into the Unity of creation.

A truly Islamic economic system is a market based system, but with entrenched Islamic values and goals (objectives/rules/institutions) attributed to consumers, producers and to government (authorities), and with institutions that embrace and monitor these rules. For economic analysis, some of these Islamic values and goals can be introduced into the conventional behavioral functions of consumers and producers and others can be added as constraints in the maximization of consumer utility and producer profit. Based on the Islamic vision, we expect the Islamic solution to differ in the following important ways from the conventional: greater degree of justice in all aspects of economic management, higher moral standard, honesty, and trust exhibited in the marketplace and in all economic transactions, poverty eradication, a more even distribution of wealth and income, no hoarding of wealth, less opulence in consumption, no exploitive speculation, risk sharing as opposed to debt contracts, better social infrastructure and provision of social services, better treatment of workers, higher education expenditures relative to GDP, higher savings and investment rates, higher trade/GDP, higher foreign aid/GDP, higher degree of environmental preservation, and vigilantly supervised markets. It would be expected that these differences would be reflected in higher quantitative and qualitative economic growth if the Islamic rules and objectives were adopted. One would expect a higher rate of growth as higher investment rate, higher educational expenditures, higher social awareness, better functioning markets, higher level of trust, and institutions that have empirically been shown to be critical for growth.

In the case of Islamic finance, the objective is to support real economic activities through risk sharing—producing real goods and services and prohibiting the financing of purely financial, speculative, and other prohibited activities. The *Qur'an* mandates that risk sharing, along with other prescribed behavioral rules, for example, exhortation on cooperation [5:2], serves to bring humans closer to unity, which, in itself is a corollary of Islam's

central axiom: *the Unity of the Creation*. It is a natural consequence of such a system to require risk sharing as an instrument of social integration. This is perhaps why the *Qur'an* places more emphasis on rules governing exchange distribution, and redistribution—to affect balanced risk sharing—than on production. The central proposition of Islamic finance is the prohibition of transactions in which a rent is collected as a percentage of a principal amount loaned for a specific time period without the transfer of the property rights, thus transferring the entire risk of the transaction to the borrower. The alternative to interest-based contracts is *Al-Bay',* a mutual exchange, allowing both parties to share production, transportation, and marketing risks. This, in turn, allows specialization and gains from exchange. It further allows both parties to reduce the risk of income of volatility and to allow consumption smoothing, a major outcome of risk sharing.

At its core, Islamic finance embodies ethical values which were, in the past, also characteristics of Christianity and Judaism, but which were eroded over time to serve the narrow interests of the wealthy and vested interests at the expense of society at large. While the beneficial and ethical attributes of Islamic finance are evident, most observers have largely ignored the economic benefits. Indeed, in the years between the two great wars, eminent Western economists, such as Keynes, raised serious questions about the stability of conventional finance. More recently, economists are again questioning the stability assumptions of conventional finance, its debt-based characteristic and leveraging. Conventional banks fail to meet inherent stability conditions even in the presence of prudential regulations. Unlike conventional banks, Islamic banks do not create and destroy money. Money is not issued by the stroke of a pen, independently of the production of real goods and services. There can be no bank run or speculation, as the source of credit for speculation, credit multiplication, does not exist. Tangible real assets owned directly by the institution cover liabilities. Risks for Islamic financial institutions are mitigated as they relate essentially to returns from investment operations and not to the capital of these institutions. These features afford Islamic financial system enhanced financial stability.

No matter one's political and religious views, there is an important role for the government in the economic and social life of any country, any system, and any religion. In Islam, the need for intervention would be reduced to the extent that Muslims are rule compliant. Divisions and disagreements arise over the extent and the specifics of the role and intervention. In Islam, the state must uphold Allah's rules and intervene as needed to support the unity of Allah's creation. Rule-compliant humans, rule-compliant rulers, and state and rule-compliant public policies would, by definition, create a society that is just with everything in its rightful place and everyone

receiving their rightful share and due. Unfortunately, Muslims have not internalized the prescribed rules. In Muslim countries, institutions are weak and the state has not played a helpful and supportive role to foster human and economic development as envisaged in Islam. Governments, entities that should be more rule-compliant than individuals, are oppressive and have not been pressured to reform. As a result, political, social, economic, environmental, and most importantly, human conditions are not as they should be in Muslim countries.

Opportunities are not equal. Wealth disparities, in large part as a result of rent-seeking activities, are obscene. The disadvantaged are left to their misery. The rights of future generations, in particular, their right to Allah's creation and its resources, have been and continue to be compromised. While a change in policies is essential, fundamental institutional reforms and rule-compliance are absolute necessities for a positive turnaround in Muslim countries.

Above all, we must stress that an institutional structure that guarantees and supports political and social freedom is at the foundation of any flourishing society. Allah in His wisdom Gave humans the freedom of choice, a freedom that rulers, governments, institutions and other humans must not take away. At the same time, He advises humans to develop a socioeconomic structure that has balance and is just, with equal opportunities for all, sharing of wealth and income with the disabled and disadvantaged, tolerable disparities in income and wealth and safeguarding the rights of all future generations in all the resources that He has bestowed on humans. There is an important role for public policy in all of this, especially when humans fail in their own duty to follow divine rules, but indispensable for rulers and governments that are rule-compliant and just. For it is in the confines of justice and balance that humans will find peace and harmony. And in their search for justice, Muslims would always do well to recall the well-known Prophetic admonishment that on the Day of Reckoning the oppressor, the oppressed, and the person(s) who stood by and observed the oppression will be called upon to answer: the oppressor for oppression, the oppressed for not resisting the oppression, and the bystander for not assisting the oppressed.

The Role of Common Law[1]

Common Law has an important role in the ability of Islamic finance industry to navigate through its constraints and challenges. It has been argued that there is sufficiently strong commonality between *Shari'ah* and Common Law that provides a fertile ground for Muslim legal minds to explore in order to nurture greater understanding between the two legal systems. This

in turn could lead to easing of legal constraints that at the moment create legal risk for Islamic finance and an impediment to its global operation. The challenge for Muslim scholars is to develop a legal system representing a convergence of the two systems in order to relax these constraints.

It is interesting to note that the IFI has often relied on common law to successfully achieve such acclimatization. For instance, one of the key ingredients of the contemporary *murabahah* transaction is the promise (*waad*) given by the customer to buy the goods from the financier. Similarly, one of the key ingredients in an *ijarah* transaction or a *Sukuk* offering is a promise (*waad*) by the customer to buy the assets at a certain agreed price at maturity. As highlighted below, almost all cross-border *murabahah*, *ijarah,* and *Sukuk* transactions are documented under English law and are subjected to the jurisdiction of the English Courts. The Common Law lawyers who designed the Islamic contracts relied on the common link between *waad* and promissory estoppel to achieve the intended results.

The Influence of Waqf in the Development of Common Law of Trust

Almost all contemporary *Sukuk* offerings are designed as common law trust instruments. For a security like *Sukuk* to be tradable under *Shari'ah*, the security must reflect or evidence the security holder's share in an underlying asset or enterprise. The trust instrument complies with this requirement and gives each *Sukuk* holder a proportionate share in the trust assets and income. The finer details of the *Sukuk* instrument will be discussed later. It needs to be highlighted here that when the *Sukuk* was first conceived using the trust structure, many Islamic scholars were not familiar with the trust structure and could not find *Shari'ah* support for it.

What these Islamic scholars, as well as many common law lawyers, were not aware of is that the Common Law of Trust itself has its origin in Islamic law, according to the most recent research on this topic. Since the very beginning, the true origin of Common Law of Trust has been the subject of much debate among Common Law lawyers. It even prompted Maitland (1936, p. 129) to say:

> If we were asked what is the greatest and most distinctive achievement performed by Englishmen in the field of jurisprudence, I cannot think we should have any better answer to give than this, namely the development from century to century of the trust idea... The idea of trust is so familiar to us all that we never wonder at it. And yet surely we ought to wonder.

According to Loring and Rounds (2012, pp. 1179–1186),

> There are three theories concerning the origin of the English trust: the Roman, Germanic, and Islamic. Until the nineteenth century, it was believed the trust was modeled on the Roman *fideicommissum*. By the nineteenth century, the accepted theory was that the trust was modelled on the Salic law of the salmannus. The latest theory is that the trust is based on the Islamic example of the *waqf*.

Justice Weeramantry (1998, p. 109), a former judge of the Supreme Court of Sri Lanka and the International Court of Justice, points out how the English law of trust was still groping in the dark in the 13th century when the Islamic law of trust was at a highly developed stage. The learned judge also highlighted the remarkable similarities between the Common Law of Trust and the Islamic concept of *waqf* (charitable trust). Critics of the *fideicommissum* (i.e., committed to one's trust) theory point out that *fideicomissum* were a testamentary trust devised to evade the prohibition of inheritance by infants and non-Romans under Roman law. Using *fidei-comissum*, the testator was able to appoint an intermediary person (say a Roman allowed to be an heir under Roman Law) and entrust him with a property; and upon the testator's death the trustee would pass the legal title to the intended heir or beneficiary.

The critics of the second theory point that *salmannus* (i.e., a person entrusted to dispose), like *fideicomissum*, was also used to facilitate the disposition of the transferor's property upon the transferor's death. If a person desires to adopt or appoint someone (who is not an heir under the forced heirship law) as his heir, he would transfer a property during his lifetime to a *salmannus* who would then become the owner of such property and upon the transferor's death, the *salmannus* would transfer the property to the designated beneficiary. In both *fideicommissum* and *salmannus*, the legal ownership always passes from the trustee to the designated beneficiary upon the death of the intended beneficiary.

The proponents of the *waqf* theory point out that unlike *fideicomissium* and *salmannus*, the *waqf* was not used as a device to transfer property upon the transferor's death, and that the legal ownership of the *waqf* property remains vested in the trustee (*mutawalli* even after the death of the settlor (*waqif*). For example, a *waqif* will settle a *waqf* over a mosque that he has built and appoint a *mutawalli* (trustee) to manage the *waqf* property in perpetuity for the benefit of all Muslims who congregate at the mosque. The proponents of this view claim that the Franciscan friars, who introduced the concept of trust to England in the thirteenth century, had learned it

from the institution of *waqf* during their travels in the Muslim world at the time of the Crusades. The friars were not allowed to own property due to their vow of poverty, but they realized they needed to own property for their religious activities. The friars (as settlor) would transfer the property to a trustee who would hold it in perpetuity for the benefit or use of the Franciscans. The similarities between the two instruments are striking. The main difference, however, is that *waqf* requires that the corpus of the trust be applied exclusively for a charitable purpose. In that sense, *waqf* is closer to the common law charitable trust.

Box 12.1 The Influence of Common Law of Trust in the Development of **Sukuk**

Just as Common Law benefitted from the Muslim world with the introduction of the *waqf* concept in the 13th century, the Muslim world benefited in the 21st century when Common Law introduced the concept of the transferable trust instrument, which helped create the *Sukuk* market.

As highlighted above, for a security like *Sukuk* to be tradable under *Shari'ah*, the security must reflect or evidence the security holder's share in an underlying asset or enterprise. For example, contemporary *Shari'ah* scholars have allowed investment in equity or share in a company on the basis that the security reflects the holder's ownership of the underlying assets of the company. Through the ownership of the company, the shareholders are deemed to indirectly own the assets held by the company. By making a link between the ownership of the company with the ownership in the company's assets, the *Shari'ah* scholars were able to allow the trading of shares as a sale of an undivided co-ownership share of the company's assets (Davies, 1997, p. 175). If the company as a going concern makes a profit by trading in goods, assets or services, the shareholders are entitled to receive from the company a share in the profit through dividends.

A conventional bond, on the other hand, typically confers on the bondholder a contractual right to receive from the issuer of the bond certain interest payments during the life of the bond and the principal amount at the maturity of the bond. The bondholders themselves are deemed as creditors to the issuer of the bond and are ranked as senior unsecured and unsubordinated creditors of the issuer in priority to the shareholders. The juridical nature of a conventional bond is clearly contrary to *Shari'ah*.

The nature of the transferable trust instrument under Common Law, however, complied with the *Shari'ah* requirements of ownership of assets that permits a security to be traded at a premium or discount. Under Common Law, when a trustee holds an asset on trust for a beneficiary, the beneficiary is construed as the beneficial owner of the asset held on trust. The relationship between the trustee and the beneficiary is evidenced by a trust deed executed by the settlor. The trust deed can also be documented to allow the relationship between the trustee and the beneficiaries to be created through the issuance of a trust instrument by the trustee to the beneficiary or class of beneficiaries. For instance, a settlor can create a trust over say a house pursuant to a trust deed and appoint a trustee to issue trust instruments to a class of beneficiaries. The class of beneficiaries will be limited to the investors who purchase the trust instruments offered by the trustee for a certain consideration. The investors who purchase the trust instruments will automatically become the beneficiary of the trust and be construed as pro-rata owners of the house held on trust by the trustee. The trust deed can also be structured to allow the holders of the trust instrument to transfer the trust instruments to others on a willing-buyer and willing-seller basis.

The trust instruments were aptly named in Arabic as *Sukuk* or *Sukuk al-ijarah* because the trust assets were leased out to produce a lease income. The holders of the *Sukuk* will be construed under *Shari'ah* as co-owners of an asset, held on trust, similar to a *shirkat al-milk*. As a co-owner of an asset, each co-owner is entitled to sell his share in the asset without the consent of the other co-owners at whatever price he can command in the market. When the trustee receives the variable rentals from the lessee, the *Sukuk* holders will receive a proportionate share in the rental proceeds. At the maturity of the lease, which corresponds to the redemption date of the *Sukuk*, the trustee will sell the trust asset to the lessee for a price equal to the original acquisition cost of the trust asset. With the proceeds of the sale, the trustee will redeem the *Sukuk* and the *Sukuk* holders will receive their principal investment. The payment profile of the *Sukuk* is thus comparable to a conventional bond or a floating rate note. Given these characteristics, the *Sukuk* complied with the *Shari'ah* requirements as well as the commercial requirements for fixed income securities of the global capital markets. With the help of Common Law, the IFI successfully gave birth to the *Sukuk* market.

Source: Haneef and Mirakhor (2014)

The Role of English Law and English Courts in Cross-Border Islamic Finance Transactions

Whilst *Sukuk* must comply with *Shari'ah* requirements, all global *Sukuk* offering are not governed by *Shari'ah,* but by English law, and subject to the jurisdiction of the courts of England. Why do *Sukuk* issuers choose English law and English courts, when almost all the issuers are neither domiciled in England nor have any jurisdictional nexus with England? There are a number of reasons:

Familiarity and Predictability

Both issuers and investors prefer to adopt an internationally recognized legal system with a well-developed jurisprudence to govern cross-border transactions, such as *Sukuk* offerings. In the conventional global bond space, the issuers usually adopt either English law or New York law to govern the transaction. Both legal systems have a long history of adjudicating legal disputes arising from cross-border financial transactions and have a large depository of judicial precedents that can adequately guide the contracting parties to document their financial transaction properly. The depth of the judicial precedents produces a high degree of certainty in terms of legal interpretation of commercial terms and conditions. This in turn reduces uncertainty for the parties and provides predictability in terms of legal enforceability of the transactional documents.

Sophistication

Given the complex nature of cross-border transactions, both issuers and investors require the services of highly skilled and experienced legal advisers. Due to English law's predominant position in international financial transactions, English lawyers have acquired a high level of sophistication in advising and documenting complex financial transactions. The level of sophistication among English lawyers was critical in facilitating the Islamically structured financial transactions like *Sukuk* to be documented adequately within the legal framework of English law. The parties also desire that sophisticated and experienced judges adjudicate any legal disputes. The judges in England are often viewed as highly experienced and sophisticated in matters of international finance, given the important role played by English law as the governing law, as discussed above. The high level of sophistication further boosts the standing of English law in the global *Sukuk* market.

Accessibility

The parties also require legal advice to be offered by quality lawyers closer to home, and access to foreign legal advisers in the home market is also an

important criterion that leads to the choice of English law as the governing law. Leading English law firms have set up their offices in all the major cities in the world, including in the Middle East and Asia. Their proximity to the local markets facilitates the *Sukuk* issuers' ability to document the *Sukuk* transactions under English law in a cost-efficient and timely manner.

The Diversity of Required Institutions

It should be obvious that effective institutions are at the foundation of all successful economic and financial systems. In the absence of institutions, countries and their economic and financial systems become a jungle. Market participants, producers and consumers, savers and investors, and buyers and sellers cannot have access to the reliable information they need for sound decision making; information and data become useless as their accuracy cannot be trusted; there can be little idea about future economic and financial developments; government policies are invariably haphazard; property rights are not enforceable; contracts become worthless papers as they may not be enforceable; uncertainty and risk become prohibitive to productive activities; and in short, all productive endeavors are threatened, and economic and social development become endangered.

To Douglass North, institutions and organizations are the determinants of success or failure. To his mind, institutions "form the incentive structure of a society, and the political and economic institutions, in consequence, are the underlying determinants of economic performance" (North, 1994, p. 360), and are: "the humanly devised constraints that structure human interaction. They are made up of formal constraints (such as rules, laws, constitutions), informal constraints (such as norms of behavior, conventions, self-imposed codes of conduct), and their enforcement characteristics" (North, 1994, p. 360). On the other hand, North defines organizations as "groups of individuals bound together by some common purpose to achieve certain objectives. Organizations include political bodies (political parties, regulatory agencies), economic bodies (firms, trade unions), social bodies (churches, clubs), and educational bodies (schools, universities)" (North, 1994, p. 361). He refers to institutions as "the rules of the game," and to organizations and their entrepreneurs as "the players."

Muslim countries are in desperate need of sustained economic growth, job creation, and expansion of financial inclusion. It is generally recognized that these require effective institutions. Moreover, and as we have seen, the risk-sharing and trust-intensive features of Islamic finance require effective institutions. However, institutions alone are insufficient and require thoughtful policies to deliver good results. There can thus be no doubt that

institution building must be the priority of all Muslim countries and be supported by thoughtful policies.

Effective institutions embody rules, their monitoring, and enforcement. Some institutions (social norms and rules) are naturally embodied in societies. To assess the difficulties of institutional reform, we could distinguish between formal and informal institutions. Some formal institutions, such as stock market rules, can be changed and reformed almost immediately. Nevertheless, the effective enforcement of rules may take longer as these rely on informal social structures also. Other formal institutions, such as the rule of law and property rights protection, which also rely on deeply embedded social norms, may take much longer to reform. As can be imagined, the most difficult institutional reforms are those dealing with informal institutions. To change them and render them more effective and conducive to productive activity naturally takes much sustained effort and time as people and long-held beliefs are the most difficult things to change.

To our mind, the most important and foundational institutional reforms in Muslim countries include:

a. Political reforms that enable participatory governments and governance
b. An independent judicial system
c. Business rules and regulations (such as those dealing with competition and corrupt practices) conducive to growth
d. Financial rules and regulations that emphasize risk-sharing finance and 100 percent reserve banking
e. An independent taxing authority
f. Labor market rules and regulations that ensure labor rights and labor market flexibility
g. Independent agencies to monitor and enforce business, financial, tax and labor rules and regulations
h. A limited public sector that operates transparently and affords equal opportunities to all
i. An institutional structure to provide an adequate social safety net
j. A free press

While these are the broad recommendations, circumstances differ from country to country. There is no "one size fits all." The two most difficult reforms are the political and the rule of law in most Muslim countries. Oppressive rulers and their backers are unlikely to adopt meaningful reforms and would instead pursue policies that make such reforms highly improbable, even if they are overthrown. The rule of law is at the foundation of all long-term business and financial decisions; but such reforms are

essential to afford individuals the rights to develop their talents and realize their dreams. However, Muslim countries have one advantage—their Islamic teachings. If individual Muslims study and absorb the rules that are apparent in the teaching of Islam, the needed institutional reforms and structures would quickly appear.

Conclusion

Islamic finance is in a unique position to offer an alternative to the present interest rate-based debt-financing regime that has brought individual and global economies to series of crisis and lopsided prosperity. The core principle of Islamic finance is risk sharing. Risk sharing is trust intensive. Trust is enhanced by effective institutions. Effective institutions are also the key to sustained and just economic development and growth. Unfortunately, today's Muslim countries are institutionally deficient. However, the core principles of Islam provide the most perfect roadmap for reforms and institution building.

Notes

2 Institutional Perspective of Islamic Economics

1. North (1995).
2. Uslaner (2008).
3. Geoffrey Brennan and James M. Buchanan (1985).
4. Verses of the Qur'an are referred to in the text by [verse: chapter].
5. Al-Hakimi, Al-Hakimi and Al-Hakimi (1989).
6. One such scholarly study is S. K. Sadr (1996).
7. Al-Hakimi, et al. (1989).
8. Al-Hakimi (1989).
9. Al-Hakimi, et al. (1989).
10. Al-Hakimi, et al. (1989).
11. Al-Hakimi, et al. (1989).
12. Al-Hakimi, et al. (1989).
13. Al-Hakimi, et al. (1989).
14. Al-Hakimi, et al. (1989).
15. Al-Hakimi, et al. (1989).
16. McMillan (2002).
17. McMillan (2002).
18. McMillan (2002).
19. McMillan (2002).
20. Metz (1967); Kister (1965); Shihata (1977).
21. Al-Hakimi et al. (1989); Iqbal and Mirakhor (2011).
22. Knack and Keefer (1997).
23. E. Lorenz (1999); Uslaner (2008); Fukuyama (1995); Alesina and La Ferrara (2002); Berg and McCabe (1995); Zak and Knack (2001); Mirakhor (2005); Askari, Iqbal and Mirakhor (2009); Fehr and Kosfeld (2005).
24. Knack and Keefer (1997).
25. See the Prophet's saying number 2218 in A. Payandeh, *Nahjul-Fasaha*, Tehran: Sazemane Entesharate Javidan (1974).
26. Al-Hakimi, et al. (1989); Qutb (1953).
27. Al-Hakimi, et al. (1989); Qutb (1953).

3 Economic and Social Justice: The Policy Objective in Islam

1. Verses in the Quran also stress the importance of fair treatment, such as, *Allah commands justice and beneficence* [9:16]; *Allah loves those who treat others with justice* [25:57]; *give (others) full weight and measure in justice and do not deliberately undervalue the goods (produce or labor) of other humans and do no evil on earth, causing corruption* [85:11].
2. Al-Hakimi, et al. (1989); Qutb (1953).
3. Motahhari, 1975.
4. Lakhani, 2006.
5. See Ali Ibn AbiTalib, Imam's Nahj al-Balagha Sermon 53.

5 Lessons from Financial Crisis: A Policy Failure?

1. This section is based on works of Mirakhor and Alaabed (2013a) and Mirakhor and Alabed (2013b).
2. Bogle (2012). Out of US$ 250 billion, US$ 25 billion went to Initial Public Offerings (IPO) and the remaining US$ 25 billion to established companies.
3. For further details see, http://www.mauldineconomics.com/.
4. The absence of debt means the economy is highly efficient and saves considerable resources that are involved with the cost of issuing loans, administrating, recovering, and litigating loans (Carroll, 1965).
5. *Sukuk* (short form or abbreviation of *sukuk al*-ijarah) is an Islamic bond. It is a negotiable financial instrument issued on the basis of an asset to be leased. Investors provide funds to a lessor, such as a bank. The lessor acquires an asset and leases it out if it is not already leased out. The investors become owners of the leased asset in proportion to their investment. The holders of these bonds are entitled to collect rental payments directly from the lessee. These instruments can be made tradable on a stock exchange.
6. In conventional finance, the rate of return on equities is influenced by abundance of credit as illustrated by the South Sea Company in 1720, the Great Depression in 1929, and recent stock market experience (2000–2013). For instance, the marginal production of capital may be 4 percent per year; however, the yield on stock may be 25 percent per year. It is speculation fueled by low interest rates and massive credit that weakens the link between equity returns and marginal product of capital (Holden, 1907). Speculators (e.g., hedge funds, equity funds, brokers, etc.) reap large gains from cheap money. Inevitably, distorted stock markets reach a tipping point beyond which they crash, with disastrous consequences. These elements of instability do not exist in Islamic finance, where equity returns cannot be distorted by credit and interest.

6 Financial and Capital Market Policies

* For a discussion of role of social capital and markets in risk-sharing financial system, see Ng, Ibrahim, and Mirakhor (2013).

1. See Mirakhor (2010).
2. Beta is a measure of the degree to which the price of a stock or portfolio is correlated to a benchmark, such as the overall financial market (measured by an index like the S&P 500 for US, stocks). The stronger the correlation, the larger the beta. The beta of the portfolio is simply the weighted average beta of assets within the portfolio.
3. In 1952, Harry M. Markowitz proposed a portfolio construction model based on mean-variance analysis.
4. The CML is a line that plots the increase in return an investor can expect to get in return for taking an additional risk. The CML with the highest slope would reflect the Markowitz efficient portfolio. The slope of the CML determines the equilibrium market price of risk.
5. Shiller, along with economist Mark Kamstara, has proposed that countries replace much of their existing national debt with shares of the "earnings" of their economies. The shares, or "trills," would pay a quarterly dividend equal to exactly one-trillionth of a country's quarterly gross domestic product.
6. Eichengreen and Hausmann (1999). The original sin refers to the fact that most governments/companies are unable to borrow abroad in their domestic currency; as a result, foreign borrowing always results in currency mismatch. This mismatch brings in a new dimension of risk—currency risk.
7. In a recent study across 142 countries, the Legatum Institute (2012) finds that social capital correlates negatively with government regulation.

7 Fiscal and Monetary Policy in Islam

1. Çizakça, Murat (2013), "Finance and Development in Islam: A Historical Perspective and a Brief Look Forward," in Zamir Iqbal and Abbas Mirakhor (eds), *Economic Development and Islamic Finance*, The World Bank, Washington, DC, USA.

8 Developing Social Capital

* This chapter is drawn upon valuable works of Ng, Ibrahim, Mirakhor (2013), Ng, Ibrahim, Mirakhor (2014a) and Ng, Ibrahim, Mirakhor (2014b). We thank the authors for their permission to benefit from their valuable work.

1. Muslim countries generally have lower levels of social capital, with Jordan, Turkey, and Malaysia ranked 44th, 49th, and 50th respectively according to Lee et al.'s social capital index. Bangladesh, Egypt, Indonesia, Iran, Morocco,

and Uganda are ranked in the last quartile of the index (2011). Rehman and Askari (2010a, 2010b) find a low level of adherence to Islamic principles in most predominantly Muslim countries.

2. According to the United Kingdom Islamic Finance Secretariat in October 2013, there is a wide margin of growth as *Shari'ah* compliant financial assets currently make up around 1 percent of the global financial assets while the Muslim population is around a quarter of the world's population (TheCityUK 2013).
3. Professor Kay's recommendation for an investors' forum to be established to facilitate collective engagement by investors in British companies, and the British government's acknowledgment of the involvement of overseas institutions in the investors' forum, can also help to build "bridging" social capital.
4. The Legatum Institute shows that countries with low levels of social capital, such as Greece, Italy, Portugal, Spain, and France, also have low levels of regulatory effectiveness compared with other developed Western European countries.
5. This can be done by "removing all legal, administrative, economic, financial, and regulatory biases that favor debt and place equity holdings at a disadvantage" (Askari, Iqbal, Krichene, and Mirakhor, 2011, p. 122).
6. According to the US Securities Exchange Act of 1934, "SROs must create rules that allow for disciplining members for improper conduct and for establishing measures to ensure market integrity and investor protection. SRO proposed rules are subject to Securities and Exchange Commission's review and published to solicit public comment."
7. Section 29(5) and (6) of the Islamic Financial Services Act 2013 of Malaysia provides that members of *Shari'ah* committee of an institution shall at all times comply with the internal policies and procedures adopted by such institution to implement standards specified by the Central Bank of Malaysia. Failure to comply with such standards will result in an offense that is liable to a maximum of eight years' imprisonment or a maximum of 25 million ringgit or both. An institution and any director, officer or controller of such institution shall provide information that is accurate, complete, not false, or misleading in any material particular to the *Shari'ah* committee to enable the committee to carry out its duties or perform its functions under the act.

9 Financial Inclusion: Implications for Public Policy

1. World Bank (2013).
2. Among Muslims globally (in 148 countries) without a formal account, 7 percent cite religion as barrier, which is the least frequently cited barrier among this group.
3. Although *sadaqah* contributions are commonly considered a voluntary contribution, one could strongly argue that all such contributions should be considered mandatory since these are ordained by Allah (swt) in the Qur'an. However,

these cannot be considered mandatory to qualify them to be taken by force by a government.

4. Iqbal and Roy (2014).
5. For further detail, see work by Askari, Iqbal and Mirakhor (2009), Chapra (2008), and Asutay (2011).
6. The three main forms of Islamic finance include *murabhah* (trust finance), *musharkah* (partnership finance), and *mudarbah* (markup contract sale). These are in addition to Salam contracts, *Ijarah* and *Qard-al-Hassan*, and *Awqaf.* Other long-term and sophisticated forms include *salam* forward purchase credit and *istisna* project financing. See also Iqbal and Mirakhor (2011).

10 Environmental and Natural Resource Policies

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21. Boyce (1999), quoted in Boyce, James K. "Is Inequality Bad for the Environment?" Political Economy Research Institute. University of Massachusetts Amherst, April 2007. Web.
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23. The conceptual interpretation of NNP in an economy is that it represents the highest level of sustainable consumption. In the development of the conceptual framework of national income accounting, extractive industries were treated as any other source of national product. As a result, the value of the extracted resource was added to national product at the point of extraction. This method of valuing the contribution of extractive industries, as is now widely recognized, is ill-conceived and results in significant distortions. For the derivation of the required rate of savings see Appendix I in Askari, Hossein, *Saudi Arabia: Oil and the Search for Economic Development*, JAI press, 1990 and for a calculation of the savings rate for individual oil-exporting countries see Askari, Hossein, Vahid Nowshirvani, and Mohamed Jaber, *Economic Development in the Countries of the GCC: The Curse and Blessing of Oil*, JAI Press, 1997.
24. For an excellent summary of the recent evolution of how economists view the prescription for growth, see the various articles in *Finance and Development*, March 2006, International Monetary Fund, Washington DC.
25. The reason is that the inflow of oil revenues tends to increase the price of non-tradeables, for example, goods such as housing, services, and the like, relative to the price of tradeable goods, because non-tradeables cannot be readily imported. Thus individuals and companies are given the incentive to produce these non-tradeables to the detriment of exports.
26. Input subsidies, such as subsidized fuels, electricity and water, must be avoided as they encourage overuse and waste of the subsidized resource. Output subsidies do not encourage waste of inputs and a sub-optimal mix of inputs because of artificially low prices of selected inputs.
27. See Hausmann, Ricardo and Roberto Rigobon, "An Alternative Interpretation of the "Resource Curse": Theory and Policy Implications, in *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, J. M. Davis, R. Ossowski, and A. Fedelino (eds), International Monetary Fund, Washington DC, 2003.
28. Ibid.
29. This is the central theme of the Hausmann and Rigobon paper.

30. Zagha, Roberto, Gobind Nankani, and Indermit Gill, "Rethinking Growth," *Finance and Development,* International Monetary Fund, March 2006, Washington, DC, p. 8.
31. The exception are countries that are so rich that they can invest a large portion of current oil revenues in diversified assets (abroad) to give the government all the revenues it needs in the future without having to resort to taxation.
32. Robert M. Solow, "Intergenerational Equity and Exhaustible Resources," *The Review of Economic Studies*, Vol. 41, Symposium on the Economics of Exhaustible Resources, 1974, p. 41.
33. For a review and discussion of the operation of many of these funds (stabilization and future generations) in Alberta, Algeria, Alaska, Chile, Iran Kuwait, Kirbati, Norway, Oman, Papua New Guinea, and Venezuela, see Davis, Jeffrey, Rolando Ossowski, James A. Daniel, and Steven Barnett, "Stabilization and Savings Funds for Nonrenewable Resources: Experience and Fiscal Policy Implications," in *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, see Martin Skancke, "Fiscal Policy and Petroleum Fund Management in Norway," ibid; see John Wakeman-Linn, Paul Mathieu, and Bert van Selm, "Oil Funds in Transition Economies: Azerbaijan and Kazakhstan," ibid.
34. For more detail on military expenditures and arms imports, see Askari and Taghavi, March 2006.
35. See Collier, Elliott, Hegre, Hoeffler, Reynal-Querol, Sambanis, 2003.
36. Ibid., p. 182, for a five-point template.
37. There were exceptions to this observation. For a particular country, the population growth for a certain period of time may exceed (or indeed, be negative) this long-term growth rate. For example, it is not uncommon for population growth to be abnormally high immediately during the postwar periods (e.g., the US "baby boom" after World War II).
38. Here, the money that would have been paid out to felons may instead be re-directed to law enforcement bodies and to finance prisons, rehabilitation centers, and so on.

11 Benchmarking Islamic Finance–Enabling Policies

1. An attempt has recently been made by Lee et al. (2011) to measure these four components of social capital.
2. This figure is adjusted for insider ownership.
3. The 57 member state-organization was established in Rabat, Morocco, in 1969; to safeguard and protect the interests of the Muslim world, among others things. For further information, please visit http://www.oic-oci.org/oicv2/home/.
4. According to the United Nations, a least developed country (LDC) is a country that ranks low on human development and socioeconomic development, as measured by ranking on the Human Development Index and indicators of poverty, human resource weakness, and economic vulnerability, respectively.

5. According to the OIC Economic Outlook 2013, 18 OIC member countries are classified as low-income countries, 16 as lower middle-income countries, 16 as upper middle-income countries, and only 7 as high-income countries. Classification is as per the World Bank income country-classification.
6. Translation is as appears in Abbas Mirakhor and I. S. Hamid (2009), *Islam and Development: The Institutional Framework*. New York: Global Publications.
7. For the purpose of brevity, the word *Maqasid* is used to refer to *Maqasid al-Shari'ah*.
8. Borrowing from the Chapra (2008) book title.
9. Where readily available.
10. The indicators may overlap in terms of their relevance on the three *Maqasid*. For example, while the indicator of socioeconomic justice fits into both *Tawheed* and self-purification, it is given more weight in its linkage to *Tawheed* because the unity of the creation is, indeed, a manifestation of the unity of the Creator, the violation of which amounts to *Shirk*. This includes any act of discrimination for any consideration, other than piety, such as ethnicity, race, color, or gender (Askari, 2013, Mirakhor and Hamid, 2009).
11. In fact, the five classical *Maqasid* could be assumed to be subsumed in 'Alwani's conception of "the supreme and prevailing *Maqasid*"; such that the preservation of religion could be encompassed in *Tawheed*; the preservation of self and intellect in self-purification; and the preservation of progeny and property in development.
12. Twenty OIC member countries were, therefore, excluded from the index due to inadequacy of reported data in one or more of the 27 considered indicators. Similarly, insufficient data excluded the financial development indicator from the analysis.
13. The development level reflects various development clusters defined by the index developers. A country's development level is identified as ideal if its distance to frontier (DtF) is between 0 and 15. It is good if its DtF is 16–30; fair if its DtF is 31–40; poor if its DtF is 41–50; and unacceptable if its DtF is above 50.
14. The *Tawheed* subindex is a weighted average of compliance with the Islamic axioms of *Tawheed, Nubuwwah* and *Ma'ad* and socioeconomic justice. The former is weighted by the proportion of Muslims, Christians, and Jews, so as not to penalize countries that are not overwhelmingly Muslim. Buddhists, Hindus, and followers of other traditional nonmonotheistic religions were, however, excluded.

12 Policy Challenges: Building Institutions

1. This section is based on work by Haneef and Mirakhor (2014). We thank the authors for permitting us to benefit from their work.

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