SUSTAINABLE ENTREPRENEURSHIP PROJECT

Financial Systems

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§1 Analyzing and comparing financial systems

Businesses seeking capital to finance current operations and growth must tap into available "financial systems," which develop locally, nationally and even globally to facilitate channeling of funds from agents with surpluses to agents with deficits.[1] Researchers looking to analyze and compare financial systems have generally paid attention to how agents (i.e., those with funds surpluses and deficits) interact directly with one another through financial markets and to identifying the role of various financial intermediaries such as banks and insurance companies. In the 1950s, for example, the typical situation in the US was that wealthier households offered their surplus funds to larger firms in need of capital through equity and bond markets while less wealthy households entrusted their surplus funds to intermediaries such as banks, insurance companies and other financial institutions that loaned those funds to small and medium-sized firms needing capital. However, by 2000 things had changed substantially and the percentage of direct ownership of corporations by households had dropped to less than 40% from over 90% in 1950. At the same time, non-bank intermediaries such as pension and mutual funds had gradually become significant players in corporate ownership, owning more than 40% by 2000 using funds that had been collected from households. Accordingly, by 2000 the analysis of the financial system in the US, as well as the financial systems of other developed countries that had experienced the same types of changes, needed to take into account these non-bank financial institutions that not only intermediated between households and markets but also between firms and markets.

Another important player in any financial system is, of course, the government. Governments play a variety of roles in the financial system. For example, governments are both borrowers and savers: borrowers in times when funds are needed to fight wars, overcome recessions or underwrite major investment projects; and savers when state-owned assets, such as natural resources like oil, generate significant amounts of money that the state can set aside and hold on behalf of the citizens of the country. Other important roles for the government in the financial system include setting and conducting monetary policy and regulating banks and other financial intermediaries (e.g., insurance companies). The type and scope of regulation is determined by a variety of influences including still another important institutional factor in the financial system: the political system that determines the structure of the government and its policies.

When considering the financial system in a given country consideration must also be given to the legal system, notably the law surrounding formation and enforcement of contracts, property rights, corporate governance mechanisms and terms and restrictions of securities. In addition, the exchange of capital that occurs in any financial system requires agreement on accounting systems and standards and disclosure rules and norms that facilitate transfer of information by those in need of capital to those willing to provide capital to allow the capital providers to make informed decisions about whether

[1] The discussion in this section is based on F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 1-2. The article also appears as F. Allen and D. Gale, "Comparative Financial Systems: A Survey" in A. Boot, S. Bhattacharya and A. Thakor (Eds.), Credit, Intermediation and the Macroeconomy (Oxford: Oxford University Press, 2004), 699-770.

to invest or lend. Finally, the quality and performance of a financial system is influenced by the availability of skilled human capital including lawyers, accountants, commercial bankers, investment bankers and economists.

Barth et al. observed that "a growing body of research has focused on the possible positive causal connection between the development of the financial system and overall economic development" and explained that the literature has outlined the following key ways in which financial systems contribute to economic growth: financial systems mobilize savings by offering savers a range of savings vehicles; financial systems allocate savings by using expertise individual savers do not possess to ascertain potential borrower creditworthiness; financial systems reduce risk to individual savers by diversifying pooled assets across many investment opportunities; financial systems generate liquidity by allowing savers to readily access savings while at the same time financial intermediaries fund long-term projects; and financial intermediaries contribute to risk management by monitoring borrowers and managers of enterprises to which credit has been extended.[2]

According to Allen and Gale, researchers involved in comparing and contrasting financial systems have focused primarily on two sets of issues.[3] The first set is concerned with how effective different types of financial systems are at various functions such as investment and saving, growth, risk sharing, information provision and corporate governance. The second set of issues is concerned with identifying and understanding what drives evolution of financial systems and includes analysis of the influence of law and politics on financial systems and the impact of financial crises as accelerators of changes in financial systems. Each of these issues is discussed briefly in the following sections; however, they do not fully explain the interests of researchers in comparative financial systems and work is also being undertaken to study and understand the activities of specific actors, such as banks and other depository financial intermediaries, and the relationship between regulation and structure of the financial markets and the commercial banking sector.[4]

§2 --Investment and saving

Allen and Gale noted that one of the primary purposes of any financial system is facilitating the ability of households to invest their savings in firms and they sought to compare the relationship between saving and investment in various countries by looking

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[2] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 3-5.

[3] For surveys of early research on comparative financial systems, see, e.g., F. Allen, "Stock Markets and Resource Allocation" in C. Mayer and X. Vives (Eds.), Capital Markets and Financial Intermediation (Cambridge: Cambridge University Press, 1993); F. Allen, D. Gale, "A Welfare Comparison of Intermediaries and Financial Markets in Germany and the U.S.", European Economic Review, 39 (1995), 179-209; and A. Thakor, "The Design of Financial Systems: An Overview", Journal of Banking and Finance, 20 (1996), 917-948.

[4] See, e.g., A. Thakor, "The Design of Financial Systems: An Overview", Journal of Banking and Finance, 20 (1996), 917-948.

at how firms obtained funds and financed investment and the types of financial assets that were held by households in their savings and investment portfolios.[5] After collecting and analyzing data obtained from sources-and-uses-of-funds statements for firms located in France, Germany, Japan, the UK and the US[6], they concluded that "internal finance" (i.e., allocation of personal savings, retained profits, working capital and proceeds from the sale of fixed assets) was by far the most important source of funds used by firms for their investment purposes in all countries; bank financing was moderately important in most countries, but particularly important in France and Japan; bond financing was only important in the US and, finally, equity finance was either unimportant or negative in all countries. When viewing the link between savings and firm investment through the savings portfolios of households, differences between countries were also found: in the UK and US equities were a much more important component of the assets held by households in their savings portfolios than in France, Germany and Japan; however, when looking at holdings of cash and cash equivalents (including bank accounts), the percentage portfolio allocation to these assets was much higher in France, Germany and Japan than in the UK and the US. These findings tended to support the traditional distinction between the UK and the US as "market-based" financial systems and the other countries as "bank-based" financial systems.[7] Finally, Allen and Gale found it interesting that studies appeared to indicate that while internal finance dominated external finance, equities and banks, in the five developed countries referred to above, the reverse was true in a range of emerging economies and, moreover, the evidence from the emerging economies was that equities dominated debt as the most important financing instrument.[8]

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[5] The discussion in this section is based on F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 3-8. The article also appears as F. Allen and D. Gale, "Comparative Financial Systems: A Survey" in A. Boot, S. Bhattacharya and A. Thakor (Eds.), Credit, Intermediation and the Macroeconomy (Oxford: Oxford University Press, 2004), 699-770.

[6] The data, and the analysis thereof, was based on C. Mayer, "New Issues in Corporate Finance," European Economic Review, 32 (1988), 1167-1188; C. Mayer, "Financial Systems, Corporate Finance, and Economic Development," in R. G. Hubbard (Ed.), Asymmetric Information, Corporate Finance and Investment (Chicago: University of Chicago Press, 1990); E. Bertero, "The Banking System, Financial Markets, and Capital Structure: Some New Evidence From France", Oxford Review of Economic Policy, 10 (1994), 68-78; and J. Corbett and T. Jenkinson, "The Financing of Industry, 1970-1989: An International Comparison", Journal of the Japanese & International Economies, 10 (1996), 71-96.

[7] The preferences of household savers in each of the countries actually could be charted as a continuum with the US at one extreme (markets extremely important and banks relatively unimportant), Germany at the other extreme (banks extremely important and markets relatively unimportant), Japan and the UK in the middle with both banks and markets being important and France closer to Germany than the middle with banks being important and markets less so. Evidence of the differences between the US and Germany that have led to characterization of the US as a capital-markets-based financial system and Germany as a bank-based system is provided by Barth et al. who compared the size of the banking system in selected countries to the total financial system by calculating the percentage of bank assets to the total of bank assets plus bond market assets plus stock market capitalization. They found the percentage in the US to be 16% while the percentage in Germany was four times that much and noted that the US banking system was actually the smallest among the countries in the sample in this relative sense even though the actual amount of bank assets was the largest in the sample. See J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 7.

[8] Citing A. Singh, Corporate Financial Patterns in Industrializing Economies: A Comparative International Study (Washington, DC: International Finance Corporation, Technical Paper 2, 1995); and A. Singh and J.

Allen and Gale observed that the results of the studies raised interesting questions about the role of financial markets in supporting corporate investment in the developed countries given that equity markets were relatively unimportant across the countries studied and bond markets were only important in the US. The importance of internal and bank finance highlighted a large potential hole in traditional finance literature, which typically has emphasized equity and bond markets. Obviously the observed differences between developed countries and emerging economies was another area in which additional research appeared to be urgently needed, particularly given the growing international interest in consultation with emerging economies on the basic elements of their financial systems. Finally, Allen and Gale suggested that additional research on the empirical importance of the long-term financial relationships observed in the countries relying on bank-based financial systems was warranted in order to gain a better understanding of whether or not these relationships constituted an important advantage over market-based systems.

§3 --Growth and financial structure

The relationship between the development and structure of financial systems and economic development and growth is an important topic that has attracted a good deal of attention in the research community.[9] Among other things, it has been argued that the results of various studies provide support for the proposition that the level of financial development is a good predictor of future economic growth and that the liquidity provided by capital markets in the financial system in the UK played an important role in the Industrial Revolution.[10] Studies of firm-level data across a number of countries have led to arguments that access to stock markets leads to faster growth and that better financial systems support faster economic growth.[11] It should be noted that while it is often assumed that development of financial systems causes economic growth, researchers such as Robinson have argued that it is the other way around and that financial systems develop because of, and in response to, economic growth.[12] Regardless

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Hamid, Corporate Financial Structures in Developing Countries (Washington, DC: International Finance Corporation, Technical Paper 1, 1992).

[9] The discussion in this section is based on F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 8-11. The article also appears as F. Allen and D. Gale, "Comparative Financial Systems: A Survey" in A. Boot, S. Bhattacharya and A. Thakor (Eds.), Credit, Intermediation and the Macroeconomy (Oxford: Oxford University Press, 2004), 699-770. For a good survey of early research on financial development and economic growth, see R. Levine, "Financial Development and Economic Growth: Views and Agenda", Journal of Economic Literature, 35 (1997), 688-726.

[10] See W. Bagehot, Lombard Street (Homewood, Illinois: Irwin, 1962 (originally published in 1873)); J. Hicks, A Theory of Economic History (Oxford: Clarendon Press, 1969); R. King and R. Levine, "Finance and Growth: Schumpeter Might Be Right," Quarterly Journal of Economics 108(3) (1993), 717-38; and R. King and R. Levine, "Finance, Entrepreneurship, and Growth: Theory and Evidence", Journal of Monetary Economics, 32(3) (1993), 513-42.

[11] A. Demirg¨u¸c-Kunt and V. Maksimovic, "Stock Market Development and Financing Choices of Firms", World Bank Economic Review, 10(2) (1996), 341-70 and R. McKinnon, Money and Capital in Economic Development (Washington, DC: Brookings Institution, 1973).

[12] J. Robinson, "The Generalization of the General Theory" in The Rate of Interest, and Other Essays (London: Macmillan, 1952), 67-142.

of how causation works, Allen and Gale conceded that much work still needs to be done on understanding the channels by which development of financial systems and economic growth influence one another.[13]

Researchers have also made attempts at identifying, measuring and distinguishing the respective roles of banks and financial markets in economic development. Boyd and Smith, for example, collected and analyzed data that suggested that banks were more important at lower levels of development and that markets gradually became more important as income levels rose.[14] Tadesse, after studying 36 countries over an extended period (1980-1995), concluded that "for underdeveloped financial sectors, bank-based systems outperform market-based systems, while for developed financial sectors market-based systems outperform bank-based systems".[15] The simultaneous explosion of manufacturing in Germany and the UK during the Industrial Revolution provided a foundation for comparison of the financial systems in those countries and researchers such as Gershenkron argued that the bank-based system in Germany was preferred because it allowed for closer relationships between capital providers and users than was possible in the market-based system used in the UK while researchers such as Goldsmith offered evidence that financial markets in the UK were just as effective and fueled growth rates in that country that were on par with those seen in Germany at that time.[16] Allen and Gale, looking at the relationship between the type of financial system and innovation, argued that market-based systems will lead to more innovation than bank-based systems.[17] It should be noted, however, that Levine, for one, believed that differences between bank- and market-based systems were relatively unimportant in explaining economic growth and that other factors, such as the elements of a country's

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[13] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 11.

[14] J. Boyd and B. Smith, "The Co-Evolution of the Real and Financial Sectors in the Growth Process", World Bank Economic Review, 10(2) (1996), 371-96 and J. Boyd and B. Smith, "The Evolution of Debt and Equity Markets in Economic Development", Economic Theory, 12(3) (1998), 519-60.

[15] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 10 (citing S. Tadassee, "Financial Architecture and Economic Performance: International Evidence," working paper, University of South Carolina, 2000).

[16] See A. Gerschenkron, Economic Backwardness in Historical Perspective (Cambridge, MA: Harvard University Press, 1962) and R. Goldsmith, Financial Structure and Development (New Haven, CT: Yale University Press, 1969).

[17] F. Allen and D. Gale, "Diversity of Opinion and the Financing of New Technologies", Journal of Financial Intermediation, 8 (1999), 68-89 and F. Allen and D. Gale, Comparing Financial Systems (Cambridge, MA: MIT Press, 2000). Yosha examined innovation by firms based on high quality proprietary information and argued that those firms tend to seek and use financing provided by one source, or just a small number of sources, in order to avoid the wide dissemination of information required in a public market that is likely to lead to appropriation of any advantage associated with that information and a reduction of its "quality" (i.e., value). O. Yosha, "Information Disclosure Costs and the Choice of Financing Source", Journal of Financial Intermediation, 4 (1995), 3-20. Boot and Thakor collected evidence that they believed provided support for the proposition that more financial innovation occurs in financial systems in which commercial and investment banking activities are separated. F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 25 (citing A. Boot and A. Thakor, "Banking Scope and Financial Innovation", Review of Financial Studies, 10 (1997), 1099-1131).

legal environment and the quality of its financial services, were more relevant.[18] In general, the empirical evidence on the effectiveness of bank-based versus market-based systems in relation to economic development remains mixed.[19]

§4 --Risk sharing

According to Allen and Gale "[o]ne of the most important functions of the financial system is to share risk".[20] They presented empirical data indicating that there were differences between countries with respect to the proportion of significantly risky assets (i.e., assets likely to experience continuous changes in value), including domestic and foreign equity and real estate, held by households in those countries. For example, households in the US and the UK were exposed to substantial amounts of risk through their holdings of assets: in the US, for example, 19% of the total assets were held in the form of cash and cash equivalents, including bank accounts; 31% were held in the form of relatively safe, fixed-income assets, including domestic and foreign bonds, loans and mortgages; and 46% were held as one of the riskiest assets referred to above. The weighting of the proportions was similar in the UK, which had an even higher percentage (52%) in the riskiest assets. In contrast, however, the percentage of the riskiest assets in the portfolios of households in France, Germany and Japan was 16%, 16% and 13%, respectively, and in Japan 52% of the assets were held in cash and cash equivalents.[21]

The data presented by Allen and Gale also showed that not only did households in the US and the UK hold much higher proportions of the riskiest assets when compared to the other three countries they also held more financial assets and bore a higher absolute amount of risk. Allen and Gale noted that "it is often argued that financial markets are well suited to [sharing of risk]"[22] and wondered how it could be that households in the countries where financial markets were most developed, the US and the UK, could be exposed to more risk than households in the other three bank-based countries with less-developed financial markets. Their response was to argue that as financial systems become more market-oriented, more sophisticated risk management tools, such as derivatives and other similar techniques, become more important as strategies to cope

[18] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 9-10 (citing R. Levine, "Bank-Based or Market-Based Financial Systems: Which is Better?", Working Paper, Carlsson School, University of Minnesota, 2000).

[19] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 11.

[20] Id. The discussion in this section is based on F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 11-17. The article also appears as F. Allen and D. Gale, "Comparative Financial Systems: A Survey" in A. Boot, S. Bhattacharya and A. Thakor (Eds.), Credit, Intermediation and the Macroeconomy (Oxford: Oxford University Press, 2004), 699-770.

[21] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 12.

[22] Id. at 11.

with the risks associated with financial assets.[23] In fact, the years since Allen and Gale first put forth their theories have seen a proliferation of complex financial instruments, created and issued in the name of risk management, which have strained and overwhelmed the regulators of financial markets and created widespread economic and financial havoc.

In addition to the differences between countries with respect to the risk tolerances of households and strategies used in financial markets to manage financial risks, it is useful to look at how countries cope with certain other universal risks that are generally grouped beneath the umbrella of "financial systems". For example, government intervention is common in many countries to address real or anticipated market failures in taking care of citizens in need of some form of unemployment, health care and/or disability insurance. Allen and Gale described differences in the way that public pensions were provided by governments in the UK and Germany, noting that government provision of pensions has been necessary "[b]ecause [due to] problems of adverse selection and moral hazard, the market for annuities is inefficient".[24] They noted that public pensions in the UK were "rather meager" while in Germany "[t]he social security systems provides pensions to all workers".[25] Private pensions are also available in both countries. Not surprisingly, there are significant differences in the percentage of household assets held by public and private pension funds in the two countries—just 4% of household assets are held by pension funds in Germany while the comparable percentage in the UK is 24%--and the way in which those assets can be invested (i.e., in Germany there are maximum limits on the percentage of assets that can be invested in equities while in the UK over 75% of the assets were invested in equities).[26] Ironically, while the goals of government provision of pensions are laudable, the drain on public financial resources is driving countries to the brink of bankruptcy and it is clear that this is one area of national financial systems that will be undergoing substantial change and overhaul.

Finally, it should also be noted that comparison of financial systems should take into account variations in the ways in which countries regulate their insurance industries, which offer a wide variety of products to manage risks in the form of life, accident, property and theft insurance. In many countries, life insurers provide consumers with opportunities to invest in products that are intended to be long-term savings vehicles that offer tax advantages. As a result, insurance companies come to hold a significant

[23] For full discussion, see F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 13-14 and F. Allen and D. Gale, Comparing Financial Systems (Cambridge, MA: MIT Press, 2000), Chapter 6.

[24] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 15 (citing, for further discussion of policies regarding public provisions of pensions in various countries, E. Davis, "The Development of Pension Funds in the Major Industrial Countries" in J. Mortensen (Ed.), The Future of Pensions in the European Community (London: Brassey's, 1992), 107-131; and E. Davis, "An International Comparison of the Financing of Occupational Pensions," in Z. Bodie, O. Mitchell and J. Turner (Eds.), Securing Employer-Based Pensions: An International Perspective (Philadelphia, PA: University of Pennsylvania Press, 1996), 244-281).

[25] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 15.

[26] Id.

proportion of a country's financial assets and thus become significant players in financial markets, a situation which triggers the need for a regulatory framework that oversees how these assets are invested and safeguards the claims of consumers for a return of their investment at a future date. The events that occurred during the first decade of the 21st century are testimony to the potential problems associated with insurance companies engaging in widespread and speculative investment in riskier financial assets.

§5 --Information provision

According to Allen and Gale, "[t]he acquisition and use of information to allocate resources efficiently is one of the most important functions of a financial system"[27] and they set out to explore the fundamental question of whether market-based or bank-based financial systems did a "better job" of allocating resources.[28] They began by explaining that in the countries such as the US and the UK, both of which have extensive market-based financial systems, extensive disclosure requirements imposed by regulations and the rules of the listing exchange lead to the release of extensive amount of information regarding the activities of publicly listed firms. This "public information" is supplemented by private information that is collected by an army of analysts working for mutual and pension funds and other financial intermediaries. Champions of the market-based systems argue that all of this information is eventually reflected in the pricing of the securities that are traded in the markets and that those prices provide a basis for efficient allocation of financial resources.

In contrast, countries such as Germany that are based on bank-based financial systems have smaller stock markets and a much lower percentage of the firms in those countries are publicly listed. In addition, accounting disclosure requirements in bank-based countries are much more modest and those countries lack the securities analyst infrastructure found in the US and the UK. As a result, Allen and Gale declare that "only limited private information is incorporated into stock prices" in countries operating under bank-based financial systems.[29] However, while it would appear that stock markets are not in a position to make a large contribution to efficient allocation of resources in bank-based countries that does not necessarily mean that efficiency is not attainable in those countries. In fact, the long-term relationships between banks and the firms that they lend to means that the banks are able to collect substantial amounts of information about those firms, much more than is available in the public markets, and champions of bank-based systems explain that banks can therefore make decisions that are just as efficient as those made in the markets in the US and the UK.

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[27] Id. at 17.

[28] The discussion in this section is based on F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 17-25. The article also appears as F. Allen and D. Gale, "Comparative Financial Systems: A Survey" in A. Boot, S. Bhattacharya and A. Thakor (Eds.), Credit, Intermediation and the Macroeconomy (Oxford: Oxford University Press, 2004), 699-770.

[29] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 17.

Allen and Gale described the extensive literature from the "general equilibrium and rational expectations" schools and explained that capital markets are efficient allocators of resources to the extent that they are able to aggregate publicly available information in a way that leads to fair prices that are accurate indicators of value. Allen and Gale cautioned, however, that everything was not that simple and that since "prices have to fluctuate with changes in underlying information" in order for those prices to reveal information those who rely on prices must also be willing to accept exposure to increased risk due to price volatility. In other words, in market-based systems "[a]llocative efficiency is offset by the fact that investors bear a lot of risk". Proponents of the bank-based system as the more effective means for allocating resources argue that banks with long-term relationships with their customers are able to act as "delegated monitors" of those customers who are tasked with continuously checking on what customers do with the funds they have been allocated. The banks collect savings from their depositors and promise those depositors a fixed return, thereby removing the risk of prior volatility that depositors must bear in market-based systems, and depositors rely on the banks to safeguard their funds and return them intact on the agreed date. In that context, the problem, as described by Allen and Gale, "becomes on of monitoring the monitor, to make sure she actually monitors the borrowers".[30]

It is apparent that the choice between market- and bank-based systems with respect to information problems and efficient allocation of financial resources is complex and Boot and Thakor suggested that different systems are better for different types of information problems.[31] For example, financial markets are thought to be better suited for gathering and analyzing information about the future projects that firms might have available to them; however, intermediaries are thought to be better at solving other informational mysteries such as whether firms invest the funds that they receive in risky or safe projects and the likelihood that firms will have opportunities to invest in risky projects. Based on these propositions, Boot and Thakor argued that "banks will predominate in an emerging financial system, while the informational advantages of markets may allow them to develop in a mature financial system".[32]

§6 --Corporate governance

Governance structures in the US, the UK, Japan, Germany and France are discussed in other publications prepared and distributed by the Sustainable Entrepreneurship Project.[33] The US and the UK follow what has become referred to as the Anglo-American system and day-to-day management of the corporation is the responsibility of the members of an executive team who are charged under corporate law with fiduciary duties to act in the best interests of the shareholders who are the ultimate owners of the corporation.

[30] Id. at 24.

[31] A. Boot and A. Thakor, "Financial System Architecture", Review of Financial Studies, 10 (1997), 693-733.

[32] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 24-25 (citing A. Boot and A. Thakor, "Financial System Architecture", Review of Financial Studies, 10 (1997), 693-733).

[33] For discussion, see "Governance: A Library of Resources for Sustainable Entrepreneurs", prepared and distributed by the Sustainable Entrepreneurship Project (www.seproject.org).

Shareholders are not expected to be involved in the day-to-day management of the business of the corporation; however, they exercise their control through the election of the members of the board of directors who are supposed to set the policies for the corporation and select and oversee the chief executive officer ("CEO") and other members of the executive team. The formal corporate governance structure in Japan is similar to that found in the US due to the lingering influence of the US occupation of Japan following World War II; however, in reality Japanese shareholders have little in the way of real influence because the boards of Japanese companies are dominated by insiders selected by the chief executive officer for their loyalty. Germany's corporate governance structure, which is based on a system referred to as "co-determination", is quite different from the structures observed in the US, the UK and Japan and provides that companies with more than a specified number of employees must have two boards: a "supervisory" board and a "management" board. The supervisory board is the controlling body, much like the board of directors in the US, and designated percentages of the membership of that board are elected by the shareholders and employees, respectively. The management board is appointed by the supervisory board and no person can be a member of both boards. As the name implies, the management board "manages" the day-to-day operations of the company under the supervision of the supervisory board. The corporate governance structure typically used in France incorporates elements from both the Anglo-American and German systems and the German system through the ability of companies to choose between single- and two-tiered governance structures.

Allen and Gale pointed out that not only are there differences among countries with respect to the laws and regulations pertaining to board structures, there are also different rules that directly influence the composition and relative ownership percentages of the shareholder group.[34] In the US, for example, banks were, for a long time, prevented from holding equity stakes in companies except in unusual circumstances and laws and regulations governing other financial institutions such as insurance companies have generally restricted equity holdings of those entities in non-financial institutions to relatively small amounts in order to promote diversification. As a result, only a small amount of the equity of non-financial corporations is held by financial institutions in the US while in France, Germany, Japan and the UK the average holdings have been significantly higher.[35] In turn, the percentage of equity ownership of non-financial corporations in the hands of individuals and mutual and pension funds has been much higher in the US than in the other countries. As for ownership of shares of non-financial

[34] The discussion in this section is based on F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 25-38. The article also appears as F. Allen and D. Gale, "Comparative Financial Systems: A Survey" in A. Boot, S. Bhattacharya and A. Thakor (Eds.), Credit, Intermediation and the Macroeconomy (Oxford: Oxford University Press, 2004), 699-770.

[35] While their equity holdings in non-financial corporations are higher than in the US, banks and other financial institutions in France, Germany and Japan are subject to regulatory restrictions on holding shares and patterns of ownership including regulations on the proportions of the equity of firms that banks can hold (Japan) and restrictions on holdings of equity relative to bank capital (France and Germany). See F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 29.

corporation by other non-financial corporations, the percentage in the US has always been much lower than in Japan, Germany and France, but roughly equivalent to the percentage in the UK, a situation that can be attributed to significant differences in antitrust and competition laws across all of the countries.

§7 --Political and legal factors

Scholars have argued that political factors have played an important role in the choices that different countries have made regarding the structure of their financial systems. For example, Roe has argued that the US made a conscious political decision to limit the power of financial institutions in its financial system through laws and regulations while different political climates in Germany and Japan drove those countries toward financial systems in which financial institutions are heavily involved in the corporate governance of the firm to which they extend credit.[36] With regard to the influence of legal systems on financial systems, La Porta et al. found that civil law systems (e.g., the legal systems followed in countries such as France and Germany and in Scandinavia) give investors weaker legal rights than do the common law systems found in the UK and the US; common law countries give both shareholders and creditors the strongest protection; and the "quality" of enforcement of legal rules is highest in Scandinavian and German civil-law countries, next highest in common-law countries and weakest in French civil-law countries.[37] Other studies focusing on the relationship between the legal system and the form of finance have found evidence that countries with stronger rights for shareholders and creditors have broader and deeper capital markets[38] and that with the exception of countries such as the US and the UK, where minority investors were well protected, corporations were not widely held but instead are controlled by families, the government or, in the case of Germany, banks[39]. It should be noted, however, that according to Rajan and Zingales the origin of a country's legal system is not necessarily determinative of its financial system and political factors are often more important as evidenced by the fact that countries such as France and Germany have had large capital markets at certain times during the twentieth century.[40]

§8 Financial systems in developing countries

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[36] Id. at 38 (citing M. Roe, Strong Managers, Weak Owners (Princeton NJ: Princeton University Press, 1994). It should not be assumed that formal laws and regulations are necessary in order to limit financial institution involvement in corporate governance since banks and insurance companies in the UK appear to have voluntarily avoided getting involved in corporate governance even though the UK does not impose the same level of explicit restrictions on those institutions as are found in the US. See F. Allen, "Book review of 'Strong Managers, Weak Owners' by M. Roe, Princeton University Press", Journal of Economic Literature, 33 (1995), 1994-1996.

[37] R. La Porta, F. Lopez-de-Silanes, A. Shleifer and R.Vishny, "Law and Finance", Journal of Political Economy 106 (1998), 1113-1155.

[38] R. La Porta, F. Lopez-de-Silanes, A. Shleifer and R.Vishny, "Legal Determinants of External Finance", Journal of Finance, 52 (1997), 1131-1150.

[39] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 40 (citing R. La Porta, F. Lopez-de-Silanes and A. Shleifer, "Corporate Ownership Around the World", Journal of Finance, 54 (1999), 471-517).

[40] R. Rajan and L. Zingales, "The Great Reversals: The Politics of Financial Development in the 20th Century", Working Paper, University of Chicago, 2000.

There is controversy regarding the appropriate emphasis for policymakers in developing countries regarding their financial systems. For example, Singh, citing evidence drawn from both developed and developing countries, argued that stock markets are likely to do more harm than good to the real economy even when they are functioning well since, in his view, stock markets rarely deliver promised benefits such as encouraging savings, more efficient allocation of investment resources and discipline of corporate management through competitive selection in the market for corporate control.[41] Singh cautioned that the market for corporate control created by stock market systems often provides incentives for firm management to expand their operations through costly takeovers rather than focus on organic growth better suited for promotion of economic development and rewards financial engineering, as opposed to wealth creation, skills. Some of the other negative byproducts of stock markets cited by Singh included speculation and "short-termism" (i.e., a lock of long-term investor commitment to corporations).

According to Singh the dangers associated with stock markets referred to above were "likely to be particularly important to for third world countries with underdeveloped stock-markets and high volatility of share prices" and he strongly encouraged developing countries to shift their efforts away from establishing stock markets and concentrate on developed bank-based financial systems such as those long relied upon in countries such as France, Germany and Japan.[42] Singh commented that "[h]istorically, these bank-based systems have a proven record of successfully promoting industrial development in those countries" and that banks in those countries have the means and incentives to collect and analyze the information necessary to monitor management activities that are unavailable to ordinary investors who are merely small shareholders in large corporations with shares trading on stock exchanges.[43] Singh also argued that banks are better situated to take a long-term view of the prospects of the companies in which they "invest", "a perspective which is vital to industrialization in developing countries".[44]

However, while Singh strongly preferred bank-based systems as the preferred strategy for the development of financial systems in developing countries he noted that "in many developing countries, such systems have performed far from adequately" and they have often experienced financial crisis caused by "inflationary/inefficient finance".[45] He went to list what he believed were the most serious shortcomings of bank-based systems in developing countries: "crony capitalism", which encourages and permits preferred financing for individuals and families with the right political connections rather than funding of projects that would promote long-term industrial development; industry-finance links that could eventually lead to creation and preservation of monopolistic positions in product markets that thwart entry by new firms and undermine the progress

[41] The discussion of the arguments of Singh in this section is adapted from A. Singh, "The Stock Market and Economic Development: Should Developing Countries Encourage Stock Markets?", UNCTAD Review (1993), 1, 23-25.
[42] Id. at 23.
[43] Id. at 23.
[44] Id. at 23.
[45] Id. at 23.

toward efficient industrial development; and imprudent or inadequate government regulation of banks.

Singh also noted that, in spite of the above-described problems associated with market-based financial systems, it was inevitable that developing countries would embark on establishing their own stock markets in response to competitive pressures and the demands of international lenders such as the World Bank and the IMF and offered several suggestions to policymakers in developing countries as to how they might proceed: establish tax rates and policies that reduce incentives for rapid turnover of share ownership; closely monitor the development of markets for corporate control to avoid the negative effects referred to above, with possible steps including reduction in the role of shareholders and increased influence for other stakeholders or the government with respect to consummation of takeovers; encourage involvement of institutional investors, such as pensions funds that are typically public agencies in developing countries, as advocates for orderly and transparent markets; and closely monitor product market competition rather than simply relying on that stock markets to provide the necessary level of discipline on corporations.[46]

§9 --Institutional factors influencing finance in developing countries

The strength of local financial institutions is an important institutional factor with respect to developing countries since they are not only a source of capital for local businesses but also can provide support for prospective foreign investors looking for financial accommodations to reduce their own outlay of funds. In many developing, or recently developed, countries, the national banking system remains under the control of the state government, either as a regulator or the owner. While there may be some initial advantages to this situation if the state is able to efficiently allocate available financial resources to appropriate development opportunities, in the long run there is a risk that state control over the financial system can politicize policy decisions regarding lending practices and allocation of funds to specific borrowers and market sectors. In addition, it sometimes means that citizens will place their savings into nonmonetary assets, such as livestock, rather than into the financial system if they are concerned about the safety provided by the local banks. The weakness of financial institutions can also lead to high capital flight, which means that local firms and citizens will send their money out of the country in an attempt to obtain a higher (and less risky) return on their financial assets.

Another potential problem area is the risk of high levels of inflation that exists in many developing countries. Financial planning for individuals and businesses is extremely difficult in the midst of hyperinflation. Pricing decisions are complicated by the need to factor in the cost of replacing the goods that are to be sold. Credit management on both receivables and payables will be critical to the success of the business, while soaring interest costs can easily break the budget. The fiscal and monetary policies established by the state must be carefully monitored since policymakers will often embark on relatively risky paths in an effort to realize quick improvements in income and wealth in order to preserve their positions of power.

[46] Id. at 25.

Businesses involved in the economies of developing countries must also consider the availability of foreign exchange. The level of foreign exchange determines the external purchasing power of the country and its ability to acquire needed goods and services that are not produced domestically. Developing countries are often confronted with shortages of foreign exchange in light of the fact that their import requirements significantly exceed their ability to export domestic goods to buyers willing to pay with the desired foreign currency. Foreign exchange issues are particularly important to prospective foreign investors since managers of foreign firms may find themselves subject to restrictions on outflows of foreign exchange generated from the operation of the business in the local market. If so, raw materials and services may need to be procured from local sources, which may dramatically alter the type and quality of production technologies that must be used in the new market.

§10 --Financial systems and economic development

Businesses seeking capital to finance current operations and growth must tap into available "financial systems," which develop locally, nationally and even globally to facilitate channeling of funds from agents with surpluses to agents with deficits.[47] Barth et al. observed that "a growing body of research has focused on the possible positive causal connection between the development of the financial system and overall economic development" and explained that the literature has outlined the following key ways in which financial systems contribute to economic growth: financial systems mobilize savings by offering savers a range of savings vehicles; financial systems allocate savings by using expertise individual savers do not possess to ascertain potential borrower creditworthiness; financial systems reduce risk to individual savers by diversifying pooled assets across many investment opportunities; financial systems generate liquidity by allowing savers to readily access savings while at the same time financial intermediaries fund long-term projects; and financial intermediaries contribute to risk management by monitoring borrowers and managers of enterprises to which credit has been extended.[48]

Researchers looking to analyze and compare financial systems have generally paid attention to how agents (i.e., those with funds surpluses and deficits) interact directly with one another through financial markets and to identifying the role of various financial intermediaries such as banks, insurance companies and pension and mutual funds. Another important player in any financial system is, of course, the government. Governments play a variety of roles in the financial system. For example, governments are both borrowers and savers: borrowers in times when funds are needed to fight wars, overcome recessions or underwrite major investment projects; and savers when state-owned assets, such as natural resources like oil, generate significant amounts of money that the state can set aside and hold on behalf of the citizens of the country. Other important roles for the government in the financial system include setting and conducting

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[47] F. Allen and D. Gale, Comparative Financial Systems: A Survey, http://www.econ.nyu.edu/user/galed/papers/paper01-04-01.pdf, 1-2.
[48] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (2004) 3-5.

monetary policy and regulating banks and other financial intermediaries (e.g., insurance companies). The type and scope of regulation is determined by a variety of influences including the political system, which determines the structure of the government and its policies, and the legal system, notably the laws and regulations surrounding formation and enforcement of contracts, property rights, corporate governance mechanisms and terms and restrictions of securities.

According to Allen and Gale, researchers involved in comparing and contrasting financial systems have focused primarily on two sets of issues.[49] The first set is concerned with how effective different types of financial systems are at various functions such as investment and saving, growth, risk sharing, information provision and corporate governance. The second set of issues is concerned with identifying and understanding what drives evolution of financial systems and includes analysis of the influence of law and politics on financial systems and the impact of financial crises as accelerators of changes in financial systems. Each of these issues is discussed elsewhere in this Library; however, they do not fully explain the interests of researchers in comparative financial systems and work is also being undertaken to study and understand the activities of specific actors, such as banks and other depository financial intermediaries, and the relationship between regulation and structure of the financial markets and the commercial banking sector.[50]

Researchers such as Singh have recommended that developing countries opt for bank-based financial systems to prevent a market for corporate control and that firms in developing countries with reasonably-developed banking systems and equity markets should follow the so-called "pecking order pattern of finance" which predicts that new investment will be funded first from internal funds, second from new debt and lastly from new equity.[51] In reality, however, many developing countries have taken a different route and empirical data from the 1980s showed that external sources, including a significant contribution from the stock markets, were used for about 50% of investment financing.[52] A number of reasons have been advanced for this phenomenon included government regulations that directly discouraged the use of debt by limiting the debt ratios of firms. Notice should be taken through of changes in financing patterns in recent years—in India,

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[49] For surveys of early research on comparative financial systems, see, e.g., F. Allen, "Stock Markets and Resource Allocation", in C. Mayer and X. Vives (Eds.), Capital Markets and Financial Intermediation (1993); F. Allen and D. Gale, "A Welfare Comparison of Intermediaries and Financial Markets in Germany and the U.S.", European Economic Review 39 (1995), 179; and A. Thakor, "The Design of Financial Systems: An Overview", Journal of Banking and Finance, 20 (1996), 917.

[50] See, e.g., A. Thakor, "The Design of Financial Systems: An Overview", Journal of Banking and Finance 20 (1996), 917.

[51] A. Singh, "Financial Liberalisation, Stock Markets and Economic Development", The Economic Journal 107 (1997), 771; and A. Singh, "The New International Financial Architecture, Corporate Governance and Competition in Emerging Markets: Empirical Anomalies and Policy Issues", in Ha-Joon Chang (Ed.), Rethinking Development Economics (2003).

[52] P. L. Beena, Financing Pattern of Indian Corporate Sector Under Liberalisation: With Focus on Acquiring Firms Abroad (Trivandrum, Kerala, India: Centre for Development Studies, Working Paper 440, January 2011), 8-9 (citing S. Ajit and Javed Hamid, Corporate Financial Structure in Developing Countries (1992) and referencing other studies in India and elsewhere in the developing world that confirmed declining use of internal financing and reliance on "capital market" boom).

for example, indications are that internal sources provided a much larger proportion of the funding for investment in the early 2000s while funding through capital markets declined substantially.[53]

Booth et al. later studied data from ten developing countries distributed all around the world, with a diverse set of colonial backgrounds, using the variables suggested by Rajan and Zingales and found that "[i]n general, debt ratios in developing countries [seemed] to be affected in the same way and by the same types of variables that [were] significant in developed countries" but that, however, "there [were] systematic differences in the way these ratios [were] affected by country factors, such as GDP growth, inflation rates, and the development of capital markets".[54] Booth et al. also found support for the apparent universal applicability of the "pecking-order hypothesis" in both developed and developing countries given that in all countries debt ratios declined as firm profitability increased. However, Booth et al. cautioned that institutional differences among the countries still have a significant influence on capital structuring decisions and specifically cited the potential importance of differences relating to bankruptcy laws and procedures, methods used for preparation of financial statements and the overall availability of different forms of financing in each of the countries.[55]

In a paper prepared for the World Bank Bossone and Promise also stressed the importance of strengthening financial systems to achieving economic development and called for global cooperation "to promote principles and sound practices for financial stability through development of well-functioning financial systems and market discipline".[56] Bossone and Promise noted that in order for reforms to be successful countries must go beyond setting rules, articulating standards, approving legislation and creating new institutions and take steps that would incentivize key actors in their financial systems to engage in appropriate behavior (i.e., setting up a system of rewards and penalties that market participants perceive that it is in their own best interest to behave in efficient and prudent ways).[57] They want on to provide a list of recommendations for actions that developing countries should take as part of their process of financial sector reform[58]:

- Competition in the banking sector should be balanced with appropriate incentives to induce local financial institutions to invest in reputational capital and take actions that

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[53] P. L. Beena, Financing Pattern of Indian Corporate Sector Under Liberalisation: With Focus on Acquiring Firms Abroad (Trivandrum, Kerala, India: Centre for Development Studies, Working Paper 440, January 2011), 9 (citing RBI, Report on Currency and Finance (2005-06)).

[54] L. Booth, V. Aivazian, A. Demirgu-Kunt and V. Maksimovic, "Capital Structures in Developing Countries", The Journal of Finance, 56(1) (2001), 87, 118. The developing countries studied included India, Pakistan, Thailand, Malaysia, Turkey, Zimbabwe, Mexico, Brazil, Jordan and Korea. Developed countries used for comparison purposes included the US, Germany, Canada, Italy, France, Japan and the UK. Id. at 88.

[55] Id. at 118-119.

[56] B. Bossone and L. Promise, Strengthening Financial Systems in Developing Countries: The Case for Incentives-Based Financial Sector Reform (1998), 2.

[57] Id. at 4.

[58] Id. at 4-5.

will lead to the increase in the value of their banking franchises. Bossone and Promise noted that progress on this recommendation might require mergers of existing private institutions or privatization of state-owned financial institutions, regulatory changes to allow domestic financial institutions to operate across the maturity spectrum and in various market segments and investments in infrastructure to reduce the costs of banking transactions.[59]

- An important medium-term goal of financial reform efforts should be the establishment of modern capital markets and increased participation in those markets by institutional investors. Mature and sophisticated capital markets reduce transactions costs, increase the pool of available information, build trust and facilitate efficient allocation of savings to appropriate investment opportunities.
- Governments should complement the creation of franchise value by adopting a regulatory regime based on rules designed to align the private incentives of market players with the social goal of financial stability, and by strengthening supervision.
- Incentive-based safety-net arrangements developed to reduce the risk of a systemic crisis should include efforts to minimize moral hazard by limiting risk protection or making the cost of protection sensitive to the risk covered.
- Market participants should be encouraged to engage in self-policing and establish their own self-regulatory institutions to ensure honest and prudent behavior, lower transactions costs and reduce risks. Governments can assist in these programs by providing the appropriate legal and supervisory infrastructure.
- Governments should provide incentives to improving the quality and quantity of reliable and timely information available throughout the financial sector.
- Governments should exploit the comparative advantage of informal financiers and strengthen the complementarity between the formal and informal sectors.

Bossone and Promise also described key contributions that multilateral financial institutions, such as the World Bank and the International Monetary Fund ("IMF"), can make in facilitating the strengthening of financial systems in developing countries. These contributions could include not only financial and technical assistance but also facilitating the development and dissemination of global standards that can be used as the basis for commitments by individual countries to various aspects of the required reform strategies. Multilateral financial institutions have often been perceived as ineffective in facilitating financial system reforms when their efforts are seen as coercive by the countries with which the institutions are working. Bossone and Promise suggested that multilateral financial institutions may be more effective when they stress their ability to assist local policymakers in creating and executing sound strategies for financial sector reform and development including assisting governments in diagnosing the strengths and weaknesses of their financial system and analyzing how the system compares with other current and past models; training bank supervisors, bankers, and other financial market participants; restructuring financial institutions; and advising authorities on the reform process.[60]

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[59] Id. at 18-19.
[60] Id. at 5.

§11 Public financing markets

In the US capital raising through a public offering of securities is strictly regulated by the provisions of the federal Securities Act of 1933 (“Securities Act”) and the Exchange Act of 1934 (“Exchange Act”).[61] The focus of the Securities Act is the disclosures and liabilities involved in the offer and sale of securities to the investment community, in both private and public offerings. Under Section 5 of the Securities Act, offers and sales of securities must be registered with the federal Securities and Exchange Commission ("SEC") unless one of the exemptions from registration included in Sections 3 and 4 of the Securities Act is available. Disclosures in the registration statement are intended to include all of the material information regarding the issuer and the terms of the offering and the Securities Act contains provisions designed to insure that the information is disseminated to the investment community before the offering is completed. The SEC has no authority to rule upon the merits of an offering and lacks the resources necessary to conduct an independent review of all of the facts and statements contained in the registration statement. However, the SEC can prevent the securities from being distributed where such disclosure requirements are not fully met by preventing or suspending the effectiveness of the registration statement.

The basic purposes of the Exchange Act are to regulate securities exchanges and the securities market; to make available to persons who buy and sell securities information relating to the issuers of such securities; to prevent fraud in securities trading and manipulation of markets; and to control the amount of credit which may be used in the securities market. The provisions of the Exchange Act relate primarily to the activities of issuers and their affiliates after their securities have been distributed into the public market. The Exchange Act requires the registration of each class of an issuer's publicly traded securities with the SEC, as well as the filing of periodic and other reports with the SEC and securities exchanges by those issuers and its officers, directors and controlling shareholders. The Exchange Act also regulates the solicitation of proxies with respect to registered issuers, as well as tender offers and other specified transactions. Finally, the Exchange Act establishes a number of rules relating to the creation and operation of the securities markets, including requirements applicable to broker-dealers, stock exchanges, clearing agencies and transfer agents.

While the public securities markets in the US remain the largest and deepest in the world, there is clearly competition from other markets that are achieving extremely high levels of growth including capital markets in the European Union (“EU”) and in emerging markets such as China and India. Globalization of public securities markets has also been facilitated by advances in technology and financial services that have enabled the desire of companies to tap into capital markets in foreign markets that might be offering more attractive terms and/or reduced investment and regulatory costs. In fact, there is clearly robust competition among regulators around the world to attract both prospective investors and companies willing to list their securities on local exchanges. Finally, the

[61] For extensive discussion of public offerings and public company status in the US, see “Managing Growth and Change: A Library of Resources for Sustainable Entrepreneurs”, prepared and distributed by the Sustainable Entrepreneurship Project (www.seproject.org).

competitiveness of securities markets around the world depend a good deal on internal, or domestic, factors such as tax rates on capital gains and dividends; litigation and shareholder activism; and politically driven regulatory requirements such as those imposed on companies listed on US securities exchanges in response to a series of financial miscues and crises beginning in the late 1990s and running through the next decade. A great deal of research has been conducted on comparative aspects of public securities markets, particularly in relation to regulatory practices and corporate governance issues.

In the EU the Single European Act placed the free movement of capital on the same footing as that of goods and services and led to the adoption of Council Directive 88/361/EEC designed to give the single market its full financial dimension.[62] Based on the Directive, the European Commission has sought to abolish restrictions on movements of capital between persons in Member States. The EU also implemented the Market in Financial Instruments Directive (2004/39/EC) in November 2007 to strengthen the EU legislative framework for investment services and regulated markets and to protect investors and safeguard market integrity by establishing harmonized requirements governing the activities of authorized intermediaries and promoting fair, transparent, efficient and integrated financial markets. Specifically, Member States were required to set up an authorization system enabling investment firms to operate throughout the EU. These firms must be registered and the register must be accessible to the public. Each authorization must be notified to the European Securities and Markets Authority ("ESMA"), which was tasked with developing regulatory technical standards and assisting the Commission in its relations with third countries and in assessing their markets. The Directive was also intended to align national rules governing the provision of investment services and the operation of stock exchanges, with the ultimate aim of creating a single European "securities rule book" that would presumably benefit investors, issuers and other market stakeholders by promoting efficient and competitive markets.

One of the interesting elements of the Directive was the attempt to harmonize various rules applicable to proposed acquisitions of insurance companies including promulgation of assessment rules of procedure and a list of assessment criteria. The Directive states, in particular, that the competent authorities should judge the appropriateness of the proposed acquirer and the financial soundness of the envisaged acquisition on the basis of several factors including the reputation and experience of those who direct the business of the insurance company following the envisaged acquisition; the financial soundness of the proposed acquirer; and the existence of reasonable grounds to suspect an operation or attempt to launder money or finance terrorism.

With respect to enhancement of investor protection, it was intended that the contribution of the Directive would be in setting business of conduct rules for providing investment services to clients and minimum standards for the mandate and powers that national

[62] Portions of the discussion of securities regulation in the European Union in this section are adapted from A. Gutterman and R. Brown, Going Global: A Guide to Building an International Business (2012 Edition) (Eagan: MN: West, 2012) §34:24.

competent authorities must have at their disposal. The Directive established mechanisms for real-time cooperation in investigating and prosecuting breaches of the rules. In addition, the Directive created obligations with respect to safeguarding market integrity, reporting transactions and maintaining records. Each Member State is responsible for establishing a list of regulated markets and communicating this to the other Member States and ESMA. Finally, the Directive attempts to establish a "fair market" for retail investors by preventing financial institutions from discriminating between such investors (e.g., by offering some of them improvements to publicly quoted prices).

The role of the ESMA was mentioned above and it should be noted that the ESMA was one of several organizations created to reform European System of Financial Supervision—others included the European Systemic Risk Board, the European Banking Authority and the European Insurance and Occupational Pensions Authority. The ESMA has been charged with safeguarding the stability and effectiveness of the financial system and acts mainly in the field of activities of firms offering investment services, corporate governance, auditing and financial reporting. In addition, the scope of ESMA action covers the Directive on settlement finality in payment and securities settlement systems; the Directive on financial collateral arrangements; the Directive on the prospectus to be published when securities are offered to the public; the Directive on the transparency of information about issuers of securities; and the Directive on Alternative Investment Fund Managers. Specific activities of the ESMA in furtherance of its objectives include developing draft regulatory and implementing technical standards, issuing guidelines and recommendations and providing a centrally accessible database of financial institutions in the area of its competence.

Boskovic et al. prepared a sophisticated and detailed comparison of EU and US securities regulations in light of the implementation of the Directive.[63] They noted that due to largely unforeseen and painful impact of the international financial crisis that began in the mid-2000s, regulators in both the US and the EU had taken steps to improve supervision of large and interconnected institutions, increase market transparency and enhance capital and liquidity requirements. They also noted that US and EU regulators had comparable objectives with regard to the outcomes they were looking for from the regulatory systems including maintaining fair and orderly markets, protecting investors and providing price transparency. All that said, however, there were differences between securities markets, and the regulation of those markets, in the US and the EU including the following[64]:

- EU regulators have more discretion in authorizing investment firms and intervening in their management since they can judge whether the managers of those firms are sufficient experienced and reputable, while US regulators can only control their reputation and competencies.

[63] T. Boskovic, C. Cerruti and M. Noel, Comparing European and U.S. Securities Regulations: MiFID versus Corresponding U.S. Regulations (Washington DC: The World Bank, 2009).
[64] Id. at vii.

- Organizational requirements are broader in scope for exchanges in the US and focus on disciplinary power, which is explained by the self-regulatory role of exchanges in the US versus a more limited role in the EU.
- Capital requirements are risk-based in the EU while in the US they are based on the concept of maintaining a highly liquid core of capital.
- Investment firms in the EU are under a broad and general obligation to mitigate conflicts of interest while analogous rules in the US are focused on more specific situations.
- Investor protection rules in the EU are two-tiered: retail and professional investors; however, US regulators protect all investors with some special carve outs for institutional investors.
- The concept of "best execution" in the US covers a number of factors, with price being the most important, while in the EU price is one of just several factors considered when determining if the client has obtained the best result for the execution of its trade.
- In the US quotes and transaction data reported by national exchanges and associations is consolidated into a single system and disseminated to market participants while in the EU quotes and trade data is fragmented and no consolidation is required.

Boskovic et al. summarized their findings and arguments by observing that "[t]he U.S. framework is characterized by a powerful supervisor and important powers assigned to self-regulatory organizations . . . [while] [i]n the EU legislation is more recent and unified and characterized by the absence of a supra national supervisor; self-regulatory organizations have more limited powers".[65]

Securities regulation is becoming increasingly important in emerging markets. Lavelle argued that "certain characteristics of equity shares, as well as certain holding patterns of blocs of shares, leave anonymous shareholders bereft of any significant influence over the management of most large firms in emerging markets . . . [t]he price mechanism fails to operate for historical reasons associated with state strategies of engagement and disengagement from economic management . . . [and as] a result of these strategies, past and present, the state remains a stakeholder, and it retains control over several key functions and operations of some firms, even in cases where it has divested shares".[66]

Lavelle explained that there were two levels of often conflicting issues and objectives at work as efforts were being made to create and develop equity markets in developing countries and that states issuing shares on such markets were not strictly interested in seeking revenues from the sale of such shares but also sought to retain a degree of control over the operations of economic enterprises in their territories and to preserve employment.[67] The first level of issues and objectives, referred to by Lavelle as "Level I", was based on the requirements of international financial institutions, such as the World Bank and the IMF, that privatization programs should be implemented in order for emerging markets to receive loans needed for development activities. Lavelle explained

[65] Id. at 1.
[66] K. Lavelle, The Politics of Equity Finance in Emerging Markets (2004), 16.
[67] Id. at 18.

that international lending agencies believed that the "[d]ivestment of government shares leads to more efficient enterprises and deeper financial market institutions" and that "equity issues are mechanisms for the state to raise capital, enhance managerial efficiency in (former) parastatals, . . . reduce debt exposure . . . [and create equity markets that] . . . contribute to the state's future economic growth by making additional forms of capital available".[68] The second level of issues and objectives, which were referred to by Lavelle as "Level II", incorporated the "domestic political necessities of privatization" and the need of economic policymakers in emerging markets to "gain the endorsement of key political constituencies to sell off state shares" and the need for offerings to be structured in ways that "keep control of the firm's management within the territorial confines of the state or reserve a role for labor or local participation in management to the greatest extent possible".[69]

Obviously the pursuit of the Level II goals by domestic policymakers is at odds with the Level I vision of the international financial institutions seeking separation of the state from economic management at the firm level as well as the listing requirements of international exchanges based in developed countries that discourage issuance on non-voting shares and impose corporate governance and disclosure requirements that are unfamiliar to the leadership of emerging market enterprises. The result of this conflict was often offerings of shares by states that were strongly guided by domestic political circumstances and included shares divided into classes reserved for citizens of the state and foreign nationals, shares divided into voting and non-voting classes, sales of all of the shares to a local family group (or another domestic business group that is largely immune from markets for managerial control) or retention by the state of a sufficient number of shares to exercise ultimate control over management activities (i.e., a so-called "golden share").[70] Further complicating Level I progress in the eyes of international financial institutions was the failure of emerging markets to move quickly to establish mechanisms for recognizing and protecting rights of minority shareholders.

An article describing research conducted by Weber et al. on the 58 countries that created new stock exchanges between 1980 and 2005 provided valuable insight into the factors that motivated countries to establish exchanges and the conditions that contributed to whether or not those exchanges were successful—based on objective measures such as the number of companies trading on the exchange and the trading volume—once they had been established.[71] Not surprisingly the researchers found that a variety of factors led countries to establish stock exchanges including pressure from global financial institutions such as the World Bank and the IMF and the perceived need to follow the lead of neighboring countries that may have previously set up an exchange and thus were looked upon as competitors for capital that might be available from investors located all over the world. Interestingly, it appeared that countries were more successful in their

[68] Id. at 191.
[69] Id. at 18.
[70] Id. at 22, 191.
[71] The discussion in this section of the research of K. Weber, G. Davis and M. Lounsbury, referred to in the text as Weber et al., is based on an article titled "Developing Stock Exchanges in Developing Countries" available at
http://insight.kellogg.northwestern.edu/article/developing_stock_exchanges_in_developing_countries/

efforts to establish an exchange when they did so to meet competition from neighboring countries than when they acted primarily to diffuse international pressure.

The researchers explained that when developing countries were pushed by the World Bank and the IMF to establish stock exchanges as part of a host of economic reforms mandated as a condition for inclusion in the aid programs of those institutions the results were often little more than "symbolic" efforts that rarely were successful over the long term. In those cases the exchange launch process was largely a "well-defined project" involving an initial evaluation by institutional experts to be sure that all the formalities had been completed. However, once all the boxes on the launch list had been checked there was little or no ongoing follow up and continuous exchange of resources and expertise. When, on the other hand, countries established their stock exchanges based primarily on what Weber et al. referred to as "peer influence" the exchanges tended to be more enduring since countries became involved in an ongoing learning process that allowed them to tap into the experiences of their neighbors to fix mistakes and strengthen the foundation for development of their exchanges. The results of their study led Weber et al. to recommend that the World Bank and the IMF replace their one-on-one initiatives with developing countries to establish stock exchanges with support for regional infrastructures that would facilitate and encourage communications and exchanges of ideas among countries that already have something in common and close ties.

§12 Commercial loan financing

Commercial loan financing, particularly lending involving banks and similar financial institutions, is invariably one of the important components of any company's capital structure. In many cases, the first funding that the company receives will come from a commercial bank that is induced to provide a loan on the basis of the company's business and financial plans and the financial guarantees of one or more of the founders and/or their associates. As the company grows, its lending relationships will become increasingly important and the business may find itself using a wide range of lending tools on varying terms and with repayment dates which may range from a few months to several years in the future. The managers of the company need to carefully analyze each of the alternatives and take into account the capital requirements of the business and the philosophy of each of the potential lenders. In many cases, outside investors and business partners can provide recommendations to management about an appropriate type of commercial lending relationship.

There are a number of different commercial lenders offering a wide variety of financing arrangements. For example, full-service banks can provide short-term working capital loans, long-term lending, real estate and mortgage lending, inventory and accounts receivable financing, equipment leasing and other specialized forms of debt financing. Banks, finance companies, and thrift institutions can often provide other financing packages, including bankers' acceptance financing, factoring, and leasing. Some lenders can be a valuable source of information regarding financial and credit matters in general and provide companies with advice regarding cash management and establishing internal procedures for handling cash and making short-term investment decisions. Banks and other financial institutions also prepare and disseminate reports on general economic and business conditions. When a business receives debt financing from banks and other lenders, or loans from governmental lending agencies, the arrangement will be subject to a variety of commercial laws relating to the form and content of the terms of the loan and the company's promise to repay and the rights of the lender with respect to specified assets of the borrower and its principals in the event that the borrower defaults in its obligations under the loan. Specific areas of law that might come into play include laws governing negotiable instruments, secured transactions, guarantees, and bankruptcies.

In most cases, loans from commercial banks will either be payable on demand or will be of short-term duration (i.e., one year or less), although commercial banks also make business loans for longer periods (e.g., eight to ten years). Short-term loans may be renewed; however, in general, commercial banks are unwilling to have short-term loans converted into long-term financing through repeated renewals, and will generally require that borrowers must periodically undergo a complete reevaluation as a condition to any further lending. Demand, or short-term, loans are used by commercial banks to minimize their risks, and also to gain a degree of de facto control over the activities of the borrower. For example, if the bank is displeased with some aspect of the borrower's operations, it can threaten to demand repayment, or refuse to renew a short-term loan, in the event that changes are not made. However, in many cases, the right to force repayment may be of little effect if the parties know that such a demand will bankrupt the company, leaving the lender with only a limited prospect of recovering its investment in the company's business. As such, it is common to see lenders working with managers of the firm, particularly when the company is in its early stages of development, to formulate a sound business plan.

§13 --Comparative international characteristics of banking systems

Research has established that there is a crucial and significant link between development of financial systems and overall economic development of countries and there is no doubt that banking systems play a crucial role in the financial system of all countries even if the influence differs in countries due to historical reasons and/or the stage of economic development. Banks and their regulators serve a variety of roles including sources of credit and administrators of the payments system and central banks are generally oversee formulation and execution of monetary policies. Kagwe noted that a banking system in any country can perform a number of important functions, including acceptance of deposits from individuals, businesses, and other institutions for safekeeping; investing the deposits by making loans in return for interest, with the risk of default being borne by the banks; compensating depositors through interest payments on deposits; facilitating the system of payments and transfers of funds for goods and services transferred between different economic units in the economy; and regulation and supervision of the banking system.[72] The banking system has been a central factor in research regarding the impact of financial sector development on economic growth and researchers have, for example, found evidence of a positive relationship between the total credit extended to the private

[72] J. Kagwe, "African Banking Systems" in J. Waiguchu, E. Tiagha and M. Mwaura, Management of Organizations in Africa (Westport, CT: Quorum Books, 1999), 331-346, 331.

sector by banks and economic growth and a positive association between financial intermediation and economic growth.[73]

Barth et al. prepared a comprehensive and practical comparison of the characteristics of banking systems across a wide range of countries, 55 in all, and their work provides the basis for the following sections.[74] They focused their efforts on several fundamental aspects of international banking including the structure of banking, with emphasis on the connection between the development of the banking system and economic growth; banking industry performance; and banking regulation, supervision, and corporate governance. Embedded within these general topics are a number of specific issues of interest from a comparative perspective such as the relative size of banking industries in various countries; the degree of government and foreign ownership in banking; the degree of market power in banking systems; the range of activities in which banks are permitted to engage; the structure, scope and independence of the supervisory system; the implementation of supervision; and deposit insurance schemes.[75] Results and measures for individual countries were presented and comparisons were made among groups of countries created based on income following World Bank classification of economies as of April 2003 according to 2001 gross national income per capita. The country groups were identified as "low income", "lower middle income", "upper middle income" and "high income".

§14 ----Structure of banking systems

Barth et al. examined cross-border differences in the structure of banking systems by looking at five different measures and the results can be summarized as follows[76]:

- The size of the banking system relative to the economy was measured using the ratio of banking system assets to GDP and the results clearly indicated that high income countries have larger, more developed banking systems compared with countries in the other income categories and that the ratio declined as income levels declined. Specifically, the group average bank assets-to-GDP ratio was 343% for the high income countries but just 52.34% for low income countries.[77]

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[73] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 5 (citing R. King and R. Levine, "Finance and Growth: Schumpeter Might Be Right", Quarterly Journal of Economics, 108(3) (1993), 717-737; R. Levine, N. Loayza and T. Beck, "Financial Intermediation and Growth: Causality and Causes", Journal of Monetary Economics, 46(1) (2000), 31-77).

[74] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004).

[75] Id. at 3. The authors also recommended the following as a useful source regarding international comparative banking studies: K. Brown and M. Skully, "International Studies in Comparative Banking: A Survey of Recent Developments," SSRN Working Paper No. 365920, January 2003.

[76] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 6-14.

[77] Barth et al. noted that the bank assets-to-GDP ratio for the US was just 66%, well below the group average for high income countries, but explained that this was "not a reflection of an undeveloped banking

- Government involvement in the banking system as a bank owner was analyzed by looking at the percentage of bank assets that were government owned and while Barth et al. found wide variation across all of the countries (e.g., 0% in about one-third of the countries up to 80% in India) the results indicated that the high income countries had the lowest percentage of government ownership of banking (group average of 11%) and the low income countries had the highest percentage (group average of 36%).
- Involvement of foreign banks in the banking system was analyzed by looking at the percentage of bank assets that were foreign owned in each country and while once again there was wide variation (0% in Saudi Arabia to 99% in New Zealand) the main findings were that there was a significantly higher proportion of foreign ownership of bank assets in the upper-middle-income-countries group than in the other three groups and that the high income countries showed about the same average percent foreign ownership of bank assets as the low income countries.
- Another structural consideration, the level of competition in the banking sector as measured by concentration, was analyzed using the three-bank concentration ratio (i.e., the percentage of banking system assets held by the top three banks)[78] and "net interest margins" as a percentage of total assets.[79] Barth et al. found that there was not much variation in the average value of the concentration ration for each of the four income groups of countries, with each group close to the overall average of 51%, and thus no strong relationship between the concentration ratio and economic development; however, average net interest margins declined as income rose providing evidence to support the proposition that market power in banking goes down as economies achieve higher levels of development.

Two additional points about the factors discussed above are worth mentioning. The first is that government ownership of banks has always been a controversial subject and there is empirical evidence to support the argument that too much government involvement will create pressure on banks to make credit extension and investment decisions based on factors, primarily political, that are not limited to economic assessments of risk and return. The danger, of course, is that this will lead to a higher incidence of credit problems and poor profitability. Accordingly, many counsel that government ownership of banks slows economic growth and increases the risk of systematic banking problems.[80]

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system, but rather an indication of the relatively lower importance of the banking system compared with the stock and bond markets [in the US]". J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 6-7.

[78] For a discussion of the fairly extensive research on the benefits and disadvantages of concentration in the banking sector, see J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 11. While "concentration" has been the focus of many studies some researchers have also analyzed the "contestability" of banking markets across countries. Id.

[79] Barth et al. explained that the working assumption behind the use of this measure was that "the greater the degree of competition in a banking system, the lower will be the spread between the interest rates banks charge their customers and their own interest expenses". See J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 13-14.

[80] Id. at 7.

The second point relates to participation by foreign banks, often an area of concern in debates regarding liberalization of developing economies. Interestingly, Barth et al. reported that there was substantial evidence to support the argument that foreign bank entry actually benefits host countries, particularly in so-called “emerging markets” because it stimulates competition in the banking industry, leading to higher efficiency for domestic banks; improves the quality and accessibility to financial services for host country firms and individuals; facilitates the transfer to domestic banks of improved banking skills and technology; enhances a country’s access to international capital; and, finally, improves host country supervision and regulation.[81]

§15 ----Bank performance

Barth et al. looked at several different measures of bank performance in their cross-country comparisons. For example, they analyzed return on assets and return on equity (ROE) for 1999 and found “a clear-cut positive correlation . . . between ROE and income level”; however, “[t]he pattern [was] not as clear in the case of ROA, although the two highest income groups show[ed] a considerably greater average ROA than the two lowest.[82] They also analyzed the ratio of noninterest revenue to total revenue, which they explained as providing insight into “the degree to which a bank relies on noninterest-bearing, fee-generating activities relative to “traditional” interest-bearing activities, such as commercial and real estate loans”.[83] Barth et al. suggested that this ratio could be viewed as an assessment of the level of innovation in the banking sector and/or the ability of banks to diversify their risks and thus they were not surprised to find that the ratio was much higher for the high income countries on average than for the other country income groups.[84] In addition, comparisons of “nonperforming loans” to total loans uncovered a “clear-cut negative pattern between income level groups and nonperforming loans”, a result that Barth et al. attributed to less rigorous standards in less developed countries and which they felt was “consistent with other gauges of bank performance showing overall weaker banking systems in less developed countries.[85] Finally, Barth et al. presented a comparison of information on net interest margins, which they explained as being “indicative of overall banking efficiency”, and found that “the country income group averages show[ed] that higher income countries [had] lower net interest margins, consistent with the expectation of more efficient banking in more developed countries”.[86]

§16 ----Regulation and supervision

[81] Id. at 8 (citing J. Crystal, G. Dages and L. Goldberg, "Has Foreign Bank Entry Led to Sounder Banks in Latin America?", Current Issues in Economics and Finance, Federal Reserve Bank of New York, 8(1) (2002); and R. Levine, "Foreign Banks, Financial Development, and Economic Growth" in B. Claude (Ed.), International Financial Markets(Washington, D.C.: AEI Press, 1996)).

[82] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 14.

[83] Id. at 15.

[84] Id.

[85] Id. at 15-16.

[86] Id. at 16. Barth et al. noted that net interest margins were typically cited as measures of efficiency on the group that “in more efficient banking systems the gap between the rates banks receive on, and pay for, funds will be relatively small because of competitive pressures”. Id.

Some of the features that making the banking system so important for national economies, such as its role in administering payments, supplying backup liquidity and creating and implementing monetary policy, have already been mentioned and it is therefore not surprising that all governments are involved to some extent in regulation and supervision activities over banks operating in their countries. However, while regulation and supervision is universal, Barth et al. observed that differences could be identified with regard to the range of activities in which banks are permitted to engage; the way in which banking supervision is structured, the scope of the authority of banking supervisors, and their relative independence from political and other influences; the implementation of supervision; and deposit insurance systems.[87]

Barth et al. collected and presented information on the differences in permissible activities for banks including the ability of banks to engage in the business of securities underwriting, brokering, and dealing; insurance underwriting and selling; and real estate investment, development, and management, as well as the degree to which banks were allowed to own non-financial firms and vice versa. For each of these categories Barth et al. specified the degree of restrictiveness in each country's regulations (i.e., 1 = unrestricted, 2 = permitted, 3 = restricted and 4 = prohibited) and then put together both a "narrow" index of restrictiveness, which included just regulation of securities, insurance and real estate activities, and an "overall" index of restrictiveness that added in the two types of ownership activities.[88] The results were understandably complex; however, Barth et al. focused in on the finding that across all income levels securities activities were the least restricted—not one country restricted banks from engaging in securities activities—and real estate activities were the most restricted—one-fourth of the countries prohibited banks from engaging in real estate activities. Germany, New Zealand and Switzerland were among the least restrictive countries, granting banks unrestricted securities, insurance and real estate powers, and interestingly the timing of the survey was just before the US had liberalized its rules to open up bank participation in securities and insurance activities.[89] As for the so-called commerce activities, Barth et al. reported that bank ownership of nonfinancial firms was more restricted than nonfinancial firm ownership of banks and that only 15% of the countries allowed banks unrestricted ownership of nonfinancial firms, whereas 40% allowed unrestricted ownership of banks by nonfinancial firms.[90] The bottom line, according to Barth et al., was that "[t]here [was] a tendency for high income countries to be less restrictive than countries in the three other income groups".[91]

The scope of permissible activities for banks is certainly one of the most controversial subjects in the US and elsewhere and Barth et al. pointed out that there are arguments on

[87] Id. at 17.
[88] Id. at 18. They noted that the narrow index ranged in value from 3 to 12, the overall index ranged in value from 5 to 20 and the higher the index value the greater the level of restriction.
[89] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 19.
[90] Id. at 19-20.
[91] Id. at 20.

both sides of the key issue of what mix of permissible activities is best for promoting the development and efficiency of the banking sector.[92] Those arguing for more restrictions on banking activities cite the possibility of conflicts of interest as a result of banks engaging in a diverse range of activities, more opportunities for risk, the possibility that banks may create financial conglomerates that would be difficult to supervise due to their size and political/economic influence and, finally, the possibility of reduced competition that would also lead to reduced efficiency.[93] On the other hand, Barth et al. suggested that, in theory at least, "[f]ewer regulatory restrictions on the activities of banks may . . . permit the exploitation of economies of scale and scope in gathering and processing information about firms, managing different types of risk for customers, advertising and distributing financial services, enforcing contracts, and building reputational capital with clients; increase the franchise value of banks and thereby enhance their incentive to behave prudently; lead to diversified income streams and thus create more stable banks; [and] limit the ability of the government to use banks to allocate funds to less productive projects, and thereby promote bank performance and stability".[94] For their part, Barth et al. concluded that "[a]lthough existing empirical studies do not fully resolve these theoretical debates, most of the literature suggests there are positive benefits from permitting banks broad powers".[95]

Barth et al. pointed out what has become so painfully evident over the last two decades all around the world: banking crises, rapid structural change and continuing globalization have brought increased attention to the issue of banking supervision and presented an extensive list of the policy questions that must be considered by countries when establishing and maintaining their supervisorial schemes. These questions included the following: Should banks be subject to one or multiple supervisory authorities? Should the central bank be involved in bank supervision? Should bank supervisory authorities supervise other financial service industries, including in particular securities and insurance? To what degree should bank supervisors be subject to political and economic policy pressure and influence?[96] The results produced by their survey provided the following profile of bank supervision around the world:

- The vast majority of countries had opted for a single bank supervisory authority, with no systematic pattern to the division between single and multiple supervisory regimes

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[92] For review of arguments on both sides, see A. Saunders, "Banking and Commerce: An Overview of the Public Policy Issues," Journal of Banking and Finance, 18(2) (1994), 231-254.

[93] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 20-21.

[94] Id..

[95] Id. at 21-22 (citing also J. Barth, G. Caprio and R. Levine, "Bank Regulation and Supervision: What Works Best?" Journal of Financial Intermediation, 2003; and J. Barth, G. Caprio and R. Levine, "Banking Systems Around the Globe: Do Regulations and Ownership Affect Performance and Stability?" in F. Mishkin (Ed.), Prudential Supervision: What Works and What Doesn't (Chicago, IL: University of Chicago Press, 2001)).

[96] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 23.

across geographical regions or country income levels. The US was in the small group of countries that relied on multiple supervisory authorities.[97]

- Almost two-thirds of the countries assigned banking supervision to the central bank, including 53% in which the central bank is the single bank supervisory authority. Proponents of this approach point to the central banks' presumed first-hand knowledge of the condition and performance of banks; however, opponents worry that central banks have "the inherent conflict of interest between supervisory responsibilities and responsibility for monetary policy".[98]
- While the authority responsible for bank supervision was confined only to the banking industry in 58% of the countries, bank supervisory authorities also supervised securities firms in 13% of the countries and insurance firms in 11% of the countries (in 15% of the countries the authority(ies) responsible for bank supervision also supervised both securities and insurance firms).[99]
- Using an index of "bank supervisor independence" developed by Barth, Nolle et al., 44% of the countries had bank supervisory authorities with relatively low independence, while more than 27% had relatively high independence and the remainder of the countries ranked somewhere in between.[100] High independence, when it occurred, was generally confined to the richer countries and only two countries in the lower middle income group had high independence and none of the countries in the low income group achieved that status.

Putting aside the issues surrounding the structure of bank supervisory systems, Barth et al. offered information regarding how the countries in their survey group actually implemented their supervisory schemes. The researchers had no direct information regarding the scope of bank examinations, such as what operations were examined and how thoroughly; however, they did note that in about half of the countries the bank supervisors performed on-site examinations of most of the banks on an annual basis but also pointed out that a significant number of the other countries performed on-site examinations less frequently.[101] Barth et al. also compared "supervisory resource utilization" across the countries and found that the high income countries had both much lower supervisor-per-bank ratios and a higher "coverage" of banking activities on a per-

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[97] Id. at 24-25.
[98] Id. at 25-26. Barth et al. explained that problems could arise during an economic downturn when "the central bank may be tempted to pursue a too-loose monetary policy to avoid adverse effects on bank earnings and credit quality, and/or encourage banks to extend credit more liberally than warranted ba1sed on credit quality conditions to complement an expansionary monetary policy". Id. at 25.
[99] Id. at 26.
[100] Id. at 27. See J. Barth, D. Nolle, T. Phumiwasana, and G. Yago, "A Cross-Country Analysis of the Bank Supervisory Framework and Bank Performance", Financial Markets, Institutions and Instruments, 12(2) (2003), 67-120. Their index used values ranging from 1 (low independence) to 3 (high independence) based on responses provided by supervisory authorities to questions designed to measure the degree to which the authorities were insulated from political pressures and thus presumably better able to monitor banks in a strictly professional and consistent fashion and offer constructive criticism and direction that will be taken seriously by the banks they are overseeing.
[101] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 28-29. They noted also that a few countries, notably the UK, some countries, relied heavily on "off-site" examination of information submitted by banks to the supervisory authorities.

staff-member basis than what was found among the countries in the three lower income groups; however, they pointed out that these measures would obviously be heavily influenced by the number of banks in each country and that higher income countries generally had more banks than lower income countries due to larger size of the economies in the higher income countries.[102]

Finally, as for deposit insurance, which has been implemented in some form by a number of countries since the US became the first to do so in 1933, the survey results showed that deposit insurance schemes were established in one-third of all of the countries but that there were significant variations in the key features of those schemes.[103] Barth et al. noted that deposit insurance could be found in both mature economies and in emerging markets and that in the vast majority of cases of those countries that had deposit insurance they had only done so within the 20 years leading up to the survey. Coverage limits for insured depositors varied widely; however, Barth et al. noted that the limits had to be evaluated in light of the per capita income in the countries. Barth et al. described some of the theoretical debate surrounding deposit insurance and noted while insurance presumably increases the confidence of depositors in their banks it also creates a risk that depositors will be less vigilant in monitoring their banks since the government is willing to cover any losses that depositors might suffer, up to a limit, and that the lack of monitoring will encourage greater risk-taking by banks that might eventually lead to crises and substantial uninsured losses for depositors.[104]

§17 ----Corporate governance in banking

Like other businesses, banks are owned by one group, such as shareholders, and operated by a different group, the managers led by a CEO. Accordingly, corporate governance, and attention to the difficult "principal-agent" problems, is also important for banks.[105] Moreover, researchers have commented that corporate governance in banking touches on several unique issues that sets the whole field apart in terms of the inquiries and analysis that should be made and conducted. For example, banks themselves are important influences on the corporate governance of the firms that they lend to, especially in those instances where banks also acquire an equity interest in those firms. Caprio and Levine pointed out that if banks are poorly governed then "bank managers may actually induce firm managers to behave in ways that favor the interests of bank managers but hurt overall firm performance".[106] In addition, of course, bank managers are not only

[102] Id. at 29.
[103] Id. at 30.
[104] Id. at 30-32.
[105] For discussion of the "principal-agent" problems, see "Governance: A Library of Resources for Sustainable Entrepreneurs", prepared and distributed by the Sustainable Entrepreneurship Project (www.seproject.org).
[106] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 36 (citing G. Caprio and R. Levine, "Corporate Governance in Finance: Concepts and International Observations" in R. Litan, M. Pomerleano and V. Sundararajan (Eds.), Financial Sector Governance: The Roles of the Public and Private Sectors (Washington, DC: Brookings Institution Press, 2002), 17-49).

accountable to bank shareholders but also are entrusted with duties and responsibilities to those who deposit their funds in the bank and depend on bank managers to take care of those funds and return them, generally with interest, at the time agreed upon when the deposit is made.[107] Barth et al. referred to the observation of Caprio and Levine that there are four sources of governance for banks: "equity holders, debt holders, the competitive discipline of output markets, and governments".[108]

Barth et al. constructed a "Corporate Governance Index" for the countries in the survey that was based on measurements relating to three dimensions of "transparency" regarding the operations of banks: (1) the strength and effectiveness of external audits of banks; (2) the transparency of bank accounting practices; and (3) the evaluations by external rating agencies and incentives for creditors of the bank to monitor bank performance. Examples of questions used for measurement purposes included the following with respect to the "strength of external audit": (1) Is an external audit required?; (2) Are auditors licensed or certified?; (3) Do supervisors receive a copy of the auditor's report?; (4) Can supervisors meet with auditors without prior approval by the bank?; (5) Are auditors legally required to report bank misconduct to supervisors?; and (6) Can supervisors take legal action against external auditors?[109] While there was substantial variation across the entire set of countries, in general there was a positive relationship between the Corporate Governance Index and country income levels, meaning that good corporate procedures tended to emerge as countries became wealthier.[110]

§18 --Characteristics of banking systems in developing countries

Research has established that there is a crucial and significant link between development of financial systems and overall economic development of countries and there is no doubt that banking systems play a crucial role in the financial system of all countries even if the influence differs in countries due to historical reasons and/or the stage of economic development. Kagwe, who specifically researched and analyzed banking systems in Africa, noted that a banking system in any country can perform a number of important functions, including acceptance of deposits from individuals, businesses, and other institutions for safekeeping; investing the deposits by making loans in return for interest, with the risk of default being borne by the banks; compensating depositors through

[107] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 37. Macey and O'Hara (2003) argued that "bank directors should owe fiduciary duties to fixed claimants as well as to equity claimants". See J. Macey and M. O'Hara, "The Corporate Governance of Banks," Economic Policy Review, Federal Reserve Bank of New York, 9(1) (2003), 91-108.

[108] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 37 (citing G. Caprio and R. Levine, "Corporate Governance in Finance: Concepts and International Observations" in R. Litan, M. Pomerleano and V. Sundararajan (Eds.), Financial Sector Governance: The Roles of the Public and Private Sectors (Washington, DC: Brookings Institution Press, 2002), 17-49).

[109] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (Washington, DC: Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper 2004-1, January 2004), 38.

[110] Id. at 39.

interest payments on deposits; facilitating the system of payments and transfers of funds for goods and services transferred between different economic units in the economy; and regulation and supervision of the banking system.[111]

Barth et al. prepared a comprehensive and practical comparison of the characteristics of banking systems across a wide range of countries, 55 in all.[112] With regard to less than fully developed countries—that is, countries other than those classified as “high income” based on the parameters used by the World Bank as of the time that their work was conducted (i.e., countries classified according to 2001 gross national income per capita as “low income”, “lower middle income” or “upper middle income”)—Barth et al. found evidence to support the following generalizations:

- High income countries clearly have larger, more developed banking systems compared with countries in the other income categories when measured using a ratio of banking system assets to GDP and the ratio declined as income levels declined.
- Low income countries had the highest percentage of government ownership of banking and high income countries had the lowest percentage.
- There was a significantly higher proportion of foreign ownership of bank assets in the upper-middle-income-countries group than in the other three groups and the average percentage foreign ownership of bank assets was the same in the low income countries and the high income countries.
- Substantial evidence supported the argument that foreign bank entry benefitted the so-called “emerging markets” because it stimulated competition in the banking industry, leading to higher efficiency for domestic banks; improved the quality and accessibility to financial services for host country firms and individuals; facilitated the transfer to domestic banks of improved banking skills and technology; enhanced a country’s access to international capital; and, finally, improved host country supervision and regulation.[113]
- There was a tendency for high income countries to be less restrictive than countries in the three other income groups with respect to the range of non-banking activities (e.g., securities and/or real estate) in which banks were permitted to engage.[114]

De Krivoy discussed the history of attempts to implement reforms in bank regulation and supervision in developing countries through the 1980s and 1990s and noted that the scope, pace and effectiveness of such reforms were often closely tied to ”idiosyncratic factors and vested interests” and that effective implementation required “creating incentives for prudent risk-taking while adapting and adopting international standards; strengthening the institutions charged with the responsibility to regulate and supervise

[111] J. Kagwe, African Banking Systems, in J. Waiguchu, E. Tiagha and M. Mwaura, Management of Organizations in Africa (1999), 331.
[112] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (2004).
[113] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (2004), 8 (see also J. Crystal, G. Dages and L. Goldberg, Has Foreign Bank Entry Led to Sounder Banks in Latin America?, 8(1) Current Issues in Economics and Finance, Federal Reserve Bank of New York (2002); and R. Levine, Foreign Banks, Financial Development, and Economic Growth, in B. Claude (Ed.), International Financial Markets (1996)).
[114] J. Barth, G. Caprio and D. Nolle, Comparative International Characteristics of Banking (2004), 20.

financial institutions; and getting rid of moral hazard through clear exit rules, limited and credible deposit insurance, and better contingency planning".[115] De Krivoy went on to suggest several important steps that developing countries should take to reform their systems of bank regulation to eliminate the dangerous influences of "day-to-day politics" and "prevent bad banking from translating into systemic risk":

- Install and support strong, independent and proactive bank supervisors, shielded from day-to-day political pressures by means of a clear mandate, legal protection, and political support to do their job. Among others things, supervisors should have the discretion and flexibility to address problems before they expand into crises and the ability to push for early corrective actions rather than waiting until after something has happened and simply doling out punishment.
- Provide bank supervisors with appropriate and adequate resources to accomplish their goals including, for example, resources to gather and analyze meaningful and timely information regarding bank business, financial techniques, risk management and market trends and resources to attract and retain well-trained professions and provide them with incentives to shield them from corruption.
- Ensure that central banks are closely involved in institutionalizing safe and sound banking at all levels and that there is close coordination between the monetary policy function and banking regulation and supervision. In general, central banks are among a country's most prestigious and well-equipped institutions and thus are in a good position to collect the resources needed for proper bank supervision and hire, motivate, and keep skilled staff.
- Ensure that bank supervisors are "hypervigilant" and that their monitoring activities extend beyond financial indicators for individual banks to studying financial markets for danger signs (e.g., sudden upward spikes in deposit rates that may ultimately lead to defaults that will damage depositors).
- Establish and maintain close regulatory scrutiny of bank efforts to manage liquidity including public disclosure of information about relevant liquidity ratios. Liquidity management is difficult in emerging market economies due to a lack of transparency in their legal and accounting infrastructures; "moral hazard" due to promises of full deposit insurance coverage by the state that are illusory; the practice of booking bank loans as short-term when, in fact, they are frequently used to fund medium- and long-term investments due to the lack of long-term funding sources in those economies; and the disruption to the ability of banks to match maturities of their assets and liabilities caused by government regulations that force banks to provide medium- and long-term loans to priority sectors.
- Ensure that banks are properly capitalized, with shareholders having real capital at risk. Among other things, capital requirements should be raised, steps should be taken to improve the quality of capital (e.g., regulating bank holding companies to reduce the risk that conglomerate structures will be used to channel low-quality capital to banks), banks should be allowed and encouraged to tap into new private capital sources including foreign investors and the capital positions of banks should be tested using globally recognized capital adequacy standards.

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[115] R. de Krivoy, Reforming Bank Supervision in Developing Countries (2000).

- Ensure that steps are taken to monitor and improve the quality of assets held by banks by improving and enforcing asset valuation and provisioning rules and regulating “connected lending practices” (i.e., loans to affiliates of the persons and entities that own and control the banks). Byproducts of connected lending are that corporate governance standards tend to be poor or non-existent, internal controls are loose and little attention is paid to external auditing. In addition, connected lending damages non-connected borrowers due to credit rationing and increases the level of systematic risk.
- Implement overall supervisory regimes that consolidate supervision of specialized financial institutions including banks, securities firms and insurance companies. Since laws and regulations in many emerging markets prevent banks from engaging in non-banking activities financial institutions in those markets have often been grouped in conglomerates controlled by common shareholders and assets are transferred between businesses within those conglomerates in ways that have confused regulators strictly focused on a single business sector.
- Provide regulators with clear, strong and flexible tools for punishing bad behavior among bankers and averting and/or managing a crisis within the financial system. Among other things, sanctions must be meaningful and consistently enforced and supervisors must be vested with the authority and obligation to impose sanctions on a bank if it fails to comply with regulatory requirements or engages in criminal activities. In addition, rules for bank closure, resale or government takeover in the event of bankruptcy should be clear and rigorous. Responsibility for crisis management with respect to the banking system should be centralized. Finally, steps should be taken to reduce or eliminate “moral hazard” that can lead to risky actions such as prohibiting deposit insurance for bank shareholders.

One of the most vexing and potentially dangerous issues commonly found within banking systems in developing countries is “connected lending”, which was mentioned above. Conglomerates, or groups, of entities under common control are able to effectively establish their own private banks that engage in extensive lending activities with affiliated non-banking firms, a situation that confuses regulators and creates uncertainties for depositors of those banks who are not among the affiliates. De Krivoy made a series of recommendations to reduce the risks associated with connected lending including ensuring that regulators are authorized to engage in consolidated supervision and that their powers are vigorously used; clearly defining what constitutes a “connected loan” transaction so that banks cannot easily circumvent the rules adopted with respect to such transactions; making sure that relevant information on ownership, loans and investments are fully disclosed in the marketplace; strengthening corporate governance standards (i.e., better internal controls, strong and independent directors and skilled managers operating under incentives that reward compliance); and making controlling shareholders and senior management liable for bank failures.[116]

§19 Private investment and venture capital financing

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[116] R. de Krivoy, Reforming Bank Supervision in Developing Countries (2000), 126-127.

Many companies seek funding for their activities from "private investors" in transactions done outside of the formalities of public securities markets. In the US and other developed countries these transactions are often referred to as "private placements" and include offers and sales of equity and debt securities to various investors, including wealthy individuals and angel investors, venture capitalists and institutional investors (e.g., pension funds, insurance companies, etc.). Each of these investors have their own specific requirements for making funding decisions and a great deal of attention has been paid to "venture capital", which can be distinguished from many other investment capital sources by the emphasis on selecting start-up and emerging companies and working with managers to build the business to the point where the venture capitalists can realize extraordinary returns on investment through a public offering or the sale of the company to a larger firm. Put another way, venture capitalists provide a commitment beyond mere money to the development of the firm.[117] In general, venture capitalists target "high-growth enterprises", which the Organisation for Economic Co-operation and Development ("OECD") has defined as enterprises with average annualized growth in employees (or in turnover) greater than 20% a year, over a three-year period, and with ten or more employees at the beginning of the observation period, and "gazelles", which are a subset of high-growth enterprises that have been formed, or "born", five years or less before the end of the three-year observation period. While the OECD definition is suited to analysis of activities in developed countries, profiles of financing for entrepreneurship in developing countries cast a wider net since fewer high-growth enterprises and gazelles are operating in those countries at this time.

§20 --Developed countries

Among the larger, more developed, economies found among the so-called "G-20" countries access to finance remains a problem for entrepreneurial businesses and a substantial majority of the entrepreneurs in those countries who responded to a survey by Ernst & Young in 2011 reported that they found access to finance difficult in their countries.[118] While there has been some government intervention, bank credit remained tight, particularly for early stage companies, and institutional and investors had become understandably risk averse, which led to a reduction in opportunities for equity financing. Ernst & Young set out the following key findings of their survey, accompanied by suggestions for changes in public policy[119]:

- Access to funding remains difficult, though opportunities in rapid-growth markets have improved. In particular, entrepreneurs in developed markets have seen a significant deterioration in financing opportunities, although some intervention by central banks and governments has been helpful. In general, current options are

[117] For extensive discussion of venture capital financing in the US, see "Venture Capital" in "Finance: A Library of Resources for Sustainable Entrepreneurs" prepared and distributed by the Sustainable Entrepreneurship Project (www.seproject.org).
[118] Ernst & Young, Funding the future: Access to finance for entrepreneurs in the G20 (London: Ernst & Young Global Limited, 2012).
[119] Id. at 3.

limited across the board and tight credit in rapid growth markets such as China can be expected to have an adverse economic impact.

- As venture capital firms, banks and even business angels focus their attention on later-stage ventures perceived to have less risk, companies at the seed and pre-seed stages have found financing to be extremely challenging. Governments can generally play a role in filling this gap through grants and other forms of public aid; however, their budgets are challenged and the best hope might be new private market solutions such as "crowdfunding".
- Business angels are becoming a more important source of finance for promising start-ups; however, the scope of influence of this development depends on maturation and expansion of angel networks that ease the process of connecting angels with entrepreneurs and completing the paperwork required for funding to close. Government can support the development of business angels through tax policy and/or by matching finance through co-investment funds.
- Credit guarantee schemes have emerged as an important way of keeping bank lending windows open. Entrepreneurs have discovered that banks are not necessarily a ready source of funding at each stage of company development and government guarantees might provide banks with the confidence to provide funds to ventures perceived to be high risk.
- Corporate venturing could re-emerge as a powerful complement to traditional venture capital funding since many corporations have accumulated large buckets of cash and are also in need of access to innovative new ideas.
- In developed markets, regulatory changes could help to unblock IPO markets. For example, laws and regulations in the US were changed in 2012 to allow certain emerging growth companies that complete an IPO to take advantage of a deferral or relaxation of specified corporate governance and reporting requirements, a move which is intended to reduce the burdens that may have been discouraging those companies from going public. If IPO markets are "unblocked" by these changes more venture capital funds may become available; however, many have expressed concern that the new rules will lead to fraud that undermines overall investor confidence.
- In rapid-growth markets, private equity ("PE") is becoming a viable financing option for smaller, middle-market entrepreneurial businesses. Local PE firms are becoming more prevalent in rapid-growth markets and not only providing funding for portfolio companies but also advice, management capabilities and operational improvements.
- Governments should consider policies that target entrepreneurs with the greatest impact (i.e., entrepreneurs that are looking to create companies with above-average impact in terms of job and wealth creation).
- Governments should make it easier for corporations to spend mountains of cash. Corporate venturing has already been mentioned as one method for large corporations to make more productive use of their cash; however, governments could also provide incentives for large corporations to support smaller firms through procurement arrangements.

Ernst & Young also provided a summary of selected "leading practices" of various G-20 governments relating to encouragement of entrepreneurship.[120] For example, India, which like China and several other G-20 countries is often considered to be more of a developing country even though it is a member of the G-20[121], launched an India-centric early stage venture fund focused on the sustainable energy sector with financial backing from leading global businesses and the Indian government. Korea established a program to provide basic infrastructure support (i.e., office space, supplies and operating costs) to young entrepreneurs. South Africa has a program that provides 90%/10% matching grants toward qualifying expenditures incurred by cooperatives (90% from the government and 10% from the cooperative), which are enterprises that the government has determined to encourage and development as part of the country's overall economic development plans for the country's so-called "emerging economy". The EU has extended the benefits and support previously offered under its Competitiveness and Innovation Programme by announcing plans to launch a Programme for the Competitiveness of Enterprises and SMEs which will target entrepreneurs, particularly those involved in the creation and development of SMEs, who would benefit from easier access to funding for their businesses.

§21 --Developing countries

In a report on support to SMEs in developing countries through financial intermediaries, Dalberg Global Investment Advisors argued that banks are not adequately providing SMEs with capital in developing countries and described several barriers to debt financing for SMEs including banks can often earn high returns in their core markets, giving them little reason to take on additional risk in the SME market; banks incur higher administrative costs by lending to SMEs; banks have difficulty providing long-term capital; banks have difficulty providing tailored foreign exchange products; and banks have limited information, skills and regulatory support to engage in SME lending leading not only to lower loan activity but also unfavorable lending conditions for SMEs (i.e., higher interest rates and collateral requirements).[122] With regard to equity financing, Dalberg noted that "[h]istorically, there were few external equity providers in developing countries, whether private equity or venture capital . . . [and] . . . [t]he venture capital and private equity industry is still relatively new, and most players have not expanded beyond the developed world".[123] Development and expansion of equity financing in developing countries is further hindered by some of the same issues that adversely influence debt financing such as asymmetric information and lack of reliable financial information). Finally, as Dalberg points out, "entrepreneurs in developing countries have little familiarity and affinity with the equity model".[124]

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[120] Id. at 36-37.
[121] The following members of the G-20 have often been classified as developing or emerging economies: Argentina, Brazil, China, India, Indonesia, Mexico, Russia, South Africa, Republic of Korea and Turkey.
[122] Dalberg Global Investment Advisors, Report on Support to SMEs in Developing Countries Through Financial Intermediaries (November 2011), 17-19. The Report also includes an excellent list of research on SME financing and investment.
[123] Id. at 19.
[124] Id.

In a report on support to small- and medium-sized enterprises ("SMEs") in developing countries through financial intermediaries, Dalberg Global Investment Advisors noted that "[h]istorically, there were few external equity providers in developing countries, whether private equity or venture capital . . . [and] . . . [t]he venture capital and private equity industry is still relatively new, and most players have not expanded beyond the developed world".[125] Development and expansion of equity financing in developing countries is further hindered by some of the same issues that adversely influence debt financing by banks and other financial institutions such as asymmetric information and lack of reliable financial information). Finally, as Dalberg points out, "entrepreneurs in developing countries have little familiarity and affinity with the equity model".[126]

Statistics collected and analyzed by Klonwoski revealed several interesting regional trends with respect to private equity activities in emerging markets in recent years.[127] First, with respect to both fundraising and investment activities emerging markets became increasingly important from 2007 to 2010 on the global private equity market stage. Among the emerging markets "Emerging Asia" (i.e., China, India, Indonesia, Korea (South), Singapore and Vietnam) was the most popular with, for example, 60.7% of the fundraising directed to that region.[128] Second, while private equity penetration—measured by computing the ratio of private equity investment to GDP—in emerging markets was improving to 0.14% as of 2010 it still lagged behind the US (0.43%), the UK (0.34%) and Europe (0.31%). Finally, private equity firms enjoyed strong and positive returns on their investments in emerging markets and Klonwoski mentioned that not only were investors benefitting from price-earnings multiple expansion and growth but also from "the improved operational and financial performance of their investee firms (i.e., sales and margin growth)" and their ability to effectively use leverage to amplify their returns.[129]

According to Klonwoski private equity activities in emerging markets are perceived as being attractive for a variety of reasons including the rapid and high rates of economic growth in these markets driven by factors such as an expanding middle class, significant investments into domestic infrastructure, high levels of rural-to-urban migration and increasing population wealth; more responsible public finance decisions including reductions in debt levels; improvements in corporate governance frameworks and the overall legal and regulatory climate; the perception that such markets are more resilient in the face of financial turmoil and economic downturns; and diminished reliance on in emerging markets on foreign exports.[130] Emerging markets are also of interest to

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[125] Id.

[126] Id.

[127] The discussion in this paragraph is adapted from D. Klonowski, Preface, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), xvi-xvii.

[128] Latin America and the Caribbean (i.e., Argentina, Brazil, Chile, Columbia and Mexico) attracted 23.8% of the fundraising. D. Klonowski, Preface, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), xvi-xvii.

[129] Id. at xvii.

[130] The discussion in this paragraph is adapted from D. Klonowski, Preface, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), xv. See also R. Bliss,

international investors because of their strong manufacturing and service orientation and superior raw material base. In addition, the larger emerging markets—Brazil, China and India—provide opportunities for investors to deploy their capital in high increments and deal sizes in particular sectors such as banking, infrastructure, natural resources (i.e., oil and gas) and power generation and distribution.

Klonowski cautions, however, that private equity investors in emerging markets must still contend with a variety of risks and overcome substantial challenges as conditions in these markets to continue to evolve and local institutions embark on the transition from state control of the economy to a market-based model. According to Klonowski "[r]eturns in emerging markets have been inconsistent and volatile, reflecting high variability of returns in public markets and fluctuations in foreign direct investment" and investors often have to cope with geopolitical risks and difficulties in processing and closing deals in a timely and effective manner.[131] Klonowski also noted that private equity investors find it difficult to close deals in emerging markets for various inter-related reasons such as complex legal infrastructures, substandard accounting rules, lack of preparation among potential portfolio companies to receive and deploy the capital available from investors, corporate governance challenges in both the public and private sectors and, finally, rare and unbalanced exit opportunities due to the lack of a robust and mature local public capital market or a pool of local strategic investors who might be interested in purchasing the firm once the private equity investors have achieved their goals.[132] Investments in certain sectors carry specific risks when made in emerging markets such as the problems caused by poor protection of intellectual property that are encountered by investors targeting software firms in those markets.[133] Other risks and challenges mentioned by Quinlan included political instability, which causes continues shifts and uncertainties in key bureaucratic policies and practices including taxes, licenses, infrastructure development and capital requirements; corruption; shortages of local talent and worthy local partners, limited public information and overall lack of transparency, cultural differences; poorly developed property rights and difficulties in negotiating deals with family-owned firms and firms with deep ties to local politicians.[134] When looking specifically at risks confronting private equity investors in Africa Campbell mentioned the poor availability of local capital, primitive financial reporting and information technology systems, foreign exchange and the shortage of managerial talent.[135]

Private Equity: The Differences Between Developed and Emerging Markets, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012) 3, 13.

[131] The discussion in this paragraph is adapted from D. Klonowski, Preface, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), xv-xvi.

[132] The discussion in this paragraph is adapted from D. Klonowski, Preface, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), xvi.

[133] R. Bliss, Private Equity: The Differences Between Developed and Emerging Markets, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 3, 13.

[134] J. Quinlan, Private Equity in the Emerging Markets: No Longer an Asterisk, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 17, 19.

[135] C. Campbell, Private Equity, Risk and Reward in Africa, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 135, 142-143.

Not only do emerging markets carry different advantages and risks they also require that investors understand and adapt to differences in the investment process.[136] For example, Bliss noted that private equity funds in emerging markets rarely use the limited partnership structure that is so familiar in developed markets. Bliss explained that many emerging countries have failed to adopt legislation that recognizes limited partnerships and in those countries where limited partnerships are recognized they are not afforded the same types of tax and regulatory benefits available in the US. In addition, legal regimes in emerging markets generally do not recognize and enforce many of the contractual terms and capital structure provisions, such as multiple classes of securities (i.e., preferred shares with special voting rights and preferential rights with respect to dividends and the distribution of the proceeds from the sale or liquidation of the company), that are generally used in the US and other developed markets to address the divergent interests and concerns of investors, members of the founding group and employees.[137] Another difference identified by Bliss was the lack of consistent and reliable accounting, macroeconomic and capital markets data in emerging markets as well as the difficulties in forecasting and financial modeling for firms in those markets due to country-specific and exchange rate risks. Finally, emerging markets offer far fewer opportunities to exit investments through initial public offerings or a sale or merger of the company, which means that investors need to accept longer holding period and/or work to find suitable alternative exit strategies.

Differences in the investment process are accompanied by differences in investment opportunities that challenge investors to adapt their due diligence tools to fit the questions raised by operating in emerging markets.[138] Bliss mentioned several areas of potential interest for private equity investors looking at emerging markets including the extensive infrastructure needs in those markets, which require substantial amounts of capital and complex pre-deal planning given the typical involvement of local political actors; the rapidly expanding emerging market consumer sectors, many of which are benefitting from rising standards of living and the development of a middle class increasingly familiar with products and services offered in developed markets due to social media; formerly state-owned enterprises that presumably would benefit not only from the infusion of capital by private equity investors but also the restructuring that those investors would embark upon to make those firms more efficient and competitive; and, finally, small- and medium-sized enterprises, which are important players in emerging markets and often can benefit from the guidance that private equity investors can provide with respect to scaling operational activities upward and outward.

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[136] The discussion in this paragraph is adapted from R. Bliss, Private Equity: The Differences Between Developed and Emerging Markets, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 3, 13.

[137] For detailed discussion of the terms and conditions of preferred shares typically issued to venture capital investors in the US and other developed markets, see "Venture Capital" in "Finance: A Library of Resources for Sustainable Entrepreneurs" prepared and distributed by the Sustainable Entrepreneurship Project (www.seproject.org).

[138] The discussion in this paragraph is adapted from R. Bliss, Private Equity: The Differences Between Developed and Emerging Markets, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 3, 13.

Generic opportunities potentially available in many emerging markets are accompanied by opportunities that are particularly attractive in specific markets. For example, Salesny argued that private equity opportunities in Central and Eastern Europe include "small- and mid-market buyouts, typically conservatively leveraged; buy-and-build investments where companies have outgrown their founding entrepreneurs, with the objective of consolidating fragmented industries and creating national and ultimately regional market leaders; spin-offs by larger international and local corporations resulting from the rationalization of operations and industrial portfolios (i.e., disposal of noncore assets); growth and expansion financing; public to private transactions of companies with little free float, with the objective of consolidating shareholder base and enhancing company focus; privatizations/divestments of noncore activities by state-owned firms; and early-stage investing".[139] Similarly, Campbell noted a variety of distinctly African investment opportunities including projects that would promote technological, energy and/or agricultural leapfrogging.[140]

Emerging markets looking to tap into the advantages and benefits of private equity investment must be mindful of the steps that typically need to occur in order for a private equity market to develop.[141] Wilton maintained that from the perspective of private equity fund managers the attractiveness of a particular emerging market is determined by the supply of deal flow and the breadth of suitable opportunities for managers to achieve their desired returns on investment. One factor, which obviously is difficult for local stakeholders to change is the size of the economy and suffice to say that larger economies provide more opportunities to scale private equity investments. A second set of factors include the pace of progress toward a market-based and open economy, a situation that Wilton claimed increased the supply of interesting potential acquisition candidates and the motivation of local entrepreneurs to sell.[142] A third set of factors was referred to by Wilton as "structural" and included improvements in the areas of governance, transparency, legal systems and taxation and the development of bank lending and debt capital markets and the availability of liquidity on stock exchanges. Wilton argued that progress with respect to these structural factors contributes to development of private equity markets in several ways including increased opportunities through trust (i.e., greater comfort on both sides in contracting with "strangers" at a distance), expansion of opportunities to including lower growth companies and enhancement of liquidity and potential returns on investment. Each of these factor categories works in different ways and development of private equity markets does not always progress as expected. For

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[139] P. Salesny, Private Equity in Central and Eastern Europe—Opportunities in an Emerged Market: The Practitioner's Perspective, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 121, 129.
[140] C. Campbell, Private Equity, Risk and Reward in Africa, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 135, 138.
[141] The discussion in this paragraph is adapted from D. Wilton, Emerging Market Private Equity, Its Recent Growth and Differences with Private Equity in Developed Countries, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 47, 48-49.
[142] According to Wilton, increased motivation to sell, or "part with control", as local economies become more market-based and open comes from competitive pressures to meet internal efficiency standards and the ability to expand offshore. See D. Wilton, Emerging Market Private Equity, Its Recent Growth and Differences with Private Equity in Developed Countries, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 47, 49.

example, Wilton pointed out that larger economies may be able to accelerate the growth of their private equity markets even when development of the structural factors has stalled. On the other hand, the high growth rates in GDP enjoyed by China and India did not necessarily lead to the optimal rate of private equity deal flow.

Developing countries have announced programs to assist employment creation in their SME sector; however, these initiatives have typically not targeted high growth companies and, at least in the case of China, have generally been limited to attempts at creating independent self-employment opportunities for laid-off workers and rural-urban migrant workers.[143] Numerous policy responses for developing countries looking to encourage formation and development of high-growth SMEs have been suggested including improving the legal system for SMEs, particularly creation and enforcement of laws and regulations relating to financing methods and safeguards of SME financing; establishing an effective national governmental administrative institution for SME financing, including provision of loan guarantees and financial assistance service; establishing an SME development fund within the governmental budget; promoting SME development in marketing and business strategies of major financial institutions; establishing and improving the credit and guarantee systems for SMEs; creating SME venture capital companies similar to the "small business investment companies" recognized in the US; and developing and improving the intermediary service system, including managerial advisory programs for SMEs and establishment of credit rating mechanisms to provide support in independently evaluating SME projects.[144]

In their series of research studies leading to "The Global Venture Capital and Private Equity Country Attractiveness Index" Groh and Liechtenstein used data and other information collected from extensive surveys and literature reviews to identify the following six "key drivers" of country attractiveness for venture capital and private equity investors: economic activity; depth of the capital market; taxation; investor protection and corporate governance; human and social environment including cultural factors that have been demonstrated as influencers of entrepreneurial activity levels and extent to which barriers to investment are created by corruption, crime, black markets and/or significant bureaucracy; and entrepreneurial culture (e.g., innovative capacity and research output) and deal opportunities.[145] Reference should be made to their actual report on the results of their survey; however, it is interesting to note that in 2012 Groh and Liechtenstein calculated an index for 116 countries around the world, 83 of which they classified as "emerging", measuring their attractiveness for venture capital and private equity investors. Not surprisingly, the US ranked 1st and notable developing countries achieved the following rankings and index scores (it should be noted that index

[143] Ernst & Young, Funding the Future: Access to Finance for Entrepreneurs in the G20 (2012), 36.
[144] W. Xin-li and F. Yi-min, Comparison of Small and Medium-sized Enterprise (SME) Financing between China and United States, North China Electric Power University (Project Number 200711025), 4-5.
[145] The discussion in this paragraph is adapted from A. Groh and H. Liechtenstein, Assessing Country Attractiveness in the Venture Capital and Private Equity Landscape in Emerging Markets, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 31, 32-34 and 36-41.

scores ranged from 100 for the US to 11.4 for the 116th ranked country of Burundi)[146]: China (22/78.6)[147], South Africa (26/71.9)[148], India (32/66.3)[149], Turkey (35/65.0), Brazil (36/63.3)[150], Mexico (38/63.2)[151], Russia (43/59.5)[152], Indonesia (55/53.9) and Vietnam (63/49.8)[153]. Interestingly, Groh and Liechtenstein noted that "growth and development in emerging economies are not widespread, but rather concentrated in particular hubs or regions" and also pointed out that even in the most publicized and attractive emerging markets, such as the "BRICs" (i.e., Brazil, Russia, India and China), key drivers such as investor protection, human and social environment and entrepreneurial culture were still poorly developed.[154]

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[146] A. Groh and H. Liechtenstein, Assessing Country Attractiveness in the Venture Capital and Private Equity Landscape in Emerging Markets, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 31, 37. Korea was included among the non-emerging, or "developed", markets. See the notes in the referenced chapter for links to additional information on the work of Groh and Liechtenstein and related articles.

[147] For further discussion of private equity in China, see W. Scheela, E. Isidro and T. Jittrapanun, Private Equity in Southeast Asian Emerging Economies: An International Perspective, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 163, 174-175; S. Alexander and M. Casey, The Evolution and Future of Private Equity in China, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance 183 (2012); and L. McNulty, Finding Profit into and out of China, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 99, 99-100.

[148] For further discussion of private equity in South Africa, see D. Lingelbach, Private Equity in South and Sub-Saharan Africa, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 225.

[149] For further discussion of private equity in India, see W. Scheela, E. Isidro and T. Jittrapanun, Private Equity in Southeast Asian Emerging Economies: An International Perspective, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 163, 175-176; and D. Klonowski, Private Equity in India in the Context of Emerging Asia, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 241.

[150] For further discussion of private equity in Brazil, see A. Gldeson de Carvalho, Private Equity and Venture Capital in Brazil: Drivers, Evolution and Obstacles, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 197; and C. Ambrose, Private Equity in Latin America, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 145.

[151] For further discussion of private equity in Mexico, see Is Private Equity in Emerging Markets Coming of Age? Evidence of the Mexican Private Equity Market, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 249; and C. Ambrose, Private Equity in Latin America, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 145.

[152] For further discussion of private equity in Russia, see M. Musatova, Contours of Russian Private Equity, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 211; and P. Salesny, Private Equity in Central and Eastern Europe—Opportunities in an Emerged Market: The Practitioner's Perspective, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 121, 132.

[153] For further discussion of private equity in Vietnam, see W. Scheela, E. Isidro and T. Jittrapanun, Private Equity in Southeast Asian Emerging Economies: An International Perspective, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 163, 170-171; and M. Taussig, M. Schwarz and K. Chin, Private Equity amid Evolving Market Institutions: The Case of Vietnam, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 261.

[154] A. Groh and H. Liechtenstein, Assessing Country Attractiveness in the Venture Capital and Private Equity Landscape in Emerging Markets, in D. Klonowski (Ed.), Private Equity in Emerging Markets: The New Frontiers of International Finance (2012), 31, 39-41.

As for venture capital activity in developing countries, notice should be taken of the recognized determinants of venture capital investments identified by various researchers including changes in either supply of or demand for venture capital; capital gains tax rates (i.e., lower capital gains tax rates increase the supply of available funds for venture capital investments); the type of national financial system (i.e., market-based countries have stronger venture capital markets than bank-based countries); GDP growth rate; labor market rigidities; government programs for entrepreneurship; bankruptcy procedures; the level of pension funds in the economy; human capital endowment; accounting standards; research and development and the legal system.

Ernst and Young compiled an index to determine the relative positioning of 80 countries around the world with respect to their "attractiveness for investment in venture capital/private equity assets".[155] The most attractive countries in the 2011 index were, not surprisingly, developed countries including the United States, the United Kingdom, Canada, Singapore, Switzerland, Japan, Australia, Sweden, the Netherlands and Germany. Ernst and Young noted, however, that despite the composition of the "Top 10" it had identified a major shift of focus away from "traditional" venture capital and private equity countries toward emerging countries and regions such as the BRIC economies and countries in Asia, the Middle East and Africa. Ernst and Young emphasized the importance of liquid and efficient capital markets to prospective investors and noted that while emerging markets had made progress they still had a lot of work to do with respect to improving investor protection and innovation capacity and managing and reducing perceived or actual bribery and corruption.[156]

§22 --Global trends in venture capital investment

Ernst & Young prepared an extensive report describing what it viewed as the important trends underlying the globalization of venture capital as of 2011 and summarized its findings as follows[157]:

- In the West venture capital consolidation was continuing and "top tier" venture capital funds dominated fundraising activities. In the US, fewer funds were raising more capital and the more widely sought fund managers were able to close their new funds in three to five months while the average fund was out for 12 to 18 months trying to raise the amount it had targeted. US fundraising moved slightly upward; however, European fundraising declined significantly. In contrast to the US, European funds showed a distinct preference for early stages.

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[155] Ernst & Young, Globalizing Venture Capital: Global Venture Capital Insights and Trends Report 2011 (2012), 54. Relevant factors included the level of economic activity, depth of the capital markets, taxation as measured by tax incentives and administrative burdens, investor protection and corporate governance standards, human capital and social environment and the "entrepreneurial culture" and other indicators of innovativeness.

[156] Ernst & Young, Globalizing Venture Capital: Global Venture Capital Insights and Trends Report 2011 (2012), 54.

[157] Ernst & Young, Globalizing venture capital: Global venture capital insights and trends report 2011 (EYGM Limited, 2012), 5-9.

- China and India were seeing rapid growth in fundraising. Ernst & Young reported that 382 new venture capital funds raised a record US$28.2 billion in 2011 for investment into Chinese venture capital-backed companies. About 400 funds were operating in the "growth capital venture space" in India, which perhaps had reached a saturation point. Ernst and Young observed that there was a significant need for venture capital for Indian firms in the pre-revenue and early-stage phases of development. In general, Ernst and Young observed that while US venture capital still dominates, Asia is starting to surpass venture capital activity in Europe.[158]
- There is a growing trend toward international investment among venture capital firms and it is expected that firms all over the world will increase their level of investment outside of their local home markets. Nearly half of the US firms surveyed already invested outside of the US and almost half of the firms indicated an interest in increasing cross-border investing while only 25% of the firms said they had no interest in investing in foreign markets. Very high levels of cross-border investment were found among venture capital firms in Canada, France and Germany.
- Global venture capital investment was being strongly influenced by the pursuit of what Ernst and Young referred to as "large-tech-platform plays" which involve the establishment of funds dedicated to global investment in new strategic platforms, regardless of where the portfolio companies are located. Examples include funds focusing on applications development, micro-blogging and online security; all of which are open to investing not only in the US but in other countries such as China where the talent and technology can be identified.
- Western venture capital firms appear to favor early-stage investments (i.e., during the product development phase before significant revenues are generated) while Asian venture capital firms have a preference for later stage investments (i.e., revenue pre-profit and profitable companies).
- While the main exit route for venture capital-backed companies in the West is an acquisition, representing between 80% and 90% of all exits during the survey period, venture capitalists in emerging markets (e.g., China, India, Brazil, Korea and Taiwan) prefer initial public offerings (IPOs) as the exit strategies for their investments. Ernst & Young speculates that acquisitions will become more popular in emerging markets in the coming years as new local leaders emerge with capital that can be used to fund acquisitions to fuel growth and expansion of technology and product portfolios. Emerging market venture capitalists may also need to look for new exit strategies in light of the volatility of public markets in their countries, which are young and vulnerable to sudden and deep setbacks that can close IPO windows without warning.[159] Ernst and Young mentioned that buyouts of shares held by venture

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[158] According to the report, 70% of global venture capital investment continues to come from the US; however, China was close to surpassing Europe for the second spot and India was showing modest growth patterns. Venture capital activities in Canada, Europe and Israel were either stagnating or contracting. Ernst & Young, Globalizing venture capital: Global venture capital insights and trends report 2011 (EYGM Limited, 2012), 10.

[159] Of course, IPO markets in the US and other Western countries are also vulnerable and the shift toward acquisitions as exit strategies in those countries has been driven, at least in part, by the poor conditions in securities markets that have existed as a result of the financial crisis beginning in 2008. Ernst & Young, Globalizing venture capital: Global venture capital insights and trends report 2011 (EYGM Limited, 2012), 11.

capitalists by private equity firms is often used as an alternative exit route in Latin America and Eastern Europe.

- Angel investors have become a growing funding source due to the emergence of a growing number of entrepreneurs who successfully exited their ventures and now have capital to invest in new companies and the fact that the cost to start certain types of businesses has gone down to the point where angel investors can significantly increase their returns.
- Corporate venture capital was beginning to play a much more important role in emerging markets as new local giants fanned out to look for new technologies, business models and talented entrepreneurs in their highly competitive domestic markets. At the same time, corporations from the West are looking for strategic investments in emerging markets to gain access to those markets and tap into innovative technologies and products that may be commercialize globally and/or in similar developing markets.

§23 --Determinants of venture capital investment activity

Bonini and Alkan conducted an extensive review of the relevant literature pertaining to the determinants of venture capital investments with a focus both on "macro" determinants and political risk.[160] At the macro level, researchers have identified factors such as changes in either supply of or demand for venture capital; capital gains tax rates (i.e., lower capital gains tax rates increase the supply of available funds for venture capital investments); the type of national financial system (i.e., market-based countries have stronger venture capital markets than bank-based countries); GDP growth rate; labor market rigidities; government programs for entrepreneurship; bankruptcy procedures; the level of pension funds in the economy; human capital endowment; accounting standards; research and development and the legal system.[161] It should be noted, however, that different studies produced different results regarding various factors. For example, while liquidity of stock markets was found to be a significantly positive factor in some studies it was not significant in other studies and some researchers found that this factor did not affect expansion stage venture capital investment but did have an impact on early stage investments. In addition, of course, a factor such as the level of pension funds was important in the US but not in Europe because European pension funds did not deal in large amounts of money and were averse to investing in unquoted firms. As for political risk, several researchers have identified a negative relationship between institutional uncertainty and private investment and Bonini and Alkan argued that the level of venture capital investment is positively related to lower political risk.

Ernst and Young compiled an index to determine the relative positioning of 80 countries around the world with respect to their "attractiveness for investment in venture

[160] S. Bonini and S. Alkan, "The Macro and Political Determinants of Venture Capital Investments around the World", Working Paper, University of Boccini, 2006. See also L. Jeng and Ph.C. Wells, "The determinants of venture capital funding: evidence across countries", Journal of Corporate Finance, 6(3) (2000), 241-289.

[161] With regard to the influence of the legal system on venture capital investment, see S. Bonini and A. Senem, "The Political and Legal Determinants of Venture Capital Investments around the World", March 23, 2011, available at SSRN: http://ssrn.com/abstract=945312 or http://dx.doi.org/10.2139/ssrn.945312

capital/private equity assets".[162] Ernst and Young identified and relied upon the following six drivers of attractiveness in compiling its index[163]:

- Economic activity as measured by various aspects of gross domestic product (i.e., size of the economy, medium-term real GDP growth and unemployment);
- Depth of the capital market as measured by the size of the stock market, stock market liquidity (i.e., trading volume), IPO market activities, conditions to debt and credit markets, bank non-performing loans to total gross loans and financial market sophistication;
- Taxation as measured by tax incentives and administrative burdens;
- Investor protection and corporate governance as measured by corporate governance (i.e., indexes of disclosure, director liability, shareholder suits, legal rights and board efficacy), securities of property rights (i.e., legal enforcement of contracts, property rights and intellectual property protection) and quality of legal enforcement (i.e., judicial independence, integrity of the legal system, rule of law and regulatory quality);
- Human and social environment as measured by education and human capital, labor market rigidities and bribery/corruption; and
- Entrepreneurial culture and deal opportunities as measured by indices of innovation, scientific and technical journal articles, ease of starting and running a business, simplicity of closing a business and corporate research and development activities.

These drivers were assigned different weights for computing an overall venture capital/private equity index and separate indices for venture capital and private equity alone. For example, for the combined index and the venture capital index the two largest influences were depth of the capital market and entrepreneurial and deal opportunities; however, for private equity alone the key drivers were depth of the capital market, economic activity and investor protection and corporate governance.[164]

For 2011 the most attractive countries based on the combined index, in order from the top, were as follows: United States, United Kingdom, Canada, Singapore, Switzerland, Japan, Australia, Sweden, the Netherlands and Germany. Ernst and Young noted, however, that despite the composition of the "Top 10" it had identified a major shift of focus away from "traditional" venture capital and private equity countries toward emerging countries and regions such as the BRIC economies and countries in Asia, the Middle East and Africa. Ernst and Young emphasized the importance of liquid and efficient capital markets to prospective investors and noted that while emerging markets had made progress they still had a lot of work to do with respect to improving investor protection and innovation capacity and managing and reducing perceived or actual bribery and corruption.[165]

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[162] Ernst & Young, Globalizing venture capital: Global venture capital insights and trends report 2011 (EYGM Limited, 2012), 54.
[163] Further details are available in Ernst & Young, The Global Venture Capital and Private Equity Country Attractiveness Index-2011 Annual (EYGM Limited, 2012), 17.
[164] Id.
[165] Id. at 54.