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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

“Neither your creation (was) nor your resurrection (will be)
except as one united soul” The Qurān 31:28

Islamic Finance and Globalization: A Convergence?

Abbas Mirakhor*

Abstract

Islamic finance—understood as achieving maximum risk sharing—diversifies risk and allows it to be shared widely. Implications that follow are: (i) a close relationship between finance and real economic activities and (ii) the rate of return to finance determined by the rate of return to real economic activities rather than the reverse. This system’s full operation leads to financial stability, growth of income and employment, and, as a result, reduction in poverty. To obtain these results, preconditions must exist, including a developed financial system; rule of law; legal institutions that protect investors, creditors, and property rights; good governance; policy discipline to ensure macroeconomic stability; and trust in government and institutions. The network of rules and norms mandated by Islam, if implemented, satisfy these preconditions. A vast potential for financial engineering effort in Islamic finance could span each of its basic transaction modes into a menu of instruments for risk-sharing opportunity. The period since 1990 has witnessed dramatic and rapid change in the structure of financial markets and institutions around the globe. It is believed that the benefits of financial globalization would grow as economies are liberalized; legal, institutional and financial development in countries reach and surpass threshold levels; and greater variety of financial instruments of risk sharing are designed and developed. The paper explores the potential convergence of Islamic and conventional finance as these systems continue their progress in designing and developing better risk-sharing structure and much expanded menu of financial instruments. It discusses the legal, institutional, governance, and financial preconditions that should exist for equity finance to dominate debt financing. Finally, it suggests that most of the preconditions for Islamic finance to achieve its potential could be realized with operationalization of behavioral rules and norms mandated by Islam.

I. Introduction

1. Islamic finance, on the other, this paper probes whether it is possible that, at some point in the future, the conventional and Islamic finance would converge. The underlying justification for this enquiry is that, from a theoretical point of view, the objective of globalization and Islamic finance is to achieve maximum risk sharing (see explanation in paragraphs 12 and 13).

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The fundamental axiom of Islamic finance is the simultaneous prohibition of debt-based financing and promotion of equity financing: the first reduces risk sharing and the second increases it. Similarly, financial globalization aims at spreading the investor base, and diversifying and sharing risk globally. This could be done through reliance on the most effective vehicle: equity or equity-like finance. Therefore, at least from a theoretical stand point, as the conventional and Islamic finance progress through development of sophisticated risk-sharing instruments (including in the field of risk insurance), it could be expected that they converge, and it is natural that there would be perturbations, missteps, and short-run setbacks. However, in the longer run, they would both expand and their convergence would be feasible. From an empirical point of view, there is tantalizing evidence that, particularly in the last decade, the growth of financial globalization has been accompanied by increasing equity and equity-like cross-border flows. This growth has been faster than debt flows (bonds), especially to emerging markets (Table 1, Charts 1 and 2). On the other hand, the basic Islamic financial transaction modes are increasingly instrumentalized and securitized to enhance their attractiveness to global investors, thus, making convergence between Islamic and conventional finance a distinct possibility. Section II begins by considering financial globalization and its progress over the last decade. It will also focus on the conditions that should be met for financial globalization to achieve maximum risk sharing. Section III suggests that Islamic prohibition of debt-based finance and simultaneous promotion of risk sharing are consistent with the fundamental purpose of Islamic teachings, i.e., the unity of mankind, itself a corollary of the fundamental Islamic axiom of the Unity of the Creator. It will then discuss the rules and norms of behavior prescribed by Islam for individuals and collectivities that meet the conditions for maximum risk sharing. The section will also discuss the view that, based on historical consideration, financial globalization is neither inevitable nor irreversible. It will then refer to a historical episode of globalization of the early Middle Ages—where trade, finance, investment, and production were based on partnership and equity finance—and will explain how and why this episode witnessed finance evolve until dominance of debt financing which has lasted to the present. Section IV brings the ideas about the prospect for the convergence of conventional and Islamic finance to conclusion. It argues that their growth could lead to worldwide increase in investment, employment, and

economic growth; reduce inequality and poverty; and increase global welfare. These results would ultimately promote the unity of mankind.

II. Financial globalization: Benefits, costs, and conditions for better risk sharing

2. Globalization is a multi-faceted and multi-dimensional process of growing inter-connectedness among peoples and nations. Its main dimensions are cultural, socio-political, and financial. The last dimension is composed of financial globalization (the cross-border movement of capital) and financial integration (interconnectedness within and among financial markets). The combined economic and financial globalization refers to growing trade flows and unhindered movement of investment, production, and finance, which is accompanied by standardization of associated processes, regulations, and institutions, and facilitated by the free flow of information, ideas, and technology. In general, globalization is the result of reduced costs of information and transportation as well as liberalization of trade, finance, investment, capital controls, and factor movements (Mirakhor, 2005).

3. Since 1990, the world has witnessed a dramatic and rapid change in the structure of financial markets and institutions. Progress in the theory of finance, rapid innovation in the practice of finance, revolution in information technology, deregulation and liberalization, and institutional reform have changed the nature of financial relations leading to the emergence of the “new finance.” As a result, the cost of finance has been reduced and investment in many instruments matching different risk-return profiles have been made possible, leading to better risk sharing among market participants worldwide. Financial transactions have become more at arm’s length, allowing broader participation in deeper and expanded markets. This, in turn, has expanded the number of participants in financial markets, dispersed ownership, and spread risks (Rajan, 2005). Between 1991 and 2000, gross capital flows (the sum of absolute value of capital inflows and outflows) expanded by 300 percent among industrialized countries alone, the bulk of which was due to the rise in foreign direct investment (FDI) and portfolio equity flows—both rising by 600 percent—while bond flows over the same period increased by 130 percent (Evans and Hnatkovska, 2005). Over the same period, both stocks and flows of capital movements have increased substantially, especially in relation to the volume of domestic GDP and the size of financing markets. More recent data

(Table 1 and Charts 1, 5, 8) show that, after the market turbulence in 2000-02, these trends have resumed, with FDI and portfolio equity flows assuming a larger share of the total flow. The largest increase in FDI in 2006 was in the emerging Europe and the Middle East. Empirical evidence suggests that the composition of capital flows matters a great deal. Equity flows (portfolio equity flows + FDI + venture capital) promote better risk sharing, reduce volatility, and strengthen stability (Bekaert, 2000, 2006; Kose, et. al., 2006; Albuquerque, 2003; Alfaro, et. al., 2005). There is a substantial body of evidence that these flows, especially FDI, are positively associated with economic growth (Levchenko and Mauro, 2006). FDI is considered an important channel for transfer of technology and organizational knowledge (Borensztein, de Gregorío, and Lee, 1998; Ayyagari and Kosová, 2006). Over the past few decades, stock markets too have shown increasing vitality, growing with a rapid surge. Development of stock markets increases the rate of saving and leads to growth in investment, while enhancing its quality. Stock markets diversify the investor base while distributing risks across investors, which, in turn, increase the resilience of the economy to shocks (IMF, Global Financial Stability Report, April 2007; IMF, World Economic Outlook, April 2007). As mentioned earlier, the composition of capital flows has a significant influence on the economies, with FDI and equity flows exerting a great stabilizing influence on the economy's vulnerabilities to shocks and financial crises. It has been demonstrated that greater reliance on debt flows exposes a country to a higher probability of sudden stops of international capital flows and to financial crises (Frankel and Rose, 1996). A growing body of research has demonstrated the positive impact of stock market development on economic growth (Henry, 2000; Stulz, 2005).

4. There is an organic, interactive relationship between financial globalization and financial integration. On the one hand, the degree of progress of the latter depends on how well developed financial sectors are in countries. On the other hand, financial globalization plays an important catalytic role in the liberalization and development of the domestic financial markets (Häusler, 2007). An important dimension of the process of financial sector development is expansion and quality improvement in credit and share markets (Levine, 1997; Levine and Zervos, 1998). The process of financial development deepens markets and services that channel savings to productive investment and strengthens risk sharing. Liberalization of the stock market reduces the

cost of equity capital (Stulz, 1999a and b), leading to a surge in the growth rate of investment and expansion of employment and output. The effect would be stronger when stock market development is accompanied by privatization as the latter would be a signal of the country's commitment to liberalization (Perotti and van Oijen, 1995, 2001). Financial sector development constitutes the most important channel of economic growth, particularly in countries that are finance-constrained (Ayyagari, et. al., 2006; Acemoglu and Guerrieri, 2006). Empirical research over the last two decades, which has established the strong link between financial development and economic growth, has also identified the conduits between the two. These channels include: (i) greater involvement of private sector and better risk sharing; (ii) reduced risks that lower expected returns, leading to lower cost of capital and resulting in investment in higher-risk, higher-return projects; (iii) enhancement of competition and innovation; (iv) improved productivity; (v) lower output and income volatility; (vi) cost-efficiency gains in mobilizing resources for public investment; (vii) financial deepening as financial development leads to greater financial intermediation by banks, capital markets, and non-bank financial institutions; and (viii) reduced income inequality and poverty (Honohan, 2006; Demirgüç-Kunt, et. al., 2006; Beck, et. al., 2004 and 2007; Batra, et. al., 2003; Watkins, 2007; Ravallion, 2001, 2004, 2005; Ravallion and Chen, 2001; Aizenman and Jinjark, 2006; Claessens and Perotti, 2006; Clarke, 2004; Goodhart, 2004).

5. The benefits listed above would accrue if legal and institutional developments accompany financial development. The most important dimensions of the former are legal protection of creditor, investor, and property rights as well as contract enforcement (Clementi and MacDonald, 2004). Good governance, transparency, and accountability are the important institutional aspects that support financial development (Johnson, et. al., 2002). It is considered that, once a threshold level of availability of these legal and institutional developments is surpassed, the beneficial effects will accrue (Prasad, et. al., 2004). Empirical evidence suggests that countries with weak governance and low transparency receive less FDI and equity flows and have to resort to debt financing through bank loans that, as mentioned earlier, expose them to vulnerabilities and volatilities, leading to financial crises (Wei, 2001; Gelos and Wei, 2002; Wei and Wu, 2002; Smarzynska and Wei, 2000; Wei, 1997, 2000a, b, and c, 2001; Kaufman, et. al., 2005, Abed and Gupta,

2002). Another factor that could exacerbate these problems is economic instability with research suggesting macroeconomic policies as an important determinant of the composition of capital flows (IMF, Global Financial Stability Report, Washington, D.C., April 2007; IMF, World Economic Outlook, Washington, D.C., April 2007). On the other hand, better legal institutions and improved governance and transparency reduce informational problems (adverse selection and moral hazard) and market frictions (Acemoglu, et. al., 2004; Acemoglu and Johnson, 2003; Balgati, et. al., 2007). This will assist in the process of integration and deepening in the financial sector, which, in turn, will allow emergence of active and liquid equity markets, reduced cost of capital, and improved credit rating (Yartey, 2006). As a result, more investment projects become viable leading to greater risk sharing. More active equity markets are also associated with reduced volatility, again suggesting improved risk sharing. On the other hand, equity market opening against a backdrop of weak financial sector, inadequate institutional and legal development, and unstable macroeconomy “may not reduce variability at all and may even increase it” (Bekaert and Lundblad, 2006). Research suggests that an interactive relationship exists between financial sector liberalization and development of an active equity market when a country achieves a threshold level of higher bureaucratic quality, lower level of corruption, and strengthened legal institutions (Prasad, et. al., 2004). Stulz (2006) states that “financial systems with a higher degree of legal and institutional development that support finance increase stock market trading volumes and enhance the effect of financial openness.” In short, financial sector development—which is accompanied by legal and institutional developments that protect investor, creditor, property rights, enforce contracts, improve transparency, and lower corruption—promote equity market that, in turn, increase risk sharing (Wei, 2005; Faria and Mauro, 2004; see also Black, 2000, for a helpful paper providing a list of the core institution needed to support the emergence, development, and operations of a strong securities market).

6. Domestic financial sector development allows integration with the global market as it increases diversification opportunities and expands the set of financial instruments available for risk sharing. Economies that are open to two-way investments—domestic investors can invest in foreign assets and foreign investors in domestic assets—are said to be globally integrated.

Financial integration, in turn, becomes an important channel of global risk sharing. There appears to be a symbiotic and interactive relationship between domestic financial development, financial integration, and financial globalization. Importantly, there is empirical evidence that financial development and integration reduce poverty through increased investment, employment, income, and reduced income inequality. Recent research has found that: (i) impact of financial development on poverty exerts two independent influences with half of the impact on economic growth and the other through reduction in income inequality; (ii) financial development leads to considerable deceleration in the rate of growth of income inequality; and (iii) as the process of financial development gathers momentum, the rate of reduction in the proportion of population living in poverty accelerates (Atje and Jovanovic, 1993; Beck, et. al., 2007; Claessens and Feijen, 2006; Ravallion, 2001, 2005; Clarke, et. al., 2003; Claessens and Perotti, 2006; Harrison, 2006). In sum, there appears to be considerable benefit to financial sector development and financial integration which are increased and accelerated as globalization of finance positively impacts and interacts with these two processes.

7. On the assumption that significant informational problems and transactions costs are absent, theory suggests that integration and globalization of finance allow portfolios to be well diversified internationally and that capital flows into markets with the most favorable risk-return profiles. Thus, as risk sharing expands globally, capital is allocated more efficiently and welfare increases. Empirical evidence, however, suggests that risk sharing within countries and across borders is yet an insignificant fraction of its potential (Shiller, 2003). There are important paradoxes contradicting this theory: (i) Lucas paradox; (ii) home equity bias puzzle; and (iii) equity premium puzzle. First, Lucas (1990) argued that this theory suggests that capital-scarce countries have high rates of return to capital and should be able to attract investment from rich countries. The then data, however, did not show large flows of capital from the latter to the former. Indeed, most of the international capital flows, especially FDI and portfolio equity flows, took place among rich countries (Obstfeld and Taylor, 2003). Also, even then, equity flows were much more biased in favor of domestic (rather than international) markets than the theory suggests (Coval, 1999; Tesar, 1995b; French and Poterba, 1991). Research indicates that a very high percentage of aggregate stock market wealth is

composed of domestic equity (Aurelio, 2006). Furthermore, even in domestic markets of rich countries, investment in stock markets is a fraction of what the theory suggests, given that the returns to equity are much larger than justified on the basis of aversion to risk (Halaissos and Bertaut, 1995). Mehra and Prescott (1985) demonstrated that, over many decades, a large differential existed between the real rate of return to equity than to safe assets, i.e., U.S. Treasury bills. They also demonstrated that this differential was too large to be explained by existing theories of rational investor behavior. The implication presents a puzzle as to why rational investors, noting the differential, would not invest in equities up to the point where the remaining differential could be explained as the risk premium on equities. While Mehra and Prescott focused on the U.S. data in their 1985 paper, subsequent research emphasized that it existed in a number of countries, including India (Mehra, 2006). Recent research has shown the global character of this puzzle and has attributed a significant part of it to institutional factors (Erbaş and Mirakhor, 2007). Interestingly, in one of his recent papers, Mehra (2003) reports that the real worth of one dollar invested in equity in 1802 would have been worth nearly US\$560,000 in 1997, whereas the real worth of the same US\$1 invested in Treasury bills in 1802 would have been only US\$276 over the same period.

8. There is validity in the critics' arguments on globalization that—despite the fact that globalization was expected to help the poor—poverty has not been reduced and that measures of inequality reveal that it has not decreased (Stiglitz, 2003, 2006; Lindert and Williamson, 2001; Mody and Murshid, 2005; Ranciere, et. al., 2006; Tornell, et. al., 2004; Tesar, 1995; Goldberg and Pavcnik, 2007; Kaminsky and Schmuckler, 2002; van Wincoop, 1994, 1999; Wei and Wu, 2002). Moreover, there is empirical evidence of increased risks of volatility and financial crises (Aizenman, 2002; Kose, et. al., 2007). In response, researchers argue that the process of globalization is far from complete and that, at present, global economy and finance are undergoing major structural changes, creating a situation of “fluidity;” they have changed the usual “determinants of market valuation, volatility, leverage, velocity, and liquidation.” Each of these structural changes is significant on its own and in the way it interacts with others (El-Erian, 2007). These changes are: (i) positive productivity shocks associated with the growing integration of large segments of labor force in developing economies, rendering them a significant portion of global expansion; (ii) significant increase in commodity prices,

which has turned their producers, as a whole, into net global creditors, and (iii) considerable retrenchment in the barriers to entry (El-Erian, 2007). Additionally, even rapid innovation in the design of instruments of risk sharing has focused on a fraction of possibilities, and large potential markets that allow trade in broad claims on national income called “macro markets” have yet to be developed and tapped. “Some of these markets could be far larger in terms of the value of the risks traded than anything the world has yet experienced, dwarfing today’s stock markets” (Shiller, 2003). Shiller notes that “stock markets are claims on corporate dividends which are only a few percent of national income.” Finally, researchers suggest that, while the benefits of globalization have not been fully forthcoming with the scope and magnitude expected, the problem has not been the process of globalization, but rather the way in which it has proceeded, where the playing field has not been quite leveled and where many financial markets have a long way to develop to allow meaningful integration of wider and deeper risk sharing. Financial globalization does not automatically provide the expected benefits to many countries unless they have attained a threshold level of legal and institutional developments mentioned earlier (Chinn and Ito, 2002; Kose, et. al., 2007).

9. Evidence suggests that countries that attain the threshold level of good legal and institutional developments are likely to attract more FDI and portfolio equity flows. In one such study, Faria and Mauro (2004) measured institutional quality as the average of six indicators—voice and accountability; political stability and absence of violence; government effectiveness; regulatory quality; rule of law; and control of corruption—and found that countries that ranked higher on these indicators attracted more equity-like flows. Wei (2005) found evidence in a study on mutual funds that countries with a high degree of government and corporate transparency attract more equity investment because, as explained by Erbaş and Mirakhor (2007), transparency reduces adverse incentive and ambiguity effects. There is also empirical evidence that poor public institutions bias the composition of inflow of capital against equity-like flows and toward debt, exposing these countries to currency and financial crises and adversely affecting the country’s ability to use a given amount of capital inflow to stimulate economic growth. Stulz (2005) indicates that in many developing countries there is a “twin agency” problem stemming from poor corporate and state governance that feed on each

other. In countries with a “twin agency” problem, the risk of expropriation by corporations and state is high because “those who control a country’s state can establish, enforce, and break rules that affect investors’ payoffs within that country. When expropriation risks are significant, it is optimal for corporate ownership to be highly concentrated, which limits economic growth, risk sharing, financial development, and the impact of financial globalization” (Stulz, 2006). One study found that one dollar of cash is, on average, worth US\$0.91 in countries with low corruption and only US\$0.33 in countries with high corruption (Pinkowitz, et. al., 2004). Where the ‘twin agency’ problem exists, diffusion of ownership is weak, financial sector poorly developed, and investment and economic growth are low (Antunes and Tiago, 2003). Once a country begins to liberalize its financial market and improves legal institutions and governance, a virtuous circle becomes possible and globalization begins to play a positive role in encouraging further development of legal and institutional infrastructure that allows further development of the financial sector (Chinn and Ito, 2002). There is mounting evidence that in the last decade many developing countries have implemented reforms that promoted legal and institutional developments. They have improved governance, transparency, and accountability and have adopted regulatory and supervisory standards of best international practice in accounting and data reporting. They have also stabilized their economy with sound macro policies and debt management. Some have even borrowed or rented additional credibility by cross-listing their domestic corporate shares in more advanced markets (Doidge, et. al., 2004; Edison and Warnock, 2006; Karolyi, 2004). As a result, they have received increased capital inflows, with FDI and portfolio equity flows constituting a major portion of these flows (IMF: GFSR, April 2007; Dehesa, et. al., 2007; also see Table 1 and Charts 1, 7, and 8 of this paper).

10. In addition to the evidence that many developing countries have improved their legal institutions and governance, there is some indication that the three paradoxes mentioned earlier—demonstrating divergence between theory and empirics of financial globalization—are beginning to lose strength. Lucas (2000) points out that the 21st Century will witness a reversal of the widening inequality among nations. His assertion is based on an analysis of a Solow-type neoclassical model with global capital mobility, assuming that all countries have access to the same technology and institutions as well as to market-friendly economic policies. In this case, the “Lucas paradox”—that

capital did not move from rich to poor countries—will no longer hold, and a “catch-up” process will rapidly narrow the income gap among countries. Lucas contends that more capital will move to developing countries, which is reasonable as they adopt policy and institutional infrastructure that will reduce their risk premium on investment. Developing countries’ adoption of the set of policies and institutions—sound macroeconomic policy, best-practice international standards of transparency, accountability, and good governance, as well as legal institutions that protect investor, creditor, property right, and enforce contracts—will reduce risk premium (Ju and Wei, 2006). It is not unrealistic that, as their financial sectors develop and international financial integration proceeds, assets of identical risk will command the same expected return, irrespective of spatial or domicile differences. Moreover, data from 2000 show the increasing flow of capital to developing countries (Table 1, Chart 7). In recent years, equity flows to emerging markets have been stronger than bond flows, and equity market capitalization stronger than bond market capitalization (Tables 2-5, Charts 6-11). Micro data are also beginning to reveal a perceptible shift of household assets portfolio allocation toward greater risk-sharing instruments. The data on the composition of households’ financial assets in Europe, USA, and Japan between 1995 and 2003 (Table 6) demonstrate that in the Euro area, the European Union, and the USA, households allocated a larger portion of their portfolio to risk-sharing instruments. While comparable figures are not available in other areas, similar behavior could be expected as policy, institutional, legal, and financial development progress in developing countries. Considering the Lucas paradox, Alfaro, et. al. (2005) concluded that “institutional quality is the leading causal variable” in explaining the paradox based on their empirical study.

11. Recent empirical evidence also suggests that, since 2001, there has been a systematic decline in home bias, at least in US equity investments (IMF: GFSR, April 2007; Ammer, et. al., 2006; Aurelio, 2006; Kho, et. al., 2006). There has been also some empirical evidence that social capital (O’Hara, 2004; Lorenz, 1999; Lopez-de-Silanes, et. a., 1997; Helliwell and Putman, 1995; Berg, et. al., 1995; Ashraf, et. al., 2005; Dasgupta and Serageldin, 1999)—especially trust, institutional and legal developments as well as greater transparency and availability of information—may, at least tentatively, explain the equity premium puzzle. The last decade has witnessed a growing body of empirical research demonstrating that finance, particularly risk-sharing

instruments like equity, is trust-intensive; therefore, in societies where the level of trust was high, financial sectors were deeper and more developed. In particular, this literature indicates that there is a high correlation between trust and development of the financial sector (Calderon, et. al., 2002; Guiso, et. al., 2004). Importantly, if the level of trust is high, more reliance is placed on risky assets, such as equity. People invest a larger portion of their wealth in stocks, use more checks, and have access to greater amount of credit than in low-trust societies. Over the last decade, a number of researchers have demonstrated the impact of trust on economic performance (Knack and Keefer, 1997; Glaeser, 2000; Zak and Knack, 2001; Zak, 2003; Beugelsdijk, et. al., 2004). Arrow had suggested in 1975 that trust “is an important lubricant of a social system. It is extremely efficient; it saves a lot of trouble to have a fair degree of reliance on other people’s word” (Arrow, 1974). Fukuyama (1996) asserts that the general level of trust—an important component of social capital (Coleman, 1988, 1990; Glaeser, et. al., 1999; Alesina and La Ferrara, 2002)—was a strong explanatory factor in the economic performance of industrial countries; the high level of trust was reinforced in these societies by strong institutions. A recent empirical paper (Guiso, et. al., 2005) demonstrates low trust as a crucial factor in explaining the low level of stock market participation, i.e., the equity premium puzzle. Based on the analysis of cross-country data, the paper suggests that where the level of trust is relatively high, investment in equity, in general, and in the stock market, in particular, is relatively high as well. Moreover, the paper asserts that in low-trust countries, equity participation depends on observance of the rule of law and the existence of legal institutions that protect property, creditor, and investor rights, and those that enforce contracts. It suggests that in low-performing economies not only is the level of trust low, but property and investor rights are poorly protected, and legal contract enforcement weak. Policy implication for these economies is to strengthen legal institutions, improve transparency, accountability, and governance—both in private and public sectors—and to provide the public with greater amount of information on risk sharing, in general, and equity markets, in particular. The growing body of empirical evidence over the last two decades has focused on the existence (or the lack) of strong institutions as a powerful factor explaining cross-country differences in economic performance. Recent research has underlined that the same legal and institutional factors are responsible for financial sector development and its ability to integrate with the global finance which would strengthen economic performance (Johnson, et. al., 2002).

III. Islamic Finance: Benefits and conditions for progress

12. The central proposition of Islamic finance is the prohibition of the type of transaction in which a rent is collected as a percentage of an amount of principle loaned for a specific time period without the transfer of the property rights over the money loaned to the borrower, thus shifting the entire risk of the transaction to the borrower. As the Qurān prohibits debt-based contracts, it simultaneously ordains an alternative: in consonance with its systemic approach that as something is prohibited, an alternative is simultaneously ordained. The alternative to debt-based contracts is *Al-Bay'* (البيع): a mutual exchange in which one bundle of property rights is exchanged for another (see Lane, 2003; Al-Isfahani, 1992; Ibn Mandhoor, 1984; Al-Mustafaoui, 1995), thus allowing both parties to share production, transportation, and marketing risks. It further allows both parties to exchange in order to reduce risk of income volatility and to allow consumption smoothing; a major outcome of risk sharing which increases welfare of the parties to the exchange. The emphasis on risk sharing is evident from one of the most important verses in the Qurān in respect of economic behavior. The verse states that: "... they say that indeed exchange (بيع) is like usury (*Riba*). But Allah has permitted exchange and has forbidden usury..." (2:275). This verse can be considered as the cornerstone of the Qurān's conception of economy since from it flows major implications of how the economy should be organized. One of these implications relates to the nature of these two contracts. Etymologically, the first, *Al-Bay'* (بيع), is a contract of exchange of one commodity for another where the property rights over one good is traded for those of another. In the case of contracts of *Riba*, a sum of money is loaned today for a larger sum in the future without the transfer of the property rights over the principle from the lender to the borrower. Not only does the lender retain property rights over the sum lent, but property rights over the additional sum paid as interest is transferred from the borrower to the lender. The verse renders exchange and trade of commodities (and assets) the foundation of economic activity. Important implications follow: exchange requires freedom of parties to contract. This in turn implies freedom to produce, which calls for clear and well-protected property rights that would permit production. Moreover, to freely and conveniently exchange, the parties need a place, i.e., a market. To operate successfully, the market needs rules, norms, and procedures to allow information to flow smoothly; trust to be established among buyers and

sellers; and competition to take place among sellers, on the one hand, and buyers, on the other; and transactions costs as well as costs to third parties, resulting from the adverse impact of exchange, to be reduced. Risk is a fact of human existence. Risks to income are important; when they materialize, they play havoc with people's livelihood. It is therefore welfare-enhancing to reduce risk to income and lower the chances of its volatility to allow smoothing of consumption. This is accomplished by risk sharing and risk diversification which are facilitated by trade and exchange. By relying on exchange, the Qurān promotes risk sharing. Arguably, it can be claimed that through its rules governing just exchange, distribution, and redistribution, the entire Quranic position on economic relations is oriented toward risk sharing. This is perhaps the reason why in the Qurān more emphasis is placed on rules governing exchange distribution, and redistribution—to affect a balanced risk sharing—than on production. A further implication is that finance based on risk-return sharing means that the rate of return to finance has to be determined, *ex post*, by the rate of return on real activity rather than the reverse, which is the case when debt contracts finance production.

13. It is clear that the objective is to promote risk sharing. But why? Here, an economic hermeneutic of the relevant verses placed within the systemic context of the Qurān strongly suggests that risk sharing, along with other prescribed behavioral rules, e.g., exhortation on cooperation (Qurān 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. An Islamic philosophic axiom declares that from **One Creator** only **one creation** can issue. The Qurān itself unambiguously declares: "Neither your creation (was) nor your resurrection (will be) other than as one united soul" (Qurān 31:28; see also 4:1; 6:99). In a series of verses, the Qurān exhorts humans to take individual and collective actions to achieve social unity and cohesion and then strive to preserve and protect collectivity from all elements of disunity (e.g., 3:103). Unity and social cohesion are so central among the objectives of the Qurān for mankind that all conducts prohibited may be regarded as those that cause disunity and, conversely, those prescribed to promote and protect social cohesion. It is a natural consequence of such a system to require risk sharing as an instrument of social integration. Therefore, promoting maximum risk sharing is, arguably, the ultimate objective of Islamic finance. It is for this reason that profit-loss sharing and equity participation are considered as first best instruments of risk

sharing (Iqbal and Mirakhor, 2007; Mirakhor and Zaidi, 2007). Indeed, there is some evidence that stock market and social interaction are related (Hong, et. al., 2004; Huberman, 2001). One scholar that has recognized the full potential benefits of risk sharing for mankind is Shiller (2003). He points out that “[M]assive risk sharing can carry with it benefits far beyond that of reducing poverty and diminishing income inequality. The reduction of risks on a greater scale would provide substantial impetus to human and economic progress.” Arguably, the most meaningful human progress would be achieved when all distinctions among human beings on the basis of race, color, creed, income, and wealth are obliterated to the point where humanity truly views itself as one. The Qurān (4:1) unambiguously calls attention to the fact that, despite all apparent multiplicity, humans are fundamentally of one kind and rejects all bases for distinction between and among them except righteousness (Qurān 49:13). This axiom applies to all dimensions of human existence on this planet, including in the fields of economics and finance. The objective of the unity of mankind could well be promoted by financial globalization since it has the potential of being the great equalizer of our time. It has the ability to unwind and unbundle, direct, analyze, and price risk searching for the highest return. It can explore all risk-return to assets and the real rate of return, leading to greater risk sharing. It can do so across geographic, racial, national, religious, cultural, language, and time boundaries. In the process, it can level playing fields of finance and help remove barriers among people and nations. The same potential holds for Islamic finance if progress follows the trajectory envisioned by Islam, which specifies preconditions for the successful operation of financial arrangements within its framework firmly anchored on a network of norms and rules of behavior (institutions), prescribed for individuals and collectivities (Iqbal and Mirakhor, 2002). This network includes, but is not limited to, those institutions that modern scholarship considers crucial for financial development, integration, and globalization (Garretsen, et. al., 2003).

14. Among the institutions prescribed by Islam are: (i) property rights; (ii) contracts; (iii) trust; and (iv) governance. The word “property” is 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 a property along with the right to exclude others from the use of that property. Even in the evolution of Western economies, this is a

rather new conception of property that is thought to have accompanied the emergence of the market economy. Before that, however, while a grant of the property rights in land and other assets was the right to use and enjoy the asset, it did not include the right to dispose of it or exclude others from its use. For example, the right to use the revenues from a parcel of land, a corporate charter, or a monopoly granted by the state did not carry the right of disposing of the property. It is thought that the development of the market economy necessitated a revision of this conception of property since it was thought that the right not to be excluded from the use of assets owned by another individual was not marketable; it was deemed impossible to reconcile this particular right with a market economy. Hence, of the two earlier property rights principles—the right to exclude others and the right not to be excluded by others—the latter was abandoned and the new conception of property rights was narrowed to cover only the right to exclude others. In Islam, however, this right is retained without diminishing the role of the market as a resource allocation and impulse transmission mechanism within the framework; property ownership is ruled by a set of property rights and obligations (Iqbal and Mirakhor, 2007).

15. The first principle of Islamic property rights is that the Supreme Creator is the ultimate owner of all properties and assets, but in order that humans become materially able to perform duties and obligations prescribed by the Law Giver, they have been granted a conditional right of possession of property; this right is granted to the collectivity of humans. The second principle establishes the right of collectivity to the created resources. The third principle allows individuals to appropriate the products resulting from the combination of their labor of these resources, without the collectivity losing its original rights either to the resources or to the goods and services by individuals. The fourth principle recognizes only two ways in which individuals accrue rights to property: (i) through their own creative labor and/or (ii) through transfers—via exchange, contracts, grants, or inheritance—from others who have gained property rights title to a property or an asset through their labor. Fundamentally, therefore, work is the basis of acquisition of right to property. Work, however, is not only performed for the purpose of satisfaction of wants or needs, it is considered a duty and obligation required from everyone. Similarly, access and use of natural resources for producing goods and services is also everyone's right and obligation. So long as

individuals are able, they have both the right and the obligation to apply their creative labor to natural resources to produce goods and services needed in the society. However, if individuals lack the ability, they no longer have an obligation to work and produce without losing their original right to resources. Therefore, an important principle called “immutability or invariance of ownership” constitutes the fifth principle of property rights in Islam (Iqbal and Mirakhor, 2007). The latter writes the duty of sharing into Islam’s principles of property rights and obligations. Before any work is performed in conjunction with natural resources, all members of the society have equal right and opportunity to access these resources. When individuals apply their creative labor to resources, they gain a right of priority in the possession, use or market exchange of the resulting product without nullifying the rights of the needy in the sale proceeds of the product. As a result, the sixth principle imposes the duty of sharing the monetary proceeds after the sale of the property. This principle regards private property ownership rights as a trust held to affect sharing. The seventh principle imposes limitation on the right of disposing of the property—presumably absolute in the Western conception of property rights. Individuals have a severely mandated obligation not to waste, destroy, squander, or use property for unlawful purposes. Once the specified property obligations are appropriately discharged, including that of sharing in the prescribed amount and manner, property rights are held inviolate and no one can force appropriation or expropriation. This right is held so sacred that even, in relatively modern times, when a rule had to be developed to accommodate emergency cases, e.g., exercise of eminent domain for expropriation of land for public utility development, it was called “*ikrah hukmi*,” i.e., “unpleasant necessity,” a legitimate violation (Iqbal and Mirakhor, 2007). Even in these unusual cases, action could be taken only after adequate compensation was paid to the owner.

16. While the above principles strongly affirm the human’s natural tendency to possess—particularly products resulting from individual creative labor—the concomitant private property obligations give rise to the interdependence among members of the society. Private initiative, choice, and reward are recognized but not allowed to subvert the obligation of sharing. The inviolability of appropriately acquired private property rights in Islam deserves emphasis. As observed by a legal expert (Habachy, 1962), given the divine origin of Islam, “its institutions, such as individual ownership, private

rights, and contractual obligations, share its sacredness. To the authority of law, as it is understood in the West, is added the great weight of religion. Infringement of the property and rights of another person is not only a trespass against the law; it is also a sin against the religion and its God. Private ownership and individual rights are gifts from God, and creative labor, inheritance, contract, and other lawful means of acquiring property or entitlement to rights are only channels of God's bounty and goodness to man. All Muslim schools teach that private property and rights are inviolable in relations between individuals as well as in relations with the state. It is not only by their divine origin that the Muslim institutions of private ownership and right differ from their counterpart in Western system of law; their content and range of application are more far-reaching. If absolutes can be compared, it can be safely said that the right of ownership in Muslim law is more absolute than it is in modern system of law. The Muslim concept of property and right is less restricted than is the modern concept of these institutions."

17. In a terse, unambiguous verse, the Qurān exhorts the believers to "be faithful to contracts" (5:1). This command, buttressed by other verses (2:282, 6:151-153; 9:4; 16:91-94; 17:34-36; 23:8), establishes the observance and faithfulness to the terms of contract as the central anchor of a complex relationship between: (i) the Creator and His created order, including humans; (ii) the Creator and the human collectivities; (iii) individuals and the state, which represents the collectivity; (iv) human collectivities, and (v) individuals. The concept of contracts in Islam transcends its usual conception as a legal institution "necessary for the satisfaction of legitimate human need." It is considered that the entire fabric of the Divine Law is contractual in its concept and content (Habachy, 1962). Contract binds humans to the Creator, and binds them together. As Habachy suggests: "This is not only true of private law contacts, but also of public law contracts and international law treaties. Every public office in Islam, even the Imamate (temporal and spiritual leadership of the society), is regarded as a contract, an agreement (*áqd*) that defines the rights and obligations of the parties. Every contract entered into by the faithful must include a forthright intention to remain loyal to performing the obligations specified by the terms of contract." The fulfillment of contracts is exalted in the Qurān to rank it with the highest achievements and noblest virtues (2:172) (Habachy, 1962).

18. The divinely mandated command of faithfulness to the terms and conditions of contracts and abiding by its obligations is undergirded by the equally strong and divinely originated institution of trust (Iqbal and Mirakhor, 2007; Kourides, 1970). There is strong interdependence between contract and trust; without the latter, contracts become difficult to enter into and costly to monitor and enforce. When and where trust is weak, laws and complex, expensive administrative apparatuses are needed to enforce contracts. Perhaps this is why so much emphasis is placed on trust: to make entering into and enforcing contracts less costly. Accordingly, the Qurān, in a number of verses proclaims trustworthiness as a sign of true belief and insists on remaining fully conscious of the obligation of ensuring that the intention to remain trustworthy in fulfilling the terms and conditions proceeds promises or entering into contracts. Conversely untrustworthiness and betrayal of trust are considered a clear sign of disbelief (2:27; 2:40; 2:80; 2:177; 2:282-83; 3:161; 4:107; 4:155; 6:153; 7:85; 8:27; 8:58; 9:12; 9:75; 9:111; 11:85; 13:20; 16:91; 16:94; 16:95; 17:34; 23:8). Moreover, the Qurān makes clear that fulfilling the obligations of a contract or a promise is mandatory. In short, the Qurān makes trust and trustworthiness, as well as keeping faith with contracts and promises, obligatory and has rendered them inviolable except in the event of an explicitly permissible justification (Iqbal and Mirakhor, 2007; Habachy, 1962). In addition, there are numerous prophetic sayings that supplement the Quranic verses on trust. For example, it is reported that the prophet (صلى الله عليه وآله وسلم) was asked: who is a believer. He replied: “a believer is a person to whom people can trust their person and possession,” (Habachy, 1962). It is also reported that he said: “the person who is not trustworthy has no faith, and the person who breaks his promise has no religion.” Also, “keeping promises is a sign of faith,” and “there are three (behavioral traits) if found in a person, then he is a hypocrite even if he fasts, prays, performs big and small pilgrimages, and declares “I am a Muslim”: when he speaks, he lies; when he promises, he breeches; and when trusted, he betrays” (Payandeh, 1984; Iqbal and Mirakhor, 2007).

19. Other than the above, there are other individual and collective behavioral rules and norms that strengthen the governance structure of the state and firms, including transparency, accountability, voice, and representation. Nevertheless, the three basic institutions: property rights, contracts, and trust give a flavor of the strength of governance in Islam. The rule of Law governs

the behavior of state rulers no less stringently than those of individuals. As two Western legal experts (Anderson and Coulson, 1958) observe: “Islam is the direct rule of God. His Law, the Shari’a, is the sole criterion of behavior,” and “the authority of the temporal ruler is both derived and defined by this law.” Under the rule of Law, “the ruler is by no means a free agent in the determination of the public interest,” and the decisions that the ruler makes “must not be arbitrary, but rather the result of conscientious reasoning on the basis of the general principles of the Shari’a as enunciated in the authoritative texts.” These legal experts also assert that, based on their consideration of Islamic legal texts, the command of observing contracts and covenants faithfully “apply to the ruler acting in a public capacity” just as severely as to individuals. “Indeed, when considerations of expediency and public interests are taken into account, they apply even with greater force to the actions of the ruler.” Therefore, a breach of faith on the part of a ruler is more heinous in its nature and serious in its consequence than of individuals. Importantly, they observe that “just as the ruler has no special prerogative or exemptions as regards the substantive law, so he has none regarding the application of the law through the courts. Ideally, the jurisdiction of the *Qādi* (the judge), the only person qualified to apply the Shari’a, is comprehensive and exclusive. The principle that no one can be judge in his own cause is firmly established in the legal texts, and when personally involved, the ruler should submit to the jurisdiction of the ordinary *Qādi*’s courts. the ruler that breaks faith cannot shelter behind any claim of sovereignty from the dictates of the law which brooks no such plea.” The same principles of governance under which a ruler or a state should function apply also to firms. Iqbal and Mirakhor (2005) argue that within the Islamic framework a firm can be viewed as a “nexus of contracts” whose objective is to minimize transaction costs and maximize profits and returns to investors subject to constraints that these objectives do not violate the property rights of any party whether it interacts with the firm directly or indirectly. In pursuit of these goals, the firm honors all implicit or explicit contractual obligations. As could be discerned from the discussions on contracts and trust, it is incumbent on individuals to preserve the sanctity of implicit contractual obligations no less than those of explicit contracts. By the same token, firms have to preserve the sanctity of implicit and explicit contractual obligations by recognizing and protecting the property rights of stakeholders, community, society, and state. Since the firm’s behavior is

shaped by that of its managers, it becomes their fiduciary duty to manage the firm as a trust for all stakeholders in ensuring that the behavior of the firm conforms to the rules and norms specified by the Law (Iqbal and Mirakhor, 2004).

20. Even from the above rather cursory consideration, it should become clear that, once fully implemented, Islamic institutional framework would support rapid financial development and encourage financial integration and globalization which, in turn, would promote risk sharing. The institutions ordained by Islam reduce uncertainty and ambiguity to ensure predictable behavior. Islam also prescribes rules regarding income and wealth sharing to promote income-consumption smoothing. Arguably, sharing of economic risks in the society is of great concern to Islam. This is evidenced by the strong position taken by the Qurān on distributive justice through *Zakat*, an obligatory 2.5 percent of wealth, as well as additional exhortation for voluntary economic assistance to those less able; all of which are insurance against income risk. However, these institutions are exceptional by their absence in many, if not all, Muslim countries (Chapra, 2000). In case of the Middle-Eastern and North-African (MENA) region, for example, Abed and Davoodi (2003) found that the rates of growth in this region since the 1970s have not only been lower than those of developing countries as a whole, but that they have been twice as volatile as developing countries' average. They attribute this poor performance to: high population growth and low productivity; lagging political and institutional reforms; large and costly public sectors; inefficient and inequitable educational system; underdeveloped financial markets; high trade restrictiveness; and inappropriate exchange rate policies. It should be clear that poor governance; transparency; accountability; inadequate judicial system; and weak property, creditor, and investor rights all have played a role in the poor growth performance of the region; ills that could be treated with the development of the legal and institutional developments prescribed by Islam. While this process has not had any impetus, a number of Muslim countries, in and out of the MENA region, have recently implemented macroeconomic and structural reform policies and have adopted international best-practice standards and codes. As a result, the economic performance of these countries has improved markedly, also helped by increase in oil revenue. While adoption, implementation, and development of Islamic institutions may be slow, implementation of international best

practice of transparency and accountability plus development of an independent and effective judiciary and the reform of the legal system—to protect property, creditor, and investor rights and enforce contracts—and promotion of financial sector development could increase investment, employment, and income leading to reduction in poverty.

21. Islamic finance has experienced rapid growth,¹ especially over the last decade. Its growth is astonishing, given that its analytic underpinnings, in modern economic and financial term, were explained two decades ago (Khan and Mirakhor, 1987). There is no accurate estimate of the size of the market at present, but it is certain that it is nowhere near its potential. Just as is the case with financial globalization, Islamic finance has realized only an insignificant fraction of its risk-sharing capacity; of the 15 basic modes of available transactions, only a few have been used widely and even then only a few instruments have been innovated based on these transactions modes (Iqbal and Mirakhor, 2002). Nearly three decades ago, beginning with Ross (1976, 1978), theory of finance showed that a basic instrument could be **spanned** into a large number (Huberman, et. al., 1987a and b; Bekaert and Urias, 1996; Fearson, et. al., 1993). The wide ranges of instrument innovations of the new finance since then have demonstrated the validity of this idea. Undoubtedly, the process of instrument design within the field of Islamic finance will gather momentum once it attracts the needed expertise. At the time being, this is the most important challenge of Islamic finance (Baldwin, 2002; Iqbal and Mirakhor, 1999). The lack of expertise has been the reason why, so far, financial engineering in designing new instruments has focused on fast tracking a reverse-engineering process of redesigning some conventional vehicles. Not only the process of instrument design has to accelerate based on the approved transactions modes, but also inventions of new instruments paralleling Shiller's (2003) ideas on "macro markets" should start; here the potential is great. For example, virtually all government deficit financing in Muslim countries are debt-based. To remedy this, Nadeem-Ul-Haque and Mirakhor (1999) proposed an equity instrument to be sold by governments with its rate of return indexed to the rate of return to domestic, Islamic countries, and international-Islamic equity markets, each with specified weights. The analytic arguments underpinning this proposal were explained by

1. See Financial Times reports: Islamic Finance May 24, 2007, for estimates of growth, size, and potential of Islamic Finance.

Choudhry and Mirakhor (1997). The reason governments would want to raise funds is to supply social overhead capital, defense, health, and education. If the private sector was either unwilling or unable to undertake the production of these public goods, it would fall on governments to undertake the needed investments and cover the related expenditure with usual government revenue. The shortfall would be covered by floating the equity instrument, which would be, in essence, an instrument backed by assets represented by either earlier bundles of social overhead capital already completed or in train, e.g., roads, dams, hospitals, and the like. Since these are lumpy investments and their public goods nature provides a higher social return than investments undertaken by the private sector, the rate of return must be at least as high as the rate of return to be paid by the private sector when raising equity in the stock market. But, since domestic markets may experience volatilities to which government finance should not be exposed, Nadeem-Ul-Haque and Mirakhor suggested adding two other markets—the index of returns to all Islamic countries' stock returns and the index of returns to Islamic equity funds in the West—to the index of returns to the domestic equity market. There are obvious advantages to this instrument; one being a vehicle for integration of equity markets across the world, while the other would be globalization of this instrument, forcing governments to compete for funds domestically, regionally, and globally, leading to efficiency gains.

22. How likely is it that conventional and Islamic finance converge as they both go through the globalization process? The answer, would be quite likely if global finance relied more extensively on equity or equity-like flows, on the one hand, and invent/innovate a wider spectrum of risk-sharing instruments, on the other. The same process of innovations in Islamic finance would allow an asymptotic convergence between the two. Nearly five decades ago, Modigliani and Miller (1958) showed that, in the absence of frictions, firms' financial structure would be indifferent between debt and equity. In the real world, there are a number of frictions that bias financial structures in favor of debt and debt-based contracts. The two most important are tax and information. The tax treatment of equity returns and interest in industrial countries, which dominate the world of finance and the present structure of capital flows, is heavily biased against equities. Informational problems (information asymmetry and the related problems of moral hazard and adverse selection) also bias financial transactions in favor of debt or debt-based contracts. Legal-financial systems in advanced countries are also structured,

tilting in favor of debt and debt-based transactions. However, as financial market developments progress, legal and institutional developments across the world accelerate, and information technology advances, the informational problems diminish. Whether tax and legal treatment of equity versus debt will become less biased is a policy question. What is clear is that as informational problems decline, it will become increasingly difficult to maintain legal, institutional, and tax policy impediments to level the playing field between equity and debt. Consequently, it is not unreasonable to expect a process of decreasing dominance of the financial system by debt and debt-based instruments, which has not been without costs, including severe financial crises. This dominance has been a major part of the financial scene globally for so long that it is difficult to note that there was a period in the evolution of finance when equity and partnership were the dominant mode of transaction in the Middle Ages. There has been some recent research suggesting that financial globalization is not irreversible. Rajan and Zingales (2003) argue that there have been periods in history, specifically 1870-1913, when the degree of global financial integration was no less than the current degree. Yet, as a result of world wars, stock markets crash, and a worldwide depression, not only the global integration stopped, it did not resume until recently (Obstfeld and Taylor, 2003; Faria, et. al., 2006). Same catastrophic factors can explain an even earlier episode of reversal of financial integration in the Middle Ages.

23. Before the beginning of the 20th Century, economic historians of the Middle Ages all but ignored the importance of trade and financial relations between Europe and the rest of the world, which were crucial to the economic development of the West before the 15th Century (Udovitch, 1967). Abu-Lughod (1994) contends that this was due to the belief held by the Eurocentric scholarship that globalized trade became relevant only after the “rise of the West” in the late 15th Century. According to Abu-Lughod, an advanced globalized system of trade “already existed by the second half of the Thirteenth Century, one that included almost all regions (only the “New World” was missing). However, it was a world-system that Europe had only recently joined and in which it played only a peripheral role.” Abu-Lughod maps growing global trade flows between 737 and 1478 A.D., demonstrating that trade flows first centered in Mesopotamia and spread rapidly over the next eight centuries throughout the then-known world to become global (Frank, 1990; Gills and Frank, 1994). Beginning with Postan (1928), economic

historians have indicated that these trade flows were supported by a financial system sustained by an expanding risk-sharing credit structure based on **commenda** and **maona**. Commenda is identical to *mudaraba*, and *maona* partnerships are either *musharaka* or *mudaraba*, depending on the nature of activity undertaken by the partners (see Labib, 1969; Lane, 1944; Day, 2002; and Udovitch, 1962; De Somogyi, 1965; Ehrenkreuz, 1959; Imamuddin, 1960; Tuma, 1965). Postan's paper, based on his investigations in the vast commercial archives of the Middle Ages in England, was path-breaking as it demonstrated that: (i) economists and historians had, until then, underestimated the growth of the volume of credit in the Middle Ages, and (ii) the bulk of this credit was either commenda or commenda-like, joint risk-sharing partnerships, even if they were "miscalled or modified" as loans (Postan, 1928, 1957). There is little doubt that the institutions of commenda and maona originated in the Islamic world (Udovitch, 1962, 1967, 1970). These institutions, along with financial instruments, such as **hawala** and **suftaja**, were transmitted to Europe and to other regions by Jewish scholars and merchants throughout the Jewish Diaspora (Fischel, 1933, 1937), and via Spain through trade and scholastic borrowing from Islamic sources (Mirakhor, 2003). Professor Gotein of Princeton University painstakingly researched the documents known as the Geniza² records and reached the conclusions (Goitein, 1954, 1955, 1962, 1964, 1967) that: (i) trade in the Middle Ages was both extensive and intensive, financed by risk-sharing partnerships; (ii) partnership was used in industrial, commercial, and in public administration projects; (iii) the Mediterranean and Indian trade, as revealed by the Cairo Geniza, were largely not based on cash benefits or legal guarantees, but on the human qualities of mutual trust and friendship; and (iv) even a cursory examination of the Geniza material proves that lending money for interest was not only shunned religiously, but was also of limited significance economically.

2. Gotein (1964, p. 315) refers to "the so-called Cairo Geniza" as "a treasure of manuscripts written mainly during the Fatimid and Ayyubid periods and originally preserved in a synagogue in Old Cairo." Further, he indicates that "Geniza (pronounced: Gheneeza), as may be remarked in passing, is derived from the same Persian word as Arabic "*Janazah*," burial, and has almost the same meaning. It is a place where discarded writings were buried so that the name of God, which might have been written on them, might not be discarded. Thus, Geniza is the opposite of an orderly archive." He further informs that "... the documents discussed in this paper, albeit mostly written in Hebrew characters, are in Arabic language." There are a number of Geniza centers of scholarship in the USA and the UK (Imad, 2005).

24. Studying both the Geniza records as well as Islamic Fiqh (jurisprudence) sources, Udovitch reaches the following conclusions: (i) “there is remarkable symmetry between the Hanafite legal formulations of the late-8th Century and the documented commercial practices of the 11th and 12th Centuries Geniza merchants: (Udovitch, 1962, 1967); (ii) he reaffirms Goitein’s conclusion that researching “the extensive commercial records of the Geniza, we found comparatively little evidence of usurious transactions” (Udovitch, 1970a and b). Moreover, research by Medieval historians demonstrated the extensive use of risk-sharing partnerships (Adelson, 1960; Arfoe, 1987; Ashtor, 1975, 1976, 1983; Byrne, 1920, 1930; Exenberger, 2004; Laiou, 2002; Lieber, 1968; Lopez, 1951, 1952, 1955). While risk-sharing techniques continued to prevail in Europe until the mid-17th Century, beginning in mid-16th Century, the institution of interest-based debt financing also began to be used more widely and extensively throughout Europe (Munro, 2003). The explanation for the initial utilization of this method of financing and its dominance over risk-sharing methods has been a combination of several factors, including (i) the demise of the scholastic prohibition of usury (Munro, 2003; Sauer, 2002); (ii) the appearance and rapid growth of fractional reserve banking that led to specialization of finance by intermediaries who preferred to provide financing to agent-entrepreneurs at fixed interest rates based on contracts enforceable by law and the state in order to reduce monitoring and transaction costs; (iii) inflow of vast amounts of gold and other riches into Europe from the colonies in the Americas and elsewhere, which reduced the incentive for the elite classes to continue financing trade on the basis of risk sharing, preferring fixed interest debt contracts; (iv) the emergence of nation-states whose governments needed finance for wars or other state activities, but could not raise resources except by means of fixed interest rate contracts according to which an annuity was paid in perpetuity without the need for governments to repay the principal (Michie, 2007); most importantly was the process of securitization in the 14th Century, an innovation that created a revolution in mobilizing financial resources (Michie, 2007). It is likely, however, that the breakdown of trust in Europe and elsewhere was a major factor for the loss of dominance of risk-sharing finance by the end of the Middle Ages. As mentioned earlier, risk-sharing finance is trust-intensive, and trade financing during the Middle Ages was based on risk sharing which, in turn, was based on mutual trust (Goitein, 1964). Recent research indicates that catastrophic

and traumatic experience contributes to the breakdown of trust in a community and among its members (Alesina, et. al., 2002). If so, the Middle Ages certainly witnessed enormous, continuous, and extensive traumas, including four crusades, three Mongol invasions, numerous wars in Europe, which are only a few of the traumatic experiences of the age. In addition to these events was the Bubonic plague of the mid-15th Century that spread rapidly throughout the then-known world along well-established and intensively traveled trade routes (Abu-Lughod, 1994).

25. It is well known that the full-scale adoption of a fixed-interest-based financial system, with a fractional reserve banking sector at its core, has a major deficiency; the system is inherently fragile (Minsky, 1982; Khan, 1987; Posen, 2001). Toward end-1970s and early-1980s, existence of financial intermediaries, in general, and banks, in particular, was justified due to their ability to reduce transaction and monitoring costs as well as to manage risk. However, minimal attention was paid to reasons why banks operated on the basis of fixed, predetermined interest-rate-based contracts, i.e., on a fixed interest basis that rendered the system fragile and unstable, requiring a lender of last resort to regulate it. Generally, interest rate theories explain the rate as an equilibrating mechanism between supply of and demand for finance, which is a rate that prevails in the market as a spot price and not as a price determined ex ante and fixed, tied to the principle and the period covered by the debt contract. In an important paper, Bhattacharya (1982) argued that: "... with risk-neutral preferences, when the choice of risk level is unobservable, then any sacrifice of higher mean asset payoff constitutes an inefficient choice. The classical model of intermediaries existing to save on transactions/monitoring costs in asset choice does not explain why their liability structure should not be all equity." With the development and growth of information economics and agency literature, another explanation was added to the list of reasons for the existence of intermediaries. They served as **delegated** monitoring as well as signaling agents to solve the informational problems, including asymmetric information existing between principals and agents. Based on the findings of the developing field of information economics (see, in particular Stiglitz and Weiss, 1981), it has been argued that adverse selection and moral hazard effects in a banking system operating on the basis of fixed-fee contracts in the presence of asymmetric information—particularly in cases where this problem is acute—means that some groups

will be excluded from the credit market even when the expected rate of return for these groups may be higher than for those with access to credit. Furthermore, risk-return sharing contracts, e.g., equity, are not subject to adverse selection and moral hazard effects, “the expected return to an equity investor would be exactly the same as the expected return of the project itself” (Cho, 1986).

26. The fragility of a financial system operating on the basis of fixed, predetermined interest rate was underlined by Stiglitz (1988) who argued that “interest rate is not like a conventional price. It is a promise to pay an amount in the future. Promises are often broken. If they were not, there would be no issue in determining creditworthiness. Raising interest rates may not increase the expected return to a loan; at higher interest rates one obtains a lower quality set of applicants (adverse selection effect) and each one’s applicants undertakes greater risks (the adverse incentive effect). These effects are sufficiently strong that the net return may be lowered as banks increase the interest rates charged: it does not pay to charge higher interest rates.” The findings of the new field of information economics strengthened the arguments of Minsky (1982) and others that a debt-based financial system with the fractional reserve banking—operating with a fixed, predetermined interest rate mechanism at its core—is inherently fragile and prone to periodic instability. Stiglitz’s findings underlined Minsky’s arguments that, as returns to banks decline, unable to raise interest rates on their loans, they enter a liability-management mode by increasing interest rates on their deposits. As this vicious circle continues to pick up momentum, the liability management transforms into Ponzi financing and eventually bank runs develop (Posen, 2001). The last two decades of the 20th Century witnessed a number of global bouts with financial instability and debt crises with devastating consequences for a large segment of humanity, thus raising consciousness regarding vulnerability and fragility of the financial systems which are based, at their core, on fixed-price debt contracts. As previously emphasized, legal and institutional developments, along with good governance and adoption of standards of best practice in transparency and accountability at the level of individuals, firms, and state, buttressed by information technology advances, will mitigate the informational problems leading to lesser reliance on debt-based contracts.

IV. Summary and conclusions

27. This paper has addressed a question regarding the future of financial globalization, and of Islamic finance: will conventional finance, at the heart of the current financial globalization, and Islamic finance converge? The paper began by considering the recent development and the future of financial globalization. There is evidence that financial globalization has not been as helpful as expected, given the potential of its benefits for growth of investment, employment, and income as well for reduction of income inequality and poverty. The paper argues that, ultimately, the success of globalization will depend on the spread and degree of risk sharing around the world. The greater the momentum, the deeper the markets and wider the spectrum of risk-sharing instruments, greater will be shared ownership and participation by larger number of people in finance. Faster, deeper, wider financial development has a symbiotic relationship with globalization as the feedback process between the two strengthens both. Evidence suggests that, thus far, the degree of risk sharing achieved by globalization is insignificant. The paper presented reasons that explain why the degree of risk sharing and expected welfare gains from financial integration have been small: (i) as of yet, instruments have not been developed sufficiently to allow greater risk sharing, and (ii) many countries still need to achieve threshold levels of financial, legal, and institutional development required to allow greater risk sharing. It is believed that the process of liberalization of economies, adoption of best international standards, development of good legal/institutional framework and practice is gathering momentum in many countries, as is the pace of innovation of financial instruments. The paper suggests that parallel progress and challenges also characterize Islamic finance. While it has experienced a phenomenal success in the last two decades, Islamic finance has still a long way to go to achieve its objective of maximum risk sharing. The paper argued that the institutional structures ordained, within which Islamic finance is to operate, are those that promote good state and corporate governance, trust, protection of rights and contract enforcement. It was suggested that, in case of Islamic finance, the progress achieved to date is a negligible fraction of the potential. The reasons are identical to those offered in financial globalization. It is suggested that financial, legal, institutional developments, and greater pace of instrumentalization of basic modes of transactions permitted, would accelerate progress of Islamic finance. As it

would appear that Islamic finance and financial globalization share a common objective of achieving maximum risk sharing, it is not too unrealistic to expect convergence. It was also argued that legal and institutional developments as well as further advances in information technology will reduce informational problems and lead to growing trust which is essential for risk sharing. The result will be the dominance of equity in financial structures and relationships. The paper presented historical evidence of a globalization period, in the Middle Ages, when partnerships and equity participation were the dominant mode of finance. The breakdown of trust as a result of repeated wars and catastrophes as well as financial innovations, particularly securitization of government debt in the late Middle Ages, created the right milieu for the dominance of debt and debt finance which has lasted to the present day. Recent data appear to suggest that global finance may be experiencing an early stage of return of dominance of equity and risk sharing through the growth of Islamic financial techniques as well as greater innovation of equity-based instruments within the conventional finance. And, therein lies the seeds of convergence.

Table 1. Emerging Market and Developing Countries: Net Capital Flows¹
(Billions of U.S. dollars)

	1996-98	1999	2000	2001	2002	2003	2004	2005	2006
Total									
Private capital flows, net ²	159.3	74.6	56.7	70.2	88.3	173.3	238.6	257.2	255.8
Private direct investment, net	142.3	177.4	168.6	182.8	152.2	165.3	190	266.3	266.9
Private portfolio flows, net	60	60.1	11.4	-80.5	-90.9	-12.1	25	29.4	-76.3
Other private capital flows, net	-43	-162.9	-123.4	-32.1	26.9	20.1	23.5	-38.5	65.2
Official flows, net ³	20.2	22.4	-34.2	6.6	2.3	-44.5	-57.8	-122.6	-143.8
Change in reserves ⁴	-72.6	-98.2	-131.2	-120.6	-198.9	-358.9	-508.2	-590.1	-738.4
Memorandum									
Current account ⁵	-72.1	34.4	123.5	86.8	132.3	229.4	299.7	511.6	638.5
Africa									
Private capital flows, net ²	6.5	9	-4.2	2.2	0.9	2.7	12.3	18.3	20.2
Private direct investment, net	5.8	8.6	7.6	23.1	13.5	15.4	16.8	27	19.1
Private portfolio flows, net	5	9.1	-1.8	-7.9	-1.6	-0.5	5.4	4.1	18.5
Other private capital flows, net	-4.3	-8.7	-10	-13	-11	-12.2	-9.8	-12.8	-17.4
Official flows, net ³	5	4.1	7.7	6.5	8.6	6.4	4.3	-1.8	-3.8
Change in reserves ⁴	-4.2	-0.4	-12.8	-9.7	-5.5	-11.4	-32.7	-42.3	-48.4
Central and eastern Europe									
Private capital flows, net ²	27.4	36.3	38.7	10.9	54	52.5	74.7	117.5	121.1
Private direct investment, net	14.9	22.7	24.1	24	24.1	16.2	34.5	50.1	65.8
Private portfolio flows, net	1.7	5.3	3.1	0.4	1.7	6.5	26.9	20.9	8.1
Other private capital flows, net	10.8	8.3	11.6	-13.4	28.3	29.9	13.3	46.4	47.1
Official flows, net ³	-0.5	-2.4	1.6	6	-7.5	-5	-6.6	-8.3	-4.9
Change in reserves ⁴	-8.8	-12.1	-6	-3	-18.5	-11.5	-13.6	-48.2	-21.2
Commonwealth of Independent States⁶									
Private capital flows, net ²	-5.3	-13.5	-27.6	7.2	15.8	17.9	7.7	37.6	65.7
Private direct investment, net	5.5	4.7	2.3	4.9	5.2	5.4	12.9	14.4	33.1
Private portfolio flows, net	2.2	-0.9	-10	-1.2	0.4	-0.5	8.1	-3.1	13.9
Other private capital flows, net	-13	-17.3	-19.9	3.5	10.2	13	-13.4	26.3	18.8
Official flows, net ³	-1	-1.8	-5.8	-4.9	-10.4	-8.9	-7.3	-22.1	-32.6
Change in reserves ⁴	5.1	-6.4	-20.3	-14.5	-15.1	-31.8	-53.8	-75.6	-126.9
Emerging Asia⁷									
Private capital flows, net ²	36.9	-1.9	4.5	23.5	25.4	69.2	142.5	69.7	53.9
Private direct investment, net	56	70.9	59.8	52	52.6	73.1	68	105.8	102.4
Private portfolio flows, net	16	54.1	19.6	-50.2	-60.1	7.8	11.2	-8.1	-99.4
Other private capital flows, net	-35.1	-127	-74.8	21.6	32.8	-11.6	63.4	-27.9	50.9
Official flows, net ³	5.9	8.5	-10.9	-12	4.1	-16.6	-7	-2.8	-9.8
Change in reserves ⁴	-45.1	-84.8	-59.1	-85.4	-154.3	-234.3	-339	-284.1	-365.6
Middle East⁸									
Private capital flows, net ²	11.8	-3.8	-10	-5.5	-19.4	4.7	-12	-19.9	-15.5
Private direct investment, net	7	4.4	4.9	12.3	9.7	17.8	8.8	17.6	12
Private portfolio flows, net	0.5	-8.6	-1.2	-13.5	-17.4	-14.9	-14	-14.9	-5
Other private capital flows, net	4.3	0.4	-13.7	-4.3	-11.6	1.8	-6.8	-22.5	-22.5
Official flows, net ³	5.2	8	-20.5	-14.2	-9.8	-24.6	-32.5	-57.1	-75
Change in reserves ⁴	-8.1	-2	-31.2	-11.6	-3.1	-33.7	-45.7	-106.6	-129.7
Western Hemisphere									
Private capital flows, net ²	82	48.5	55.2	31.9	11.5	26.2	13.3	33.9	10.4
Private direct investment, net	53.1	66.1	70	66.5	47.2	37.5	49.1	51.4	34.5
Private portfolio flows, net	34.6	1	1.7	-8.1	-13.9	-10.5	-12.5	30.5	-12.4
Other private capital flows, net	-5.7	-18.6	-16.5	-26.5	-21.8	-0.9	-23.3	-48	-11.6
Official flows, net ³	5.6	6.2	-6.4	25.2	17.4	4.3	-8.7	-30.4	-17.7
Change in reserves ⁴	-11.4	7.4	-1.8	3.5	-2.4	-36.2	-23.4	-33.4	-46.5
Memorandum									
Fuel exporting countries									
Private capital flows, net ²	-5.4	-27.2	-57	-12.7	-11.2	12.7	-14.9	-6.8	-2.6
Other countries									
Private capital flows, net ²	164.8	101.8	113.6	82.9	99.5	160.6	253.4	264	258.4

Source: IMF, World Economic Outlook, April 2007

¹Net capital flows comprise net direct investment, net portfolio investment, and other long- and short-term net investment flows, including official and private borrowing. In this table, Hong Kong SAR, Israel, Korea, Singapore, and Taiwan Province of China are included.

²Because of data limitations, flows listed under "private capital flows, net" may include some official flows.

³Excludes grants and includes overseas investments of official investment agencies.

⁴A minus sign indicates an increase.

⁵The sum of the current account balance, net private capital flows, net official flows, and the change in reserves equals, with the opposite sign, the sum of the capital account and errors and omissions. For regional current account balances, see Table 25 of the Statistical Appendix.

⁶Historical data have been revised, reflecting cumulative data revisions for Russia and the resolution of a number of data interpretation issues.

⁷Consists of developing Asia and the newly industrialized Asian economies.

⁸Includes Israel.

Table 2. Equity Market Indices, 2002-06

	End of period				
	2002	2003	2004	2005	2006
World	792.2	1,036.3	1,169.3	1,257.8	1,483.6
Emerging Markets	292.1	442.8	542.2	706.5	912.7
Latin America	658.9	1,100.9	1,483.6	2,150.0	2,995.7
Asia	140.4	206.4	231.6	286.2	371.5
Europe, Middle East, & Africa	108.4	163.9	222.7	300.3	364.4
	Period on Periodic Percent Change				
World	-21.1	30.8	12.8	7.6	18.0
Emerging Markets	-8.0	51.6	22.4	30.3	29.2
Latin America	-24.8	67.1	34.8	44.9	39.3
Asia	-6.2	47.1	12.2	23.5	29.8
Europe, Middle East, & Africa	4.7	51.2	35.8	34.9	21.3

Source: International Monetary Fund: Global Financial Stability Report, April 2007

Table 3. Nominal Percent Growth in Equity

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Equity market capitalization growth										
All sample countries	-6.5	-20.1	65.2	-10.7	-5.5	1.5	59.7	29.7	46.1	7.7
Emerging markets	14.8	18.4	26.9	-6.4	-13.1	-16.0	34.0	17.2	9.8	13.4
Mature markets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bond market capitalization growth										
All sample countries	20.0	6.6	5.7	7.8	-2.2	4.8	6.6	8.2	1.9	12.4
Emerging markets	9.6	24.1	28.0	20.7	24.2	25.5	28.9	21.2	5.6	19.2
Mature markets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: International Monetary Fund: GFSR, April 2007.

Table 4. Equity and Bond Market Capitalization, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	(In Percent of GDP)									
	Equity Market Capitalization									
All sample countries (54)	63.0	64.1	68.2	83.6	72.7	62.8	55.0	71.2	80.4	93.4
Emerging markets (29)	49.8	41.5	36.6	52.2	36.9	37.7	36.6	52.4	60.8	77.8
Mature markets (25)	75.1	85.0	100.7	118.1	112.0	91.7	74.3	93.0	102.9	110.3
	Bond Market Capitalization¹									
All sample countries (54)	67.1	66.4	73.1	67.4	68.2	72.7	83.1	89.6	94.5	94.0
Emerging markets (29)	31.2	31.1	37.9	41.0	40.0	46.0	50.6	52.1	51.2	49.3
Mature markets (25)	105.9	104.7	113.3	97.8	101.1	105.1	121.7	134.4	146.0	145.5

Sources: Datastream; S&P/IFC Emerging Market Database; and, World Federation of Exchanges

¹ Domestic and international bonds.

**Table 5. Growth in Equity and Bond Market Capitalization
(Percent growth in the Ratio with respect to GDP)**

In Percent	1997	1998	1999	2000	2001	2002	2003	2004	2005
Equity Market Capitalization Growth									
All sample countries (54)	1.8	6.4	22.6	-13.0	-13.6	-12.4	29.4	13.0	16.1
Emerging markets (29)	-16.7	-11.8	42.7	-29.3	2.2	-2.8	43.1	16.0	28.0
Mature markets (25)	13.2	18.5	17.2	-5.1	-18.1	-18.9	25.1	10.6	7.2
Bond Market Capitalization Growth									
All sample countries (54)	-1.0	10.1	-7.8	1.2	6.6	14.3	7.8	5.5	-0.5
Emerging markets (29)	-0.4	21.9	8.2	-2.5	15.0	9.9	3.0	-1.7	-3.7
Mature markets (25)	-1.1	8.2	-13.7	3.4	4.0	15.8	10.4	8.7	-0.3

Source: International Monetary Fund: GFSR, April 2007.

Table 6. Household Portfolio Allocation to Equity

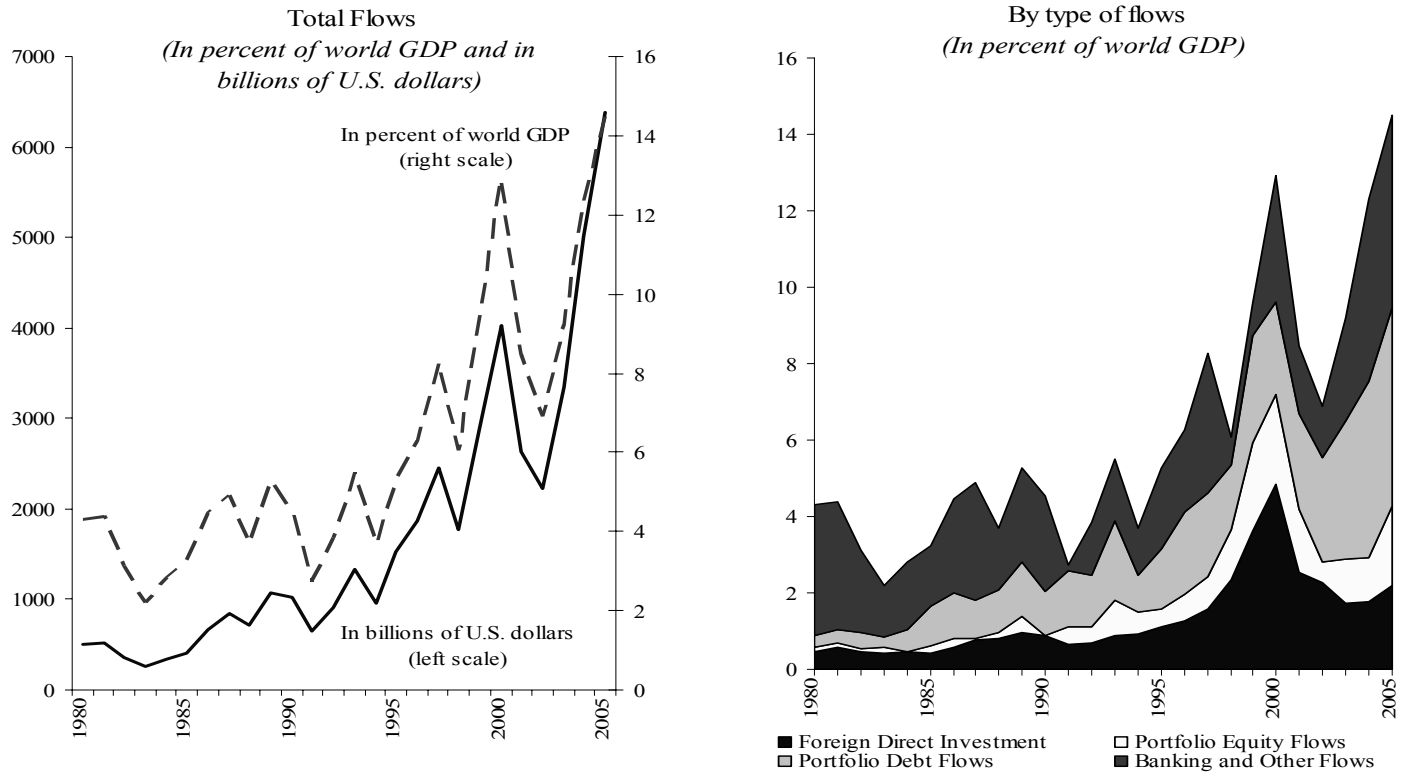
International Comparisons

As a percentage of total financial assets composition at end-1995 and end-2003

	of which:		of which:	
	Share and other equity	mutual funds shares	Share and other equity	mutual funds shares
	1995		2003	
Portugal	25	7	27	9
Belgium	29	9	29	16
Denmark	23	7	17	9
Germany	19	7	22	12
Spain	31	11	39	13
France	35	12	36	10
Italy	20	4	35	17
The Netherlands	20	5	11	4
Austria	6	4	16	10
Finland	5	1	41	5
Sweden	30	7	40	12
United Kingdom	20	4	16	5
Euro area (9)	24	8	29	11
European Union (12)	23	7	26	9
U.S.A.	46	5	48	10
Japan	14	2	11	2

Source: Fátima Cardoso and Vanda Gerlades da Cunha: Household wealth in Portugal: 1980-2004, WP 4-05, June 2005.

Chart 1. Total Global Cross-Border Inflows



Source: International Monetary Fund: Global Financial Stability Report, April 2007.

¹ Other flows include derivative transactions.

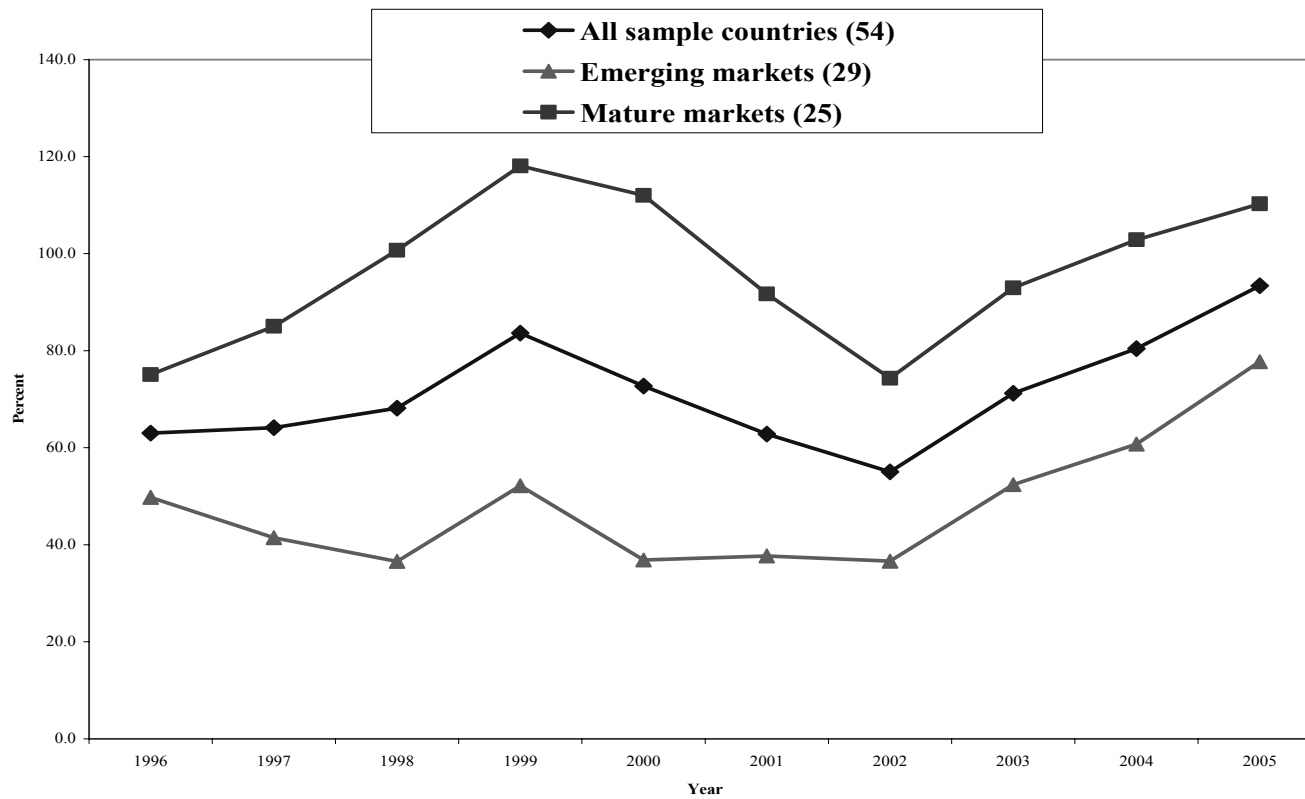
Chart 2. Equity Market Capitalization (in percent of GDP)

Chart 3. Bond Market Capitalization (in percent of GDP)

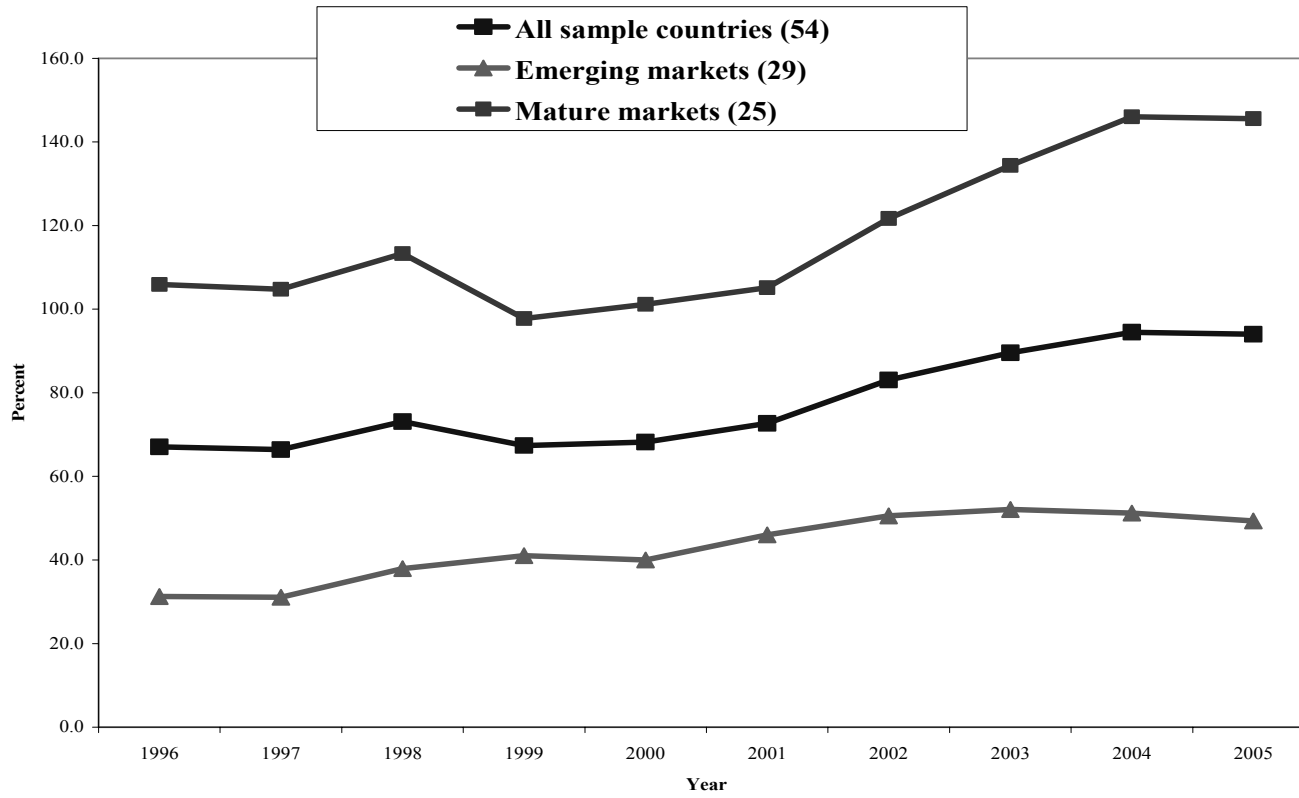
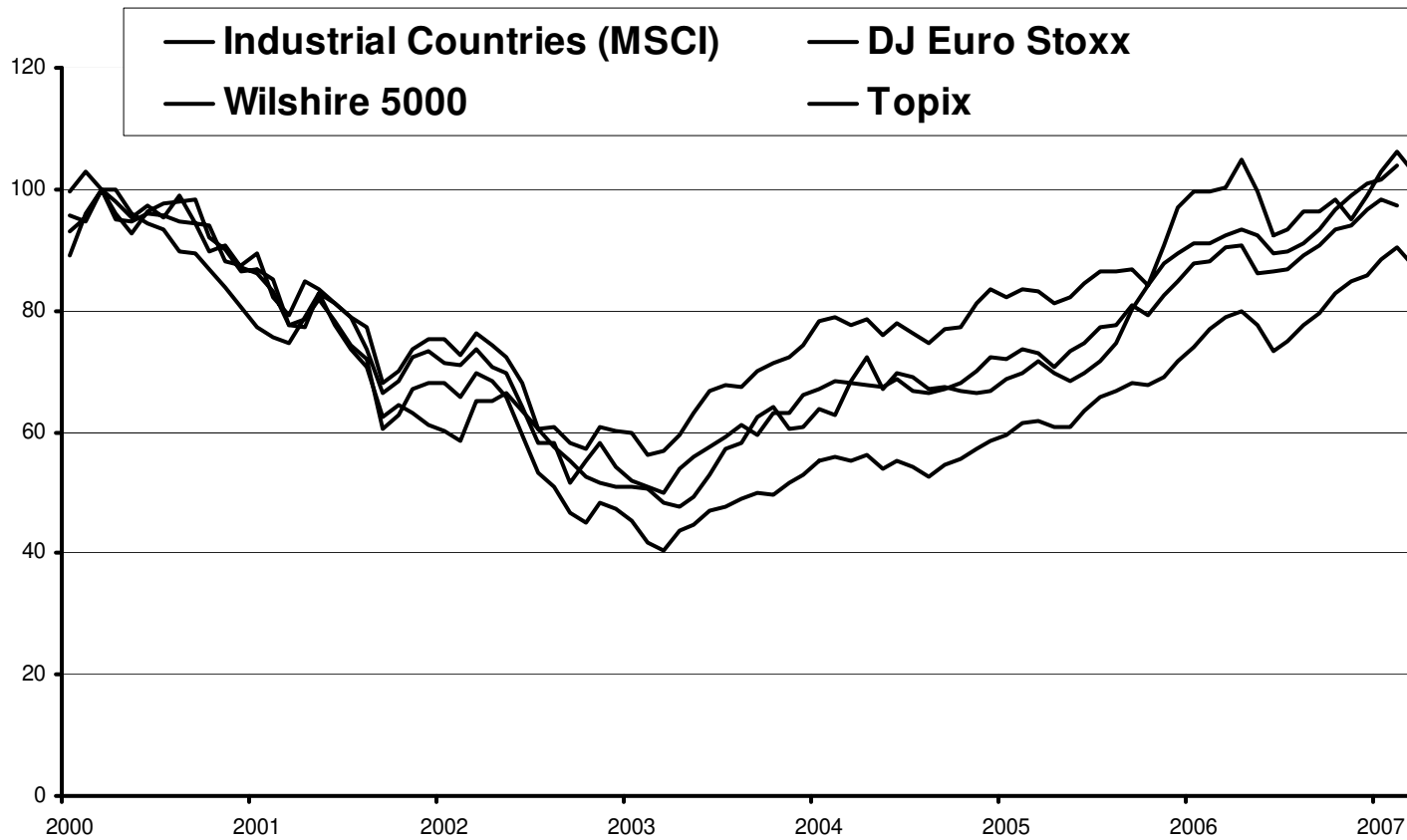
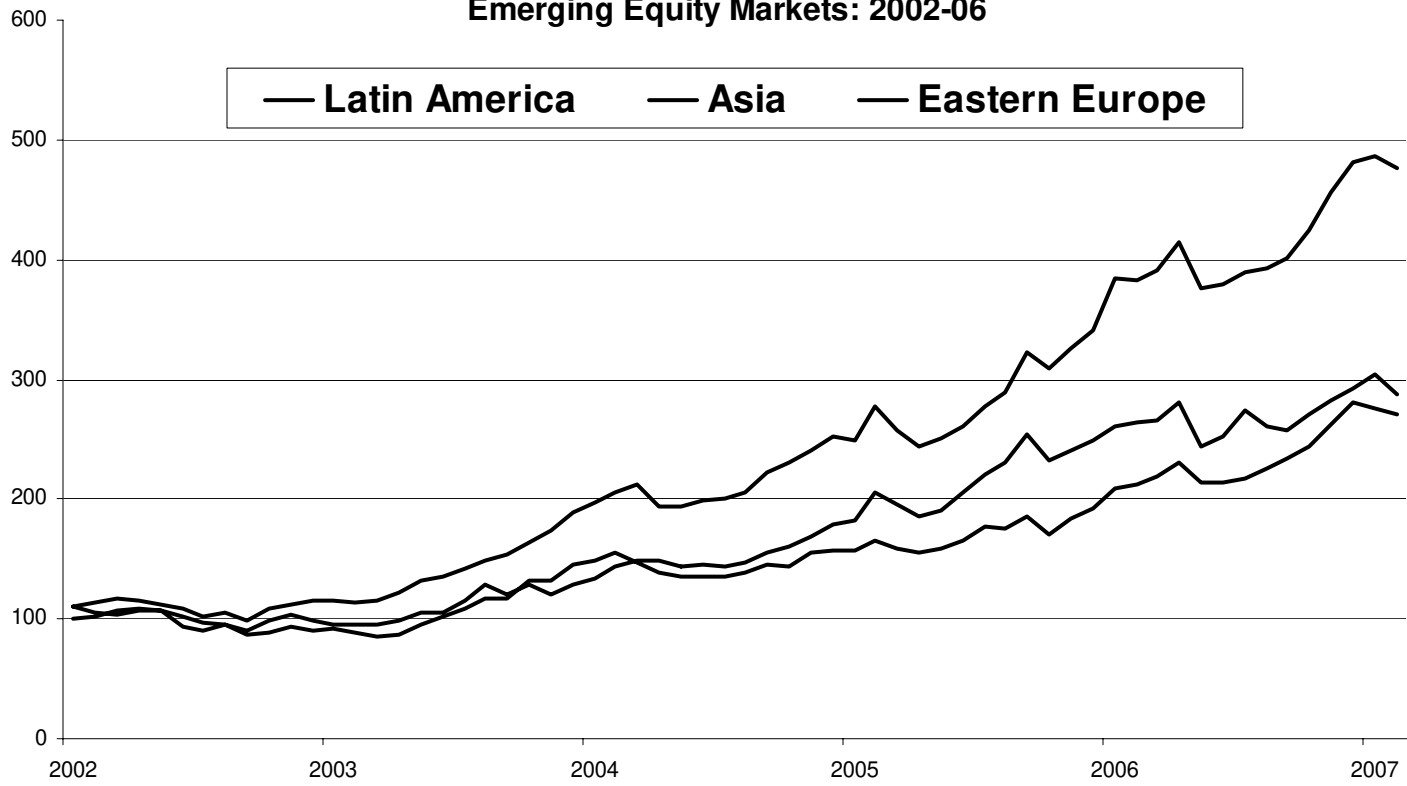


Chart 4. Equity Markets: 2000-06

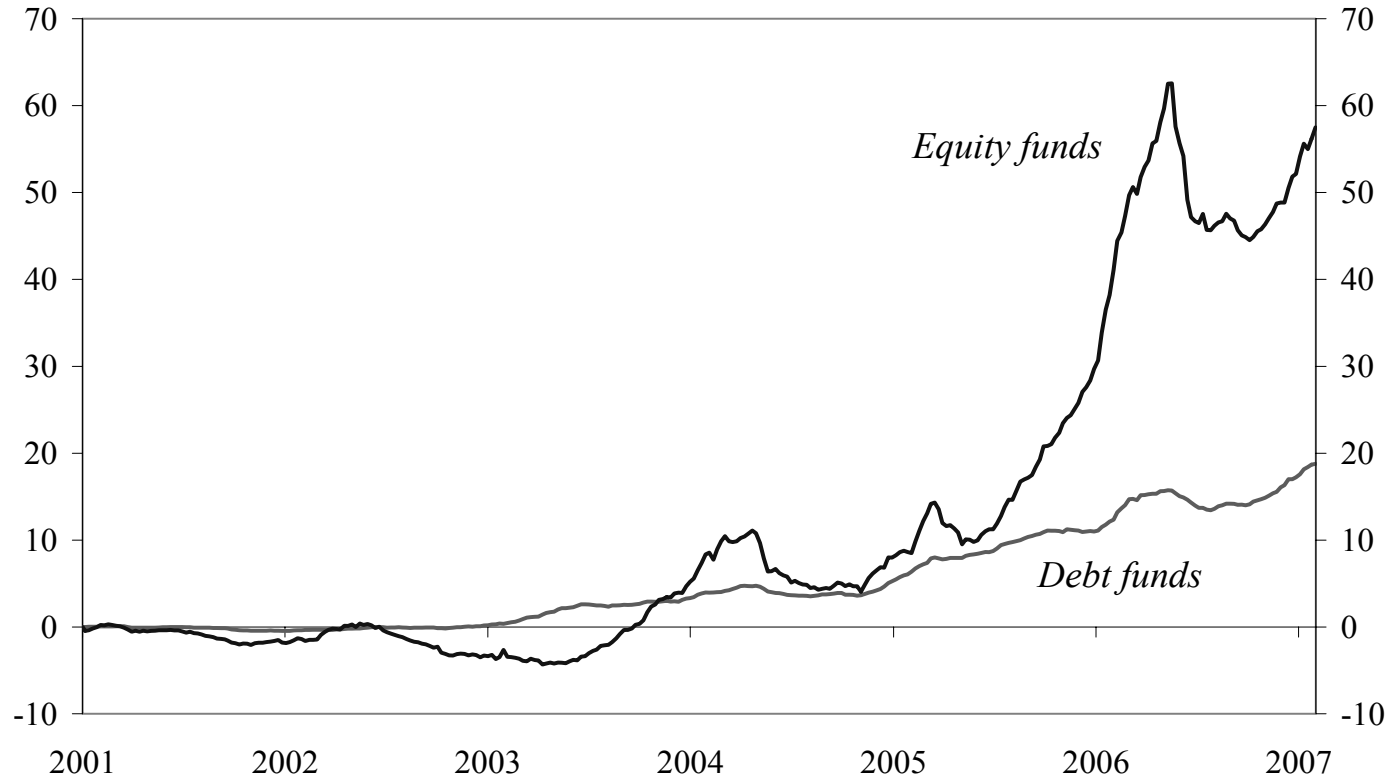


Source: International Monetary Fund: World Economic Outlook, April 2007.

**Chart 5. Portfolio Equity and FDI
Emerging Equity Markets: 2002-06**

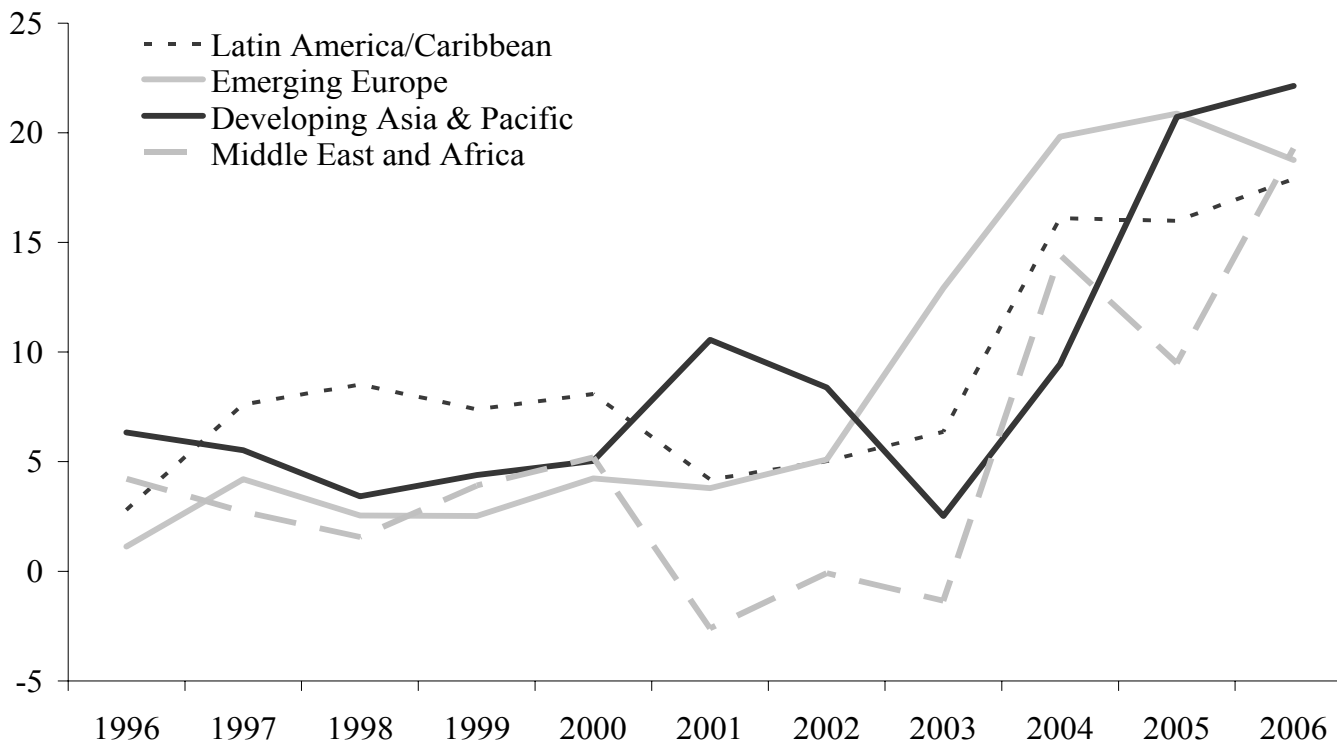


Source: International Monetary Fund: World Economic Outlook, April 2007.

Chart 6. Cumulative Net Flows to Emerging Market Funds: 2001-06*(In billions of U.S. dollars)*

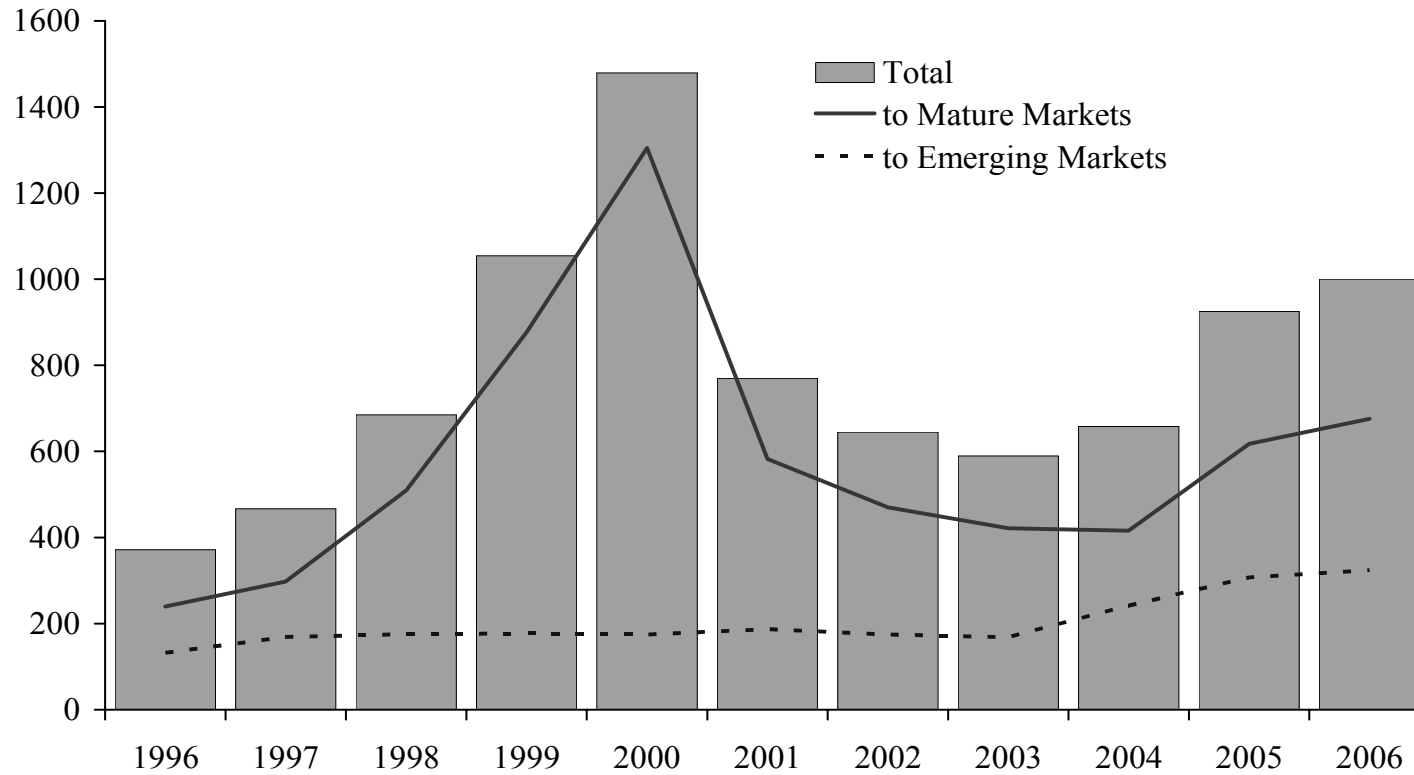
Source: International Monetary Fund: Global Financial Stability Report, April 2007.

Chart 7. Emerging Markets: FDI Outflows by Region: 1996-2006
(In billions of U.S. dollars)



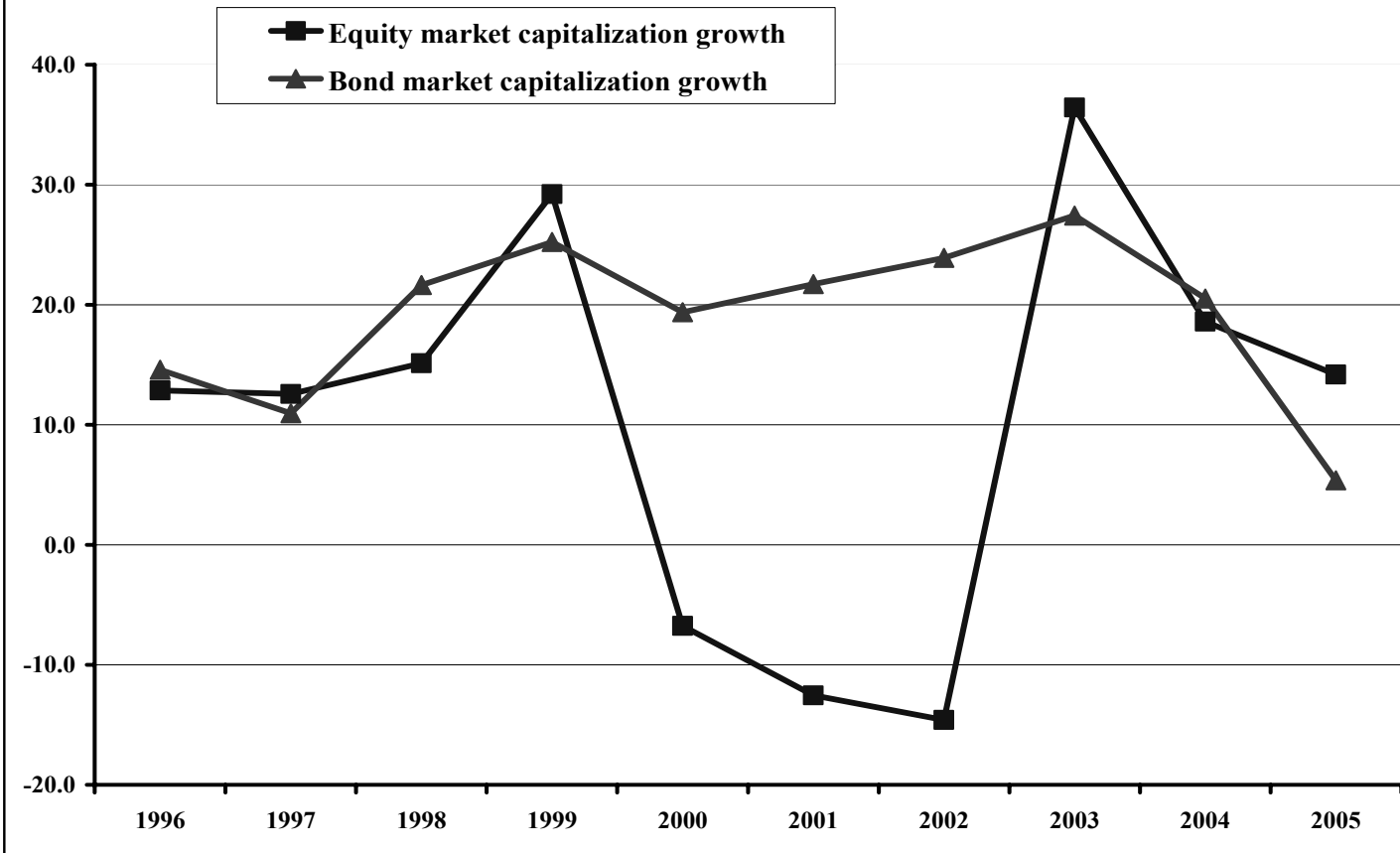
Source: IMF, *World Economic Outlook*, April 2007.

Chart 8. Global Foreign Direct Investment (FDI) Inflows: 1996-2006
(In billions of U.S. Dollars)



Source: IMF, *World Economic Outlook*, April 2007 .

Chart 9. All Sample Countries



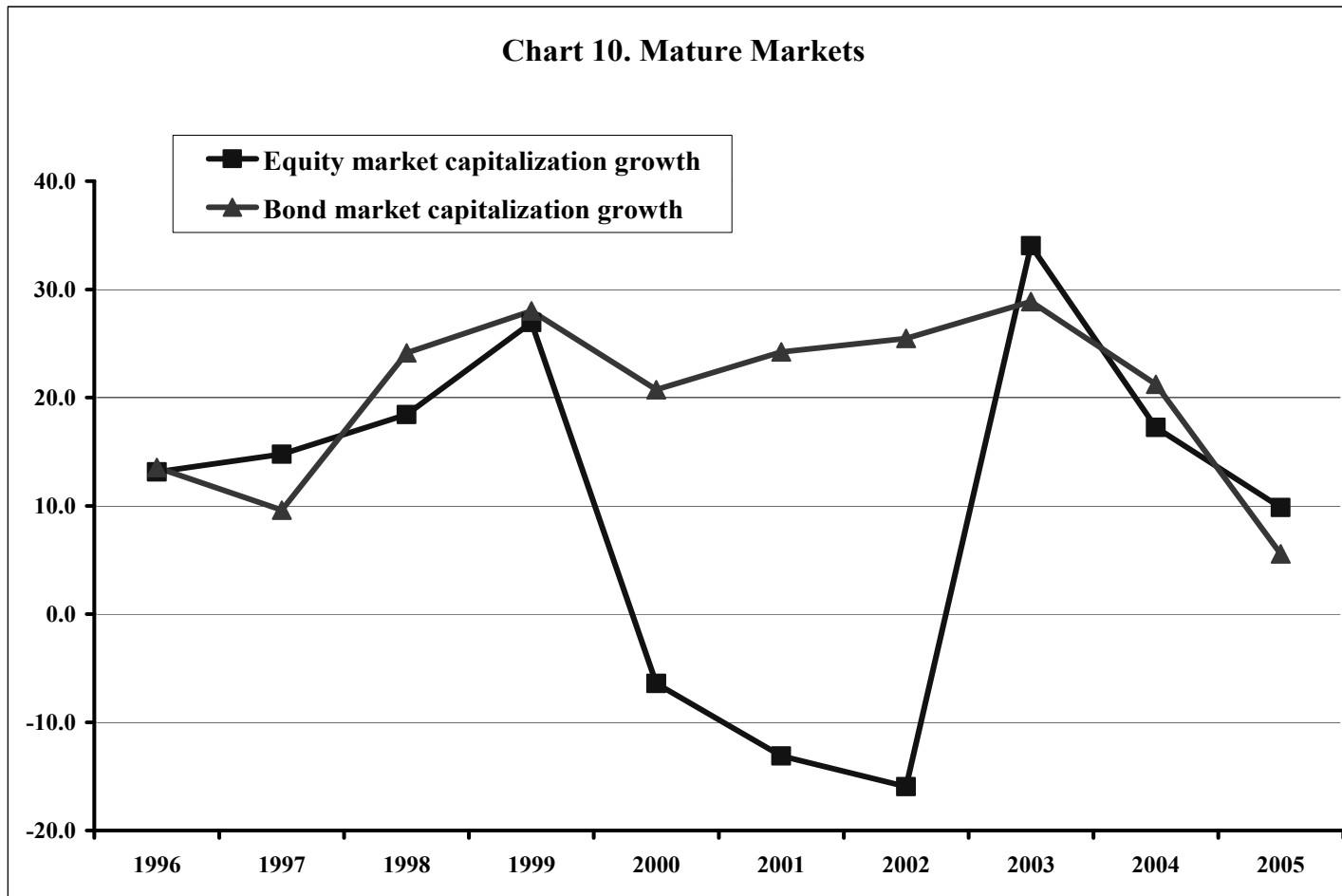
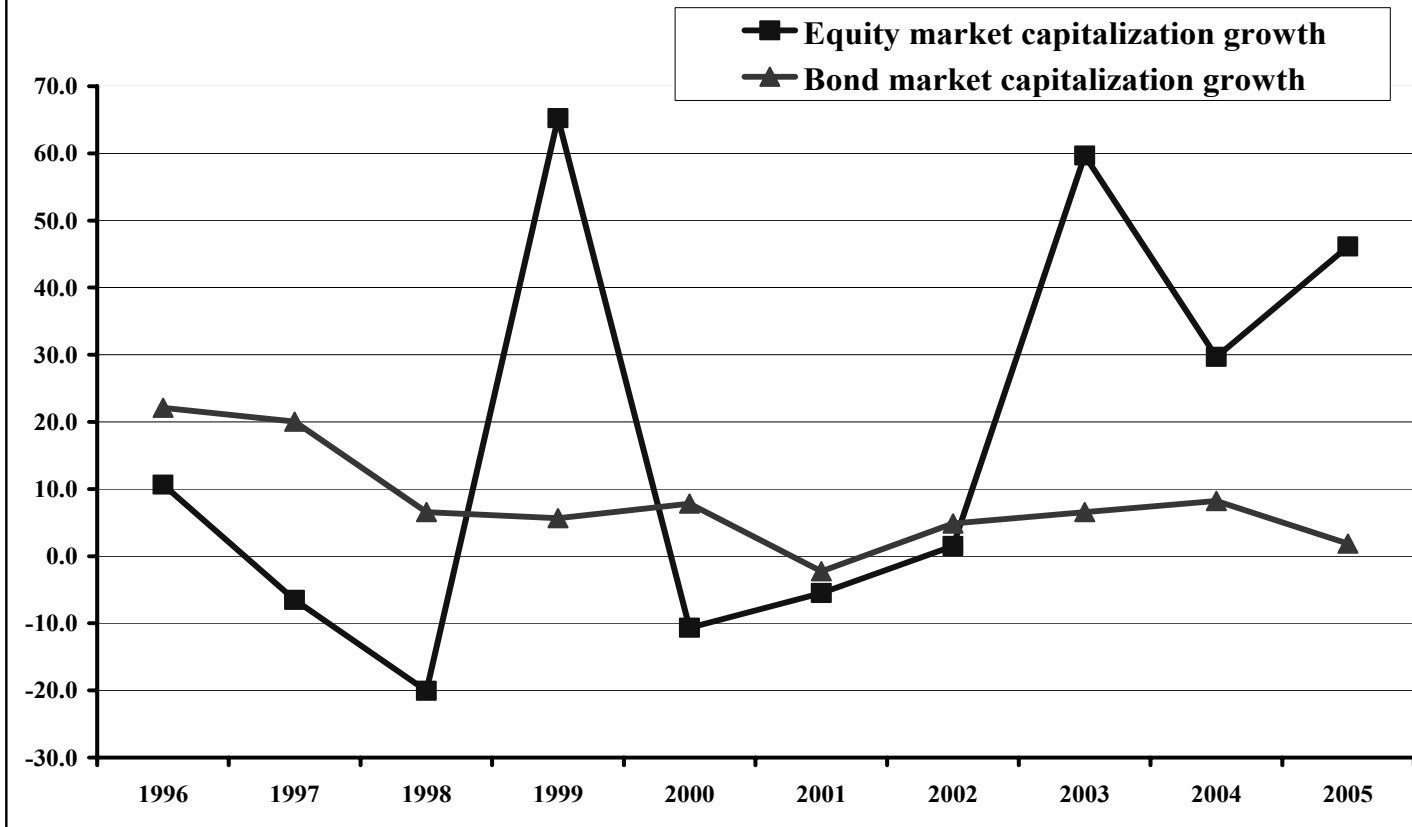


Chart 11. Emerging Markets



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