

# 2009/2010 annual

The Global Venture Capital and Private Equity  
Country Attractiveness Index

*Alexander Groh & Heinrich Liechtenstein*



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# Foreword

## *from the research team*

In this annual, we want to present the results of a comprehensive research project on how to measure the attractiveness of a country for investors in Venture Capital (VC) and Private Equity (PE) limited partnerships. The project was initiated at IESE Business School in Barcelona in 2006 with a European pilot study. From the European study we gained experience and the confidence to extend the study globally. Since 2006 two professors, one doctoral student, and many research assistants have worked on the project. We selected and collected more than 300 different data series from all kind of providers – some ranging back to 2000. We attempted to include as many countries as possible in the study, and handled approximately 200,000 individual data records.

We would not have been able to realize this without the generous financial and non financial contributions from our sponsors, and we greatly appreciate the support of IESE Business School, their International Center for Financial Research (CIIF), Ernst & Young, and DLA Piper Weiss Tessbach.

This is the first edition of the Venture Capital and Private Equity (VCPE) Country Attractiveness Index. This index will be subject to critique and we invite constructive feedback to help us improve future editions of the index. Selected data series may be subject to change in future editions and new and more appropriate data series may be used as a substitute to existing data. The quality of data and the number of countries covered will increase. As a result, our index will be a dynamic product that always considers the most adequate and recent data. We believe this index is unique in providing the VC and PE market segment with such a broad scope. We hope investors will appreciate the information included in this index; politicians may utilize the index to make improvements in their countries to attract international risk capital.

We hope that you find our 2009/2010 Venture Capital and Private Equity Country Attractiveness Index of value.



# Foreword

Professor Josh Lerner

Jacob H. Schiff Professor of Investment Banking  
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Virtually every high growth business needs capital. Investors allocate assets to earn substantial returns. One would imagine that the two facts above would bring venture capitalists and entrepreneurs together.

But, in fact, a significant gap separates the two groups. Entrepreneurs live in great uncertainty and assume significant risk in pursuing their business, whether a young start up or a restructuring division. Venture capitalists and private equity investors are a special breed, who seek to help entrepreneurs triumph, but have fiduciary responsibilities to their own investors (whether pensions, sovereign wealth funds, endowments, or families), which limit their ability to absorb all the risk in new ventures. While venture capital and private equity has become a well developed industry in the United States and Western Europe, in many other parts of the world, a gap in experience and expectations has slowed the adoption of venture capital and private equity funds, and limited the success of the pioneering funds.

But in the past few years, the venture capital and private equity industry has been globalizing at a dramatic pace. Funds are increasingly being raised internationally and invested globally. More and more firms have established multinational operations. There is an increasing appreciation by entrepreneurs world wide of the benefits that venture and growth equity investors can bring. Company managers are increasingly setting ambitious goals and looking to these investors to provide the capital, advice, and strategic partnerships they need to bring their plans to fruition.

Another important trend has been the professionalization of the venture capital industry itself. Venture capital and private equity organizations have matured. Their investment policies, procedures, and systems have been refined over decades of experience, and are becoming formalized and structured. As a result of these two trends, it is no surprise that many nations are making greater efforts to encouraging venture capital activity with an eye to boosting innovation and entrepreneurship, and to counteracting the recessionary impact of the global economic crisis on growth.

With the emergence of venture capital and private equity investment as a professional practice, understanding the way in which this industry works is critically important for policymakers, practitioners, and would be practitioners, whether they are (or aspire to be) working for entrepreneurial ventures, venture capital and private equity firms, or large institutional capital pools. I applaud Alexander Groh and Heinrich Lichtenstein, who have taken the heroic step of trying to draw together all the information needed to assess whether a market is ready for venture capital and private equity.

The country attractiveness index—which builds on academic research into the determinants of these funds world wide—provides valuable information to investors and political leaders about which markets are most suited for private investments. The index results both provide answers and raise questions—e.g., to what extent will the financial crisis upend the established order of the most attractive markets?—but represent an important step in systemizing our understanding of these issues.

Enjoy the reading!

## Website

Please visit our website <http://vcpeindex.iese.us/> where you will find more information, links to literature, and several analytical tools for benchmarking purposes.

# Sponsors

We are very grateful to our sponsors IESE Business School/CIIF, Ernst & Young, and DLA Piper Weiss-Tessbach for the financial support, their feedback throughout the project and their direct contributions to the index.

**IESE Business School – University of Navarra** is one of the world's top 10 business schools and has pioneered executive education in Europe since its foundation in 1958 in Barcelona. In 1964 IESE introduced Europe's first full-time MBA program. IESE distinguishes itself in its general-management approach, extensive use of case method, international outreach, and emphasis on placing people at the heart of managerial decision-making. With a truly global outlook, IESE currently runs executive-education programs on four continents.

The CIIF, International Center for Financial Research, is an interdisciplinary center with an international outlook and a focus on teaching and research in finance. It was created at the beginning of 1992 to channel the financial research interest of a multidisciplinary group of professors at IESE

**Ernst & Young** is a global leader in assurance, tax, transaction and advisory services. Worldwide, our 135,000 people are united by our shared values and an unwavering commitment to quality. We make a difference by helping our people, our clients and our wider communities achieve their potential.

Potential is a key word for equity capital management. Deal success doesn't end when the deal closes. Acquirers know success and stakeholder value lie in portfolio companies' continued growth under their watch and after their exits.

**DLA Piper Weiss Tessbach** is part of DLA Piper, one of the largest global legal services practices, with over 3,500 lawyers in 67 offices in 29 countries. From its offices in Asia, Europe, the Middle East and the US, legal and business advisers provide a broad range of services to local, regional and international clients. The firm is highly acknowledged in its core areas of expertise

Business School and has established itself as a nucleus of study within the School's activities.

Sixteen years on, our chief objectives remain the same:

- Find answers to the questions that confront the owners and managers of finance companies, and the finance director of all kind of companies in the performance of their duties.
- Develop new tools for financial management.
- Study in depth the changes that occur in the market and their effects on the financial dimension of business activity.

All of these activities are programmed and carried out with the support of our sponsoring companies. Apart from providing vital financial assistance, our sponsors also help to define the Center's research projects, ensuring their practical relevance.

Our private equity and venture capital practices therefore offer a holistic, tailored approach that encompasses the needs of funds, their M&A process and portfolio companies while addressing market, industry and regulatory concerns and opportunities.

We hope that the Global VC/PE Country Attractiveness Index proves to be a valuable tool in helping funds navigate through this uncertain time. For more information please visit [www.ey.com](http://www.ey.com)

including corporate, M&A, venture capital and capital markets, banking and finance, litigation and regulatory, general commercial law, real estate, employment law, IT, telecoms and IP and advises its clients as a full-service firm in all relevant areas of business law.

For further information, please visit: [www.dlapiper.com](http://www.dlapiper.com).



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## Prof. Alexander Groh

Dr. Alexander Groh is Visiting Professor at IESE Business School, Barcelona – University of Navarra, Spain. His research activities focus on VC and PE, and include valuation issues, performance measurement and socio-economic determinants for the development of national markets. He is Associate Professor of Finance at GSCM – Montpellier Business School, France. Prior to that, he was visiting INSEAD, Fontainebleau, France, and was Assistant Professor of Corporate Finance and Entrepreneurial Finance at Darmstadt University of Technology, Germany. He is involved in training courses for the European Venture Capital and Private Equity Association (EVCA), and the Indian Venture Capital and Private Equity Association (IVCA), and has worked for Quadriga Capital, a Frankfurt based Private Equity fund, since 1996.

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# The Global VC/PE Country Attractiveness Index

Article written by Alexander Groh, [agroh@iese.edu](mailto:agroh@iese.edu), and Heinrich Liechtenstein, [hl@iese.edu](mailto:hl@iese.edu), both, IESE Business School Barcelona.

## How to measure a country's attractiveness for limited partners

The purpose of our index is to benchmark countries with respect to their attractiveness for institutional investors who decide upon international allocations in VC and PE limited partnerships. We therefore take an institutional investor's point of view for the aggregation and analyses of socio-economic data. We want to contribute to solving the investor's problem: where to allocate the capital. However, a politician may conclude that a vibrant risk capital market supports innovation, entrepreneurship, economic growth, employment, and wealth. Both the politician, who would like to increase risk capital market activity, and the investor, who seeks adequate compensation for the investment risk, will observe strengths and weaknesses, risks and opportunities in particular nations and will benchmark them. A politician has the opportunity

to influence the conditions that attract (or deter) international risk capital: an investor will respond to policy actions. Therefore, attempts to increase risk capital market activity in a particular country should focus on the relationship between the parties that deserve capital and those who provide it. Risk capital is a high liquid asset class with respect to international allocations. Funds will flow quickly into regions and countries where investors expect opportunities. Nations (and regions) are in strong competition for receiving allocations from limited partners.

### What are institutional investors' selection criteria?

Our index addresses the concerns of institutional investors and looks at the criteria they base their international VC and PE allocation decisions upon. Their allocation criteria will include, in the first instance, the expected economic opportunities of a country or region from a macro perspective. However, they will also include a particular investment strategy of a fund management team, the team's competence, their track record and other parameters. The latter criteria will be addressed as part of their fund due diligence before limited partners consider committing to a particular general partner. These criteria are beyond of the scope of our index because they depend on individual cases. Our index points to the general opportunities that arise from the socio-economic state of a country or region and as a result, we contribute to the macro perspective of the fund due diligence. Our index provides valuable information to investors as it is the first time that the different factors that determine the attractiveness of a country for limited partners have been summarized in a composite measure. The decisive factors that render a country attractive have been extensively discussed in literature about the determinants of vibrant VC and PE markets. We give a brief overview over this literature and group the articles into six sub-chapters that already reveal the structure of our index. Each heading represents one of six key drivers that we regard as important, appropriate and quantifiable to determine the attractiveness of a country for limited partners. The key drivers name and define a set of criteria we need to assess for our sample countries.<sup>1</sup>

1. Groh, Alexander, Liechtenstein, Heinrich and Lieser, Karsten (2009a): The European Venture Capital and Private Equity Country Attractiveness Indices, forthcoming in the Journal of Corporate Finance (Re-print). Available at <http://ssrn.com/author=330804>.

### Importance of Economic Activity

Intuitively, the state of a country's economy should affect the VC/PE activity. An economy's size is an indicator of the quantity of corporations and deal flow opportunities in general. Economic growth should lead to demand for finance. Gompers and Lerner (1998) focus on the VC segment and point out that more attractive opportunities exist for entrepreneurs if the economy is growing quickly. Wilken (1979) argues that a situation of economic prosperity and development facilitates entrepreneurship, as it provides a greater accumulation of capital for investments. The ease of start-ups is expected to be related to societal wealth, not solely due to the availability of start-up financing, but also to higher income among potential customers in the domestic market. Romain and van Pottelsberghe de la Potterie (2004) find that VC/PE activity is cyclical and significantly related to gross domestic product (GDP) growth.

### Importance of the Depth of a Capital Market

Black and Gilson (1998) focus on the differences between bank-centered and stock market-centered capital markets. They argue that a well-developed stock market that permits venture capitalists to exit through an initial public offering (IPO) is crucial for the existence of a vibrant VC market. In general, bank-centered capital markets show less ability to produce an efficient VC infrastructure. They affirm that it is not merely the strong stock market that is missing in bank-centered capital markets; it is also the secondary institutions, including the bankers' conservative approach to lending and investing, and the social and financial incentives that reward entrepreneurs less richly (and penalize failure more severely), that compromise entrepreneurial activity. While their paper focuses on the early stage segment,

the findings are equally valid for the later stage. Jeng and Wells (2000) stress that IPO activity is the main force behind cyclical swings because it reflects the potential return to the VC/PE funds. Kaplan and Schoar (2005) confirm this. Analogous to Black and Gilson (1998), Gompers and Lerner (2000) point out that risk capital flourishes in countries with deep and liquid stock markets. Likewise, Schertler (2003) uses either the capitalization of stock markets or the number of listed companies as a measure for the liquidity of stock markets. She finds that the liquidity of stock markets has a significant positive impact on VC investments in its early stages.

Alongside the disadvantages of bank-centered capital markets, Greene (1998) emphasizes that low availability of debt financing is an obstacle for start-ups in many countries. Entrepreneurs need to find backers - whether banks or VC/PE funds - who are willing to bear risk. Cettorelli and Gambera (2001) provide evidence that bank concentration promotes the growth of those industrial sectors that have a higher need for external finance by facilitating credit access to younger companies in said industry sectors.

### Importance of Taxation

We assume that two types of taxes affect VC and PE activity; those directly related to the asset class, such as taxes on dividends and capital gains, and those with an impact on corporations and entrepreneurship, such as corporate tax rates. Gompers and Lerner (1998) stress that the capital gains tax rate influences VC/PE activity. In fact, they confirm Poterba's finding (1989), who builds a decision-model to become entrepreneur. Bruce (2000 and 2002), and Cullen and Gordon (2002) prove that taxes matter for business entry and exit. Djankov *et al.* (2008) show that corporate tax rates strongly affect entrepreneurship. Bruce and Gurley (2005) explain that increases in the

personal income tax raise the probability of becoming an entrepreneur. Hence, the difference between personal income tax rates and corporate tax rates tends to be an incentive to create self-employment.

### Importance of Investor Protection and Corporate Governance

Legal structures and the protection of property rights also influence the attractiveness of a VC/PE market. La Porta *et al.* (1997 and 1998) confirm that the legal environment strongly determines the size and extent of a country's capital market and local companies' ability to receive outside financing. They emphasize the difference between statutory law and the quality of law enforcement in some countries. Roe (2006) comprehensively discusses and compares the political determinants of corporate governance rules for the major economies and focuses on the importance of strong minority shareholder protection to develop a vibrant capital market. Glaeser *et al.* (2001) and Djankov *et al.* (2003 and 2005) suggest that parties in common-law countries have greater ease in enforcing their rights from commercial contracts. Cumming *et al.* (2006) find that the quality of a country's legal system is more closely connected to facilitating VC/PE backed exits than the size of a country's stock market. Cumming *et al.* (2009) extend this finding and show that cross-country differences in legality, including legal origin and accoun-

ting standards have a significant impact on the governance of investments in the VC/PE industry. Desai *et al.* (2006) show, that fairness and property rights protection largely determine the growth and emergence of new enterprises. Cumming and Johan (2007), meanwhile, highlight the perceived importance of regulatory harmonization with respect to increasing institutional investor commitments to the asset class. La Porta *et al.* (2002) find a lower cost of capital for companies in countries with better investor protection, and Lerner and Schoar (2005) confirm these findings. Johnson *et al.* (1999) show that weak property rights limit the reinvestment of profits in start-up companies. Finally and more broadly, Knack and Keefer (1995), Mauro (1995), and Svensson (1998) demonstrate that property rights significantly affect investments and economic growth.

### Importance of the Human and Social Environment

Black and Gilson (1998), Lee and Peterson (2000), and Baughn and Neupert (2003) argue that national culture shapes both individual orientation and environmental conditions, which lead to different levels of entrepreneurial activity in particular countries. Megginson (2004) argues that, in order to foster a growing risk capital industry, research culture plays an important role, especially in universities or national laboratories.

Rigid labor market policies negatively affect the evolution of a VC/PE market. Lazear (1990) and Blanchard (1997) discuss how protection of workers can reduce employment and growth. Black and Gilson (1998) argue that labor market restrictions influence VC/PE activity, though not to the same extent as the stock market.

Djankov *et al.* (2002) investigate the role of several societal burdens for startups in different countries. They conclude that the highest barriers and costs are associated with corruption, crime, a larger unofficial economy, and bureaucratic delay.

### Importance of Entrepreneurial Culture and Opportunities

Access to viable investments is one of the most important factors for the attractiveness of a regional VC market, especially for early stage or start-up deals. The number of potential investments relates to the research output in an economy. Gompers and Lerner (1998) show that both industrial and academic research and development (R&D) expenditure significantly correlates with VC activity. Kortum and Lerner (2000) highlight that the growth in VC fundraising in the mid-1990s may be due to a surge of patents in the late 1980s and 1990s. Schertler (2003) emphasizes that the number of both R&D employees and patents, as an approximation of the human capital endowment, has a positive and highly significant influence on VC ac-

tivity. Furthermore, Romain and von Pottelsberghe de la Potterie (2004) find that start-up activity interacts with the R&D capital stock, with technological opportunities, and the number of patents. Similar to Djankov *et al.* (2002), Baughn and Neupert (2003) argue that bureaucracy in the form of excessive rules and procedural requirements, multiple institutions from which approvals are needed, and cumbersome documentation requirements may severely constrain entrepreneurial activity. Lee and Peterson (2000) stress that the time and money required to meet such administrative burdens may discourage new venture creations.

#### **Summary on the determinants of vibrant VC and PE markets**

The research findings discussed emphasize the difficulty of identifying the appropriate parameters for our index. There is neither consensus about the most important parameters for VC/PE investment, nor any ranking. While some parameters are more comprehensively discussed, and certainly of very high relevance, it remains unclear how these interact. For example, it is debatable whether the VC/PE activity in a country with a high corporate governance level is more affected by the liquidity of the national stock market or by labor regulations. While an IPO exit is, in principle, possible at many stock exchanges in the world, labor market frictions can hardly be evaded.

For the index calculation, it would be ideal to include all parameters. However, some of the cited papers focus on particular economies or regions, depending on the data available, and their datasets are difficult to compare. Therefore, we try to find the best possible proxies for the aforementioned drivers of VC/PE activity, which are available for a large number of countries. From the foregoing review of prior research, we identified six main criteria that ultimately determine the attractiveness of an individual country for VC/PE investments: Economic Activity, Depth of a Capital Market, Taxation, Investor Protection and Corporate Governance, Human and Social Environment, and Entrepreneurial Culture and Opportunities. We regard these criteria as “key drivers”, confirm their choice via a survey among institutional investors, reported in Groh and Liechtenstein (2009b) and (2009c), and base the index structure upon them. Since none of the key drivers are directly measurable, we regard them as “constructs” and seek for data series that adequately express their character.



# The 2009/2010 Index

## Assessing six latent key drivers

The basic and important principle of our index is to make use of “latent drivers”. These are criteria that are not directly observable, but driven by others and which can be measured. For example, while we do not get data on the number of investment banks, law firms, accountants, or consultants to assess the infrastructure of the deal supporting institutions for the majority of our sample countries, we can gather more general information on the level of debt provided by the banking sector, or estimates about the soundness of banks, the sophistication of the financial system and the ease of access to loans. We assume that the better these criteria are developed, the more deal supporting institutions will likewise exist to facilitate VC and PE activity. This principle is maintained at all individual stages for the index construction. An unobservable criterion is assessed with several proxy parameters. In principle, we measure the attractiveness of a country by six main criteria. The choice of these criteria is based on our own experience, the above review of academic literature and a survey we undertook among limited partners.<sup>2</sup>

We call them the “six key drivers” :

1. Economic Activity
2. Depth of a Capital Market
3. Taxation
4. Investor Protection and Corporate Governance
5. Human and Social Environment
6. Entrepreneurial Culture and Opportunities.

As discussed before, these six key drivers are not directly observable. For this reason, we disaggregate them, and use several proxies for their assessment.

2. The results of this survey are described in two academic working papers : Groh, Alexander and Liechtenstein, Heinrich (2009b) : International Allocation Determinants of Institutional Investments in Venture Capital and Private Equity Limited Partnerships, IESE Business School Working Paper No. 726, and in Groh, Alexander and Liechtenstein, Heinrich (2009c) : How Attractive is Central Eastern Europe for Risk Capital Investors ? Journal of International Money and Finance (28), 4, p. 625 – 647. Available at <http://ssrn.com/author=330804>.

## How we disaggregate the six key drivers

According to the principle to assess latent drivers of VC and PE attractiveness with observable data we disaggregate the six key drivers in sub-categories. These categories are either actual data series or further sub-constructs, and we call them “level 2 constructs”. For example, in Table 1, we find, the key driver “2 Depth of a Capital Market” split into five sub-categories: “2.1 Size and Liquidity of the Stock Market”, “2.2 IPO Market Activity”, “2.3 M&A Market Activity”, “2.4 Debt and Credit Market”, and “2.5 Financial Market Sophistication”. The last sub-category is a data series provided by the World Economic Forum (WEF), all the others are constructs by themselves. For example, we assess “2.1 Size and Liquidity of the Stock Market” with three different data series (and call them “level 3 data”): the “2.1.1 Market Capitalization of Listed Companies”, the “2.1.2 Total Trading Volume”, and “2.1.3 Listed Domestic Companies”. This approach has two major advantages: first, individual data series do not gain too much weight when they are grouped; second, the overall results can be traced to more granulated levels and hence, facilitate interpretations.

## The weighting scheme

We spent a great amount of time with statistical analyses and optimization approaches to determine the weights for the data aggregation. Finally, we came to the conclusion not to apply a statistically sophisticated approach that deserves documentation and discussion, but to choose a simple, plausible, and robust weighting scheme. We apply equal weights for all data series, when we aggregate them to the level 2 constructs. Then again, we use equal weights for the level 2 constructs to aggregate the six key drivers. Finally, the weight of the key drivers depends on the number of level 2 constructs included. For example, “1 Economic Activity” consists of three level 2 constructs, while “3 Taxation” consists of only two.

Overall, we use 22 level 2 constructs for our index, and hence, “1 Economic Activity” receives a weight of 3/22, which is 0.136, while the weight of “3 Taxation” is 2/22 - 0.091. The advantage of this weighting scheme is that the key drivers that consist of more level 2 constructs gain more weight. That way, we also smooth outliers in individual data series.<sup>3</sup>

## Separate VC and PE indices

To account for differences with respect to the two market segments, VC vs. PE, we propose three alternative indices. The first combines both segments. The second focuses on early stage VC and the third on later stage PE only. For the VC and PE indices we simply discard data series that are less important for either market segment: for the VC index, we regard the level 2 construct “2.4 Debt and Credit Market” as relatively unimportant, and hence discard it. When calculating the PE index, we discard “3.1.2 Entrepreneurship Incentive”, “3.1.3 Labor and Tax Contributions”, and “3.2 Administrative Tax Burdens”, and further, “5.1 Education and Human Capital”, “6.1 Innovation and R&D”, “6.2 Ease of Starting and Running a Business” and “6.4 ICT Infrastructure” from the criteria. The weights for the individual index items in the separate VC and PE indices are calculated analogue to the above explained procedure.

Table 1 presents the structures and the weights of the individual data series and constructs for the combined VCPE, the VC and the PE index. In the appendices, we provide detailed information on the data series used to aggregate the index, and all data sources. There, we also explain the exact data aggregation technique.

3. Details about the possible statistical approaches to determine weights for the data series are provided in the academic paper Groh, Alexander, Liechtenstein, Heinrich and Lieser, Karsten (2009a) : The European Venture Capital and Private Equity Country Attractiveness Indices, forthcoming in the Journal of Corporate Finance. Available at <http://ssrn.com/author=330804>.

Table 1: Structure of the VCPE Index, the separate VC, and PE Indices, and the weighting schemes

<b>1</b>	<b>Economic Activity</b>	<b>0.14</b>	<b>0.14</b>	<b>0.18</b>	4.2.3	Intellectual Property Protection	0.33	0.33	0.33
1.1	Gross Domestic Product	0.33	0.33	0.33	<b>4.3</b>	<b>Quality of Legal Enforcement</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>
1.1.1	Total Economic Size	0.33	0.33	0.33	4.3.1	Judicial Independence	0.25	0.25	0.25
1.1.2	GDP per Capita	0.33	0.33	0.33	4.3.2	Impartial Courts	0.25	0.25	0.25
1.1.3	Real GDP year-on-year Growth	0.33	0.33	0.33	4.3.3	Integrity of the Legal System	0.25	0.25	0.25
1.2	Inflation	0.33	0.33	0.33	4.3.4	Rule of Law	0.25	0.25	0.25
1.3	Unemployment	0.33	0.33	0.33	<b>4.4</b>	<b>Regulatory Quality</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>
<b>2</b>	<b>Depth of a Capital Market</b>	<b>0.23</b>	<b>0.19</b>	<b>0.29</b>	<b>5</b>	<b>Human and Social Environment</b>	<b>0.18</b>	<b>0.19</b>	<b>0.18</b>
2.1	Size and Liquidity of the Stock Market	0.20	0.25	0.20	5.1	Education and Human Capital	0.25	0.25	
2.1.1	Market Capitalization of Listed Companies	0.33	0.33	0.33	5.1.1	Quality of the Educational System	0.50	0.50	
2.1.2	Total Trading Volume	0.33	0.33	0.33	5.1.2	Quality of Scientific Research Institutions	0.50	0.50	
2.1.3	Listed Domestic Companies	0.33	0.33	0.33	<b>5.2</b>	<b>Labor Market Rigidities</b>	<b>0.25</b>	<b>0.25</b>	<b>0.33</b>
<b>2.2</b>	<b>IPO Market Activity</b>	<b>0.20</b>	<b>0.25</b>	<b>0.20</b>	5.2.1	Difficulty of Hiring Index	0.25	0.25	0.25
2.2.1	Market Volume	0.50	0.50	0.50	5.2.2	Rigidity of Hours Index	0.25	0.25	0.25
2.2.2	Number of IPOs	0.50	0.50	0.50	5.2.3	Difficulty of Firing Index	0.25	0.25	0.25
<b>2.3</b>	<b>M&amp;A Market Activity</b>	<b>0.20</b>	<b>0.25</b>	<b>0.20</b>	5.2.4	Firing Costs	0.25	0.25	0.25
2.3.1	Market Volume	0.50	0.50	0.50	<b>5.3</b>	<b>Bribing and Corruption</b>	<b>0.25</b>	<b>0.25</b>	<b>0.33</b>
2.3.2	Number of Deals	0.50	0.50	0.50	5.3.1	Bribing and Corruption Index	0.33	0.33	0.33
<b>2.4</b>	<b>Debt and Credit Market</b>	<b>0.20</b>		<b>0.20</b>	5.3.2	Control of Corruption	0.33	0.33	0.33
2.4.1	Domestic Credit provided by Banking Sector	0.17		0.17	5.3.3	Extra Payments/Bribes	0.33	0.33	0.33
2.4.2	Ease of Access to Loans	0.17		0.17	<b>5.4</b>	<b>Costs of Crime</b>	<b>0.25</b>	<b>0.25</b>	<b>0.33</b>
2.4.3	Credit Information Index	0.17		0.17	5.4.1	Business Costs of Crime and Violence	0.50	0.50	0.50
2.4.4	Soundness of Banks	0.17		0.17	5.4.2	Costs of Organized Crime	0.50	0.50	0.50
2.4.5	Interest Rate Spread	0.17		0.17	<b>6</b>	<b>Entrepreneurial Culture and Opportunities</b>	<b>0.18</b>	<b>0.19</b>	<b>0.06</b>
2.4.6	Bank Non-performing Loans to Total Gross Loans	0.17		0.17	<b>6.1</b>	<b>Innovation and R&amp;D</b>	<b>0.25</b>	<b>0.25</b>	
2.5	Financial Market Sophistication	0.20	0.25	0.20	6.1.1	General Innovativeness Index	0.20	0.20	
<b>3</b>	<b>Taxation</b>	<b>0.09</b>	<b>0.10</b>	<b>0.06</b>	6.1.2	Capacity for Innovation	0.20	0.20	
3.1	Tax Incentives	0.50	0.50	1.00	6.1.3	Company Spending on R&D	0.20	0.20	
3.1.1	Marginal Corporate Tax Rate	0.25	0.25	0.50	6.1.4	Utility Patents	0.20	0.20	
3.1.2	Entrepreneurship Incentive	0.25	0.25		6.1.5	Scientific and Technical Journal Articles	0.20	0.20	
3.1.3	Labor Tax and Contributions	0.25	0.25		<b>6.2</b>	<b>Ease of Starting and Running a Business</b>	<b>0.25</b>	<b>0.25</b>	
3.1.4	Profit and Capital Gains Tax	0.25	0.25	0.50	6.2.1	Number of Procedures to start of Business	0.20	0.20	
<b>3.2</b>	<b>Administrative Tax Burdens</b>	<b>0.50</b>	<b>0.50</b>		6.2.2	Time needed to start a Business	0.20	0.20	
3.2.1	Number of Payments	0.50	0.50		6.2.3	Costs of Business Start-Up Procedures	0.20	0.20	
3.2.2	Time spent on Tax Issues	0.50	0.50		6.2.4	Minimum Capital	0.20	0.20	
<b>4</b>	<b>Investor Protection and Corporate Governance</b>	<b>0.18</b>	<b>0.19</b>	<b>0.24</b>	6.2.5	Administrative Requirements	0.20	0.20	
4.1	Corporate Governance	0.25	0.25	0.25	<b>6.3</b>	<b>Simplicity of Closing a Business</b>	<b>0.25</b>	<b>0.25</b>	<b>1.00</b>
4.1.1	Disclosure Index	0.20	0.20	0.20	6.3.1	Time	0.33	0.33	0.33
4.1.2	Director Liability Index	0.20	0.20	0.20	6.3.2	Costs	0.33	0.33	0.33
4.1.3	Shareholder Suits Index	0.20	0.20	0.20	6.3.3	Recovery Rate	0.33	0.33	0.33
4.1.4	Legal Rights Index	0.20	0.20	0.20	<b>6.4</b>	<b>ICT Infrastructure</b>	<b>0.25</b>	<b>0.25</b>	
4.1.5	Efficacy of Corporate Boards	0.20	0.20	0.20	6.4.1	Broadband Subscribers	0.25	0.25	
<b>4.2</b>	<b>Security of Property Rights</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	6.4.2	Fixed Line and Mobile Phone Subscribers	0.25	0.25	
4.2.1	Legal Enforcement of Contracts	0.33	0.33	0.33	6.4.3	Internet Users	0.25	0.25	
4.2.2	Property Rights	0.33	0.33	0.33	6.4.4	Secure Internet Servers	0.25	0.25	

**The countries we cover**

The selection of our sample countries is purely driven by the availability of data. We would like to include many more nations but the lack of data is the constraint. At present, the African continent is under-represented with only four countries, but we hope to expand the number of countries in future editions of the index. We consider the following 66 nations and assign them to eight different geographic regions.

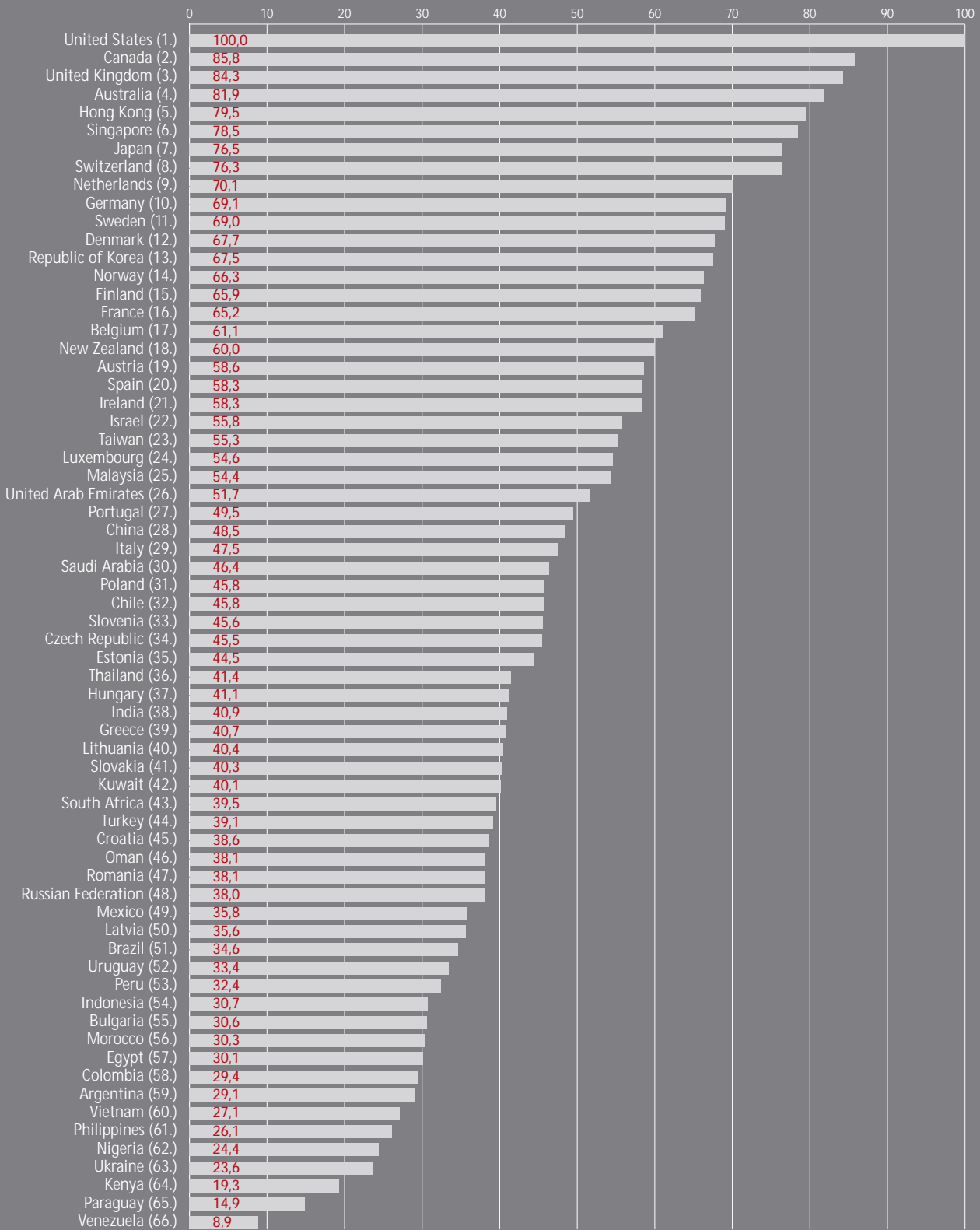
<b>Africa:</b>	Kenya, Morocco, Nigeria, South Africa
<b>Asia:</b>	China, Hong Kong, India, Indonesia, Japan, Malaysia, Philippines, Russian Federation, Republic of Korea, Singapore, Taiwan, Thailand, Vietnam
<b>Australasia:</b>	Australia, New Zealand
<b>Eastern Europe:</b>	Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia, Turkey, Ukraine
<b>Latin America:</b>	Argentina, Brazil, Chile, Columbia, Mexico, Paraguay, Peru, Uruguay, Venezuela
<b>Middle East:</b>	Egypt, Israel, Kuwait, Oman, Saudi Arabia, United Arab Emirates
<b>North America:</b>	USA, Canada
<b>Western Europe:</b>	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom

**The VCPE country attractiveness ranking**

We gathered the data from [Table 1](#) for the 66 countries as far back to the past, and as recent as possible. We calculated the index scores for 2009/2010 and realized, not surprisingly, that the United States is the most attractive country for VC and PE allocations, with some remarkable distance to its followers. Therefore, we use the US as the world benchmark: we rescale the index score for the US to 100. This enables us to directly compare all other countries on a percentage scale. We explain the rescaling procedure in the appendix to this yearbook, and first present the ranking of the 2009/2010 VCPE Country Attractiveness Index.

[Exhibit 1](#) shows the ranking of the 2009/2010 VCPE Country Attractiveness Index. We know that this exhibit opens room for discussion. Some readers might think that particular countries are ranked too high, others too low. However, we want to stress that the index ranking is the result of commonly available, aggregated socio-economic data. The results can be traced to the level of the individual data series, and hence, can be confirmed. We want to remark that the underlying data is historical, and does not include future estimates. Therefore, we show the attractiveness ranking as of today and want to leave it to investors and advisers to enrich the information we prepared with own knowledge, and expectations to draw their conclusions.

Exhibit 1: 2009/2010 VCPE Country Attractiveness Index

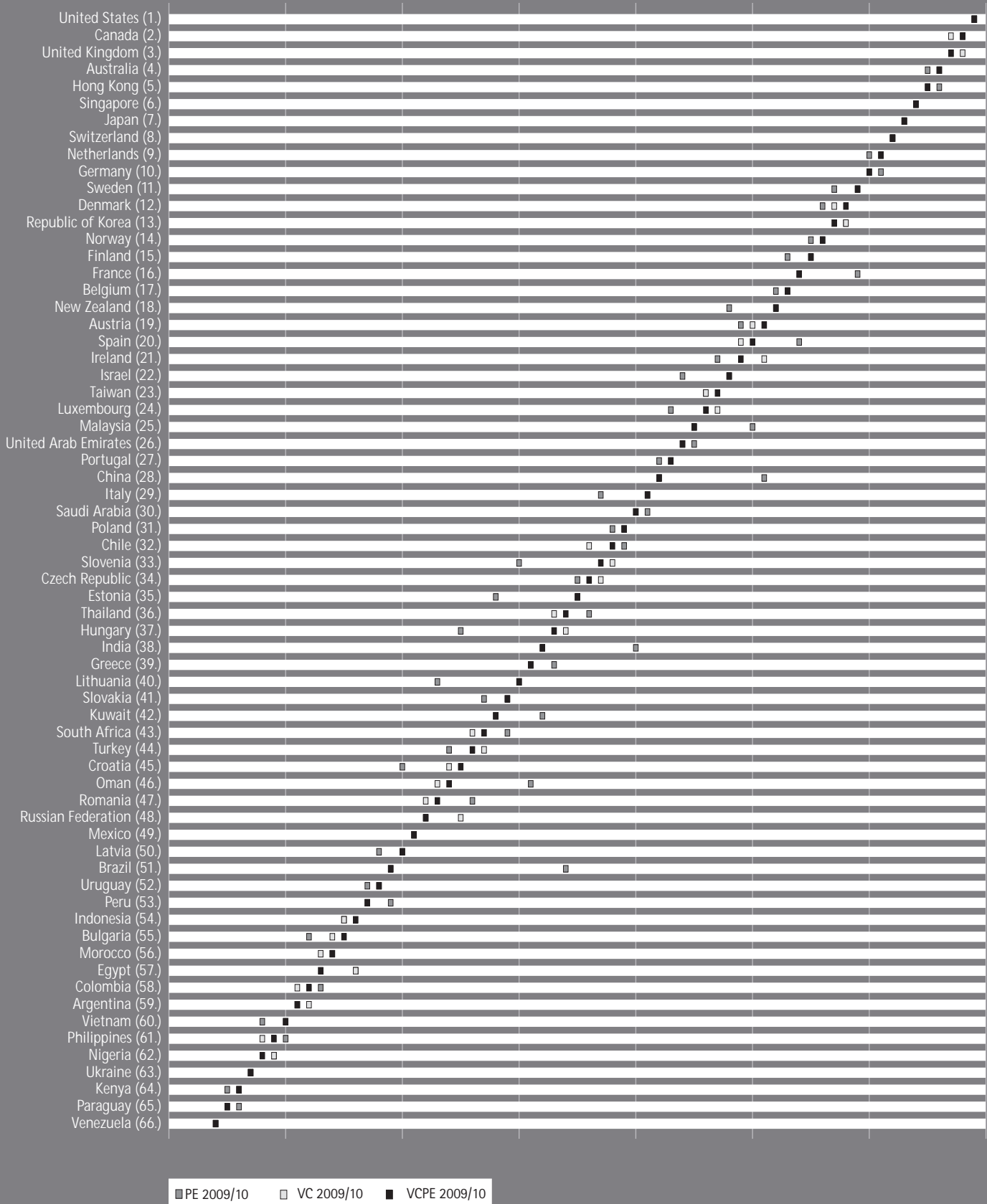


**Rankings according to the separate VC and PE indices**

Exhibit 2 combines the prior results and the ranking according to the separate VC and PE indices. The triangles mark the VCPE index ranks. The diamonds designate the VC index, and the squares the PE index ranks. The VC index country ranking does not change greatly. The ranking remains because we only discard the level 2 construct to assess the "Debt and Credit Market" from the VC index. However, we receive a stronger ranking variation if we focus on the PE segment only. For the

PE index, we discard all constructs that are related to innovations, and founding or running a business in early stages. We realize that Brazil, India, China, France, Spain and Malaysia gain many ranks with respect to their attractiveness for PE investments. The rationale is simple: the aforementioned countries show relative liquid and developed capital markets. As the measure for the depth of a capital market gains a higher weight in the PE index, these countries rank on superior levels, consequently.

Exhibit 2: Rankings of the three different indices



## Comparisons of regions and countries

### The general pattern: What renders the US so attractive?

Next, we break down the index scores to the level of the six key driving forces, and further down to the level 2 constructs to enhance the discussion about the ranking. We find a typical pattern with respect to the dominating attractiveness of the US for VC and PE allocations. We can demonstrate this pattern by comparing the first ranked with the medial ranked, and the final ranked country, the US, Slovenia, and Venezuela. **Exhibit 3** presents the key driver scores of Slovenia and Venezuela relative to the scores of the US (which scores 100 for each key driver).

**Exhibit 3** reveals that the US ranks ahead of Slovenia and Venezuela with respect to all key drivers but Taxation. Emerging economies often attract investors with tax incentives. The criteria that really make the difference are the depth of the US capital market and its legislation and

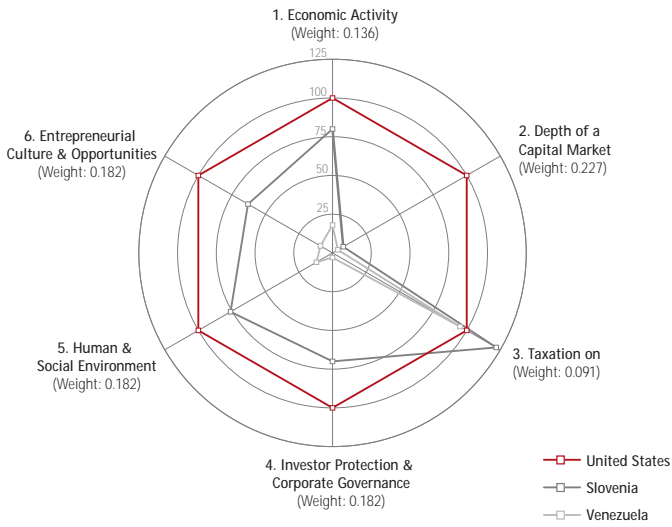
enforcement possibilities with respect to investor protection and corporate governance. This pattern becomes even more obvious in the analyses presented in the appendix, where we benchmark every individual country with the US: there are many economically strong nations with vibrant entrepreneurial cultures and opportunities, with excellent human capital and social environment. However, the finally decisive criteria are the financial markets, and investor protection and corporate governance. That finding points to the discussion about the competition of legal systems, and the relation between law and finance: all strong countries show high scores for the Investor Protection and Corporate Governance key drivers. This likewise spurs the development of a national capital market, which is required for the establishment of VC and PE deal supporting institutions.

### More details

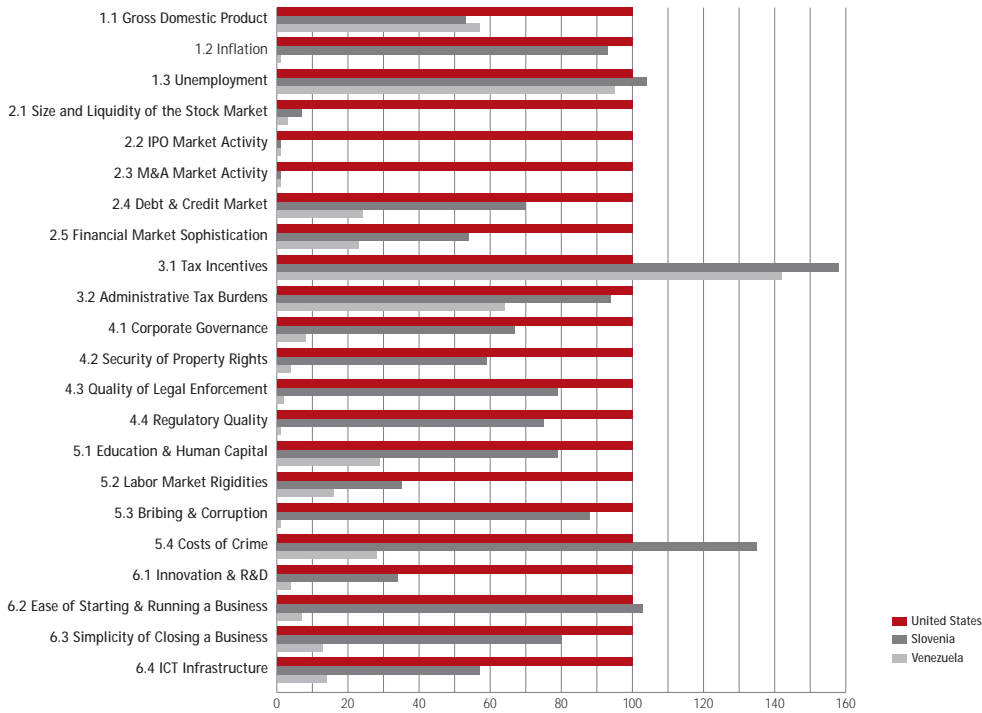
We can break-down our analysis to the level 2 constructs and provide more details to support the general pattern we detect.

**Exhibit 4** points to the remarkable distance between the scores of the US, Slovenia and Venezuela with respect to the level 2 constructs that assess the capital market, investor protection and corporate governance.

**Exhibit 3: Six key driving forces. Comparison of the US, Slovenia and Venezuela**



**Exhibit 4: Level 2 constructs - Comparison of the US, Slovenia and Venezuela**



### Regional comparison

Beside the analyses for the individual countries, we can benchmark geographic regions against each other. We are aware that we should interpret regional comparisons with special care and want to highlight that many of our sample countries already represent somehow geographic regions. The point is that within large countries, such as the US, Russia, China, India, or Brazil the internal socio-economic differences might be larger than those between e.g., some European countries. Therefore, the scores of these large countries represent averages. We know that California attracts more VC and PE than Montana, but we cannot control for small clusters, and the US still receives one single average country score. Hence, we also keep our approach to calculate the index scores for the different geographic regions rather simple: we calculate either GDP-weighted, population-weighted, or arithmetic averages of the different data series, and aggregate the regional scores with these values. We use GDP-weighted averages for the data series that are related to the size of the economy, we use population weighted averages for those that are related to people and we use arithmetic averages for the rest. We highlight that, of course, these averages base on the

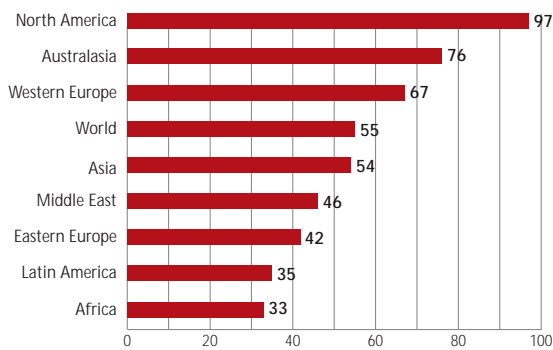
included sample countries only. Hence, especially for Africa, where we cover only four countries, the results should be interpreted with caution.

**Exhibit 5** presents the regional ranking. Again, the score of the US is rescaled to 100. It is in line with the contemporary use of the terms emerging regions and developed markets. Braking-down the index scores to the six key driving forces reveals the same pattern as described before. First, we compare the four leading regions North America, Australasia, Western Europe, and Asia.

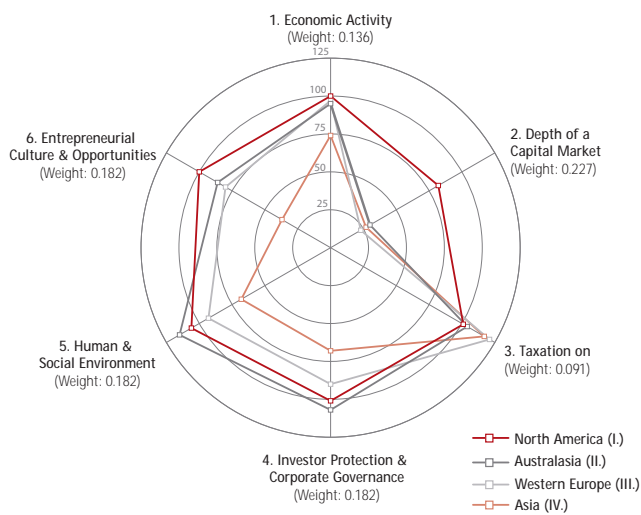
**Exhibit 6** highlights that only the common-law Australasian countries can compete with North America with respect to investor protection and corporate governance. It also shows that, compared to the North America, all other regional capital markets can be considered miniscule. A closer look to the emerging regions confirms this.

**Exhibit 7** compares the emerging regions Middle East, Eastern Europe, Latin America, and Africa. It reveals weaknesses especially with respect to entrepreneurial cultures and opportunities. Attempts to attract investors simply by tax incentives will probably not be fruitful as long as the obstacle of missing deal opportunities remains.

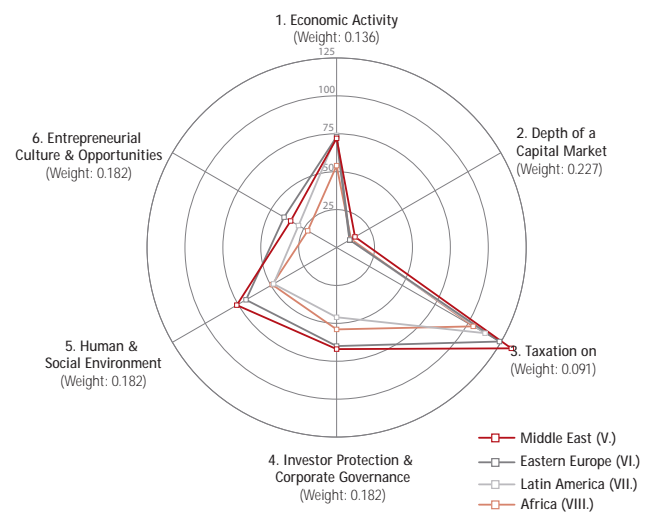
**Exhibit 5: Ranking of geographic regions**



**Exhibit 6: Key driver scores of geographic regions**



**Exhibit 7: Key driver scores of geographic regions**

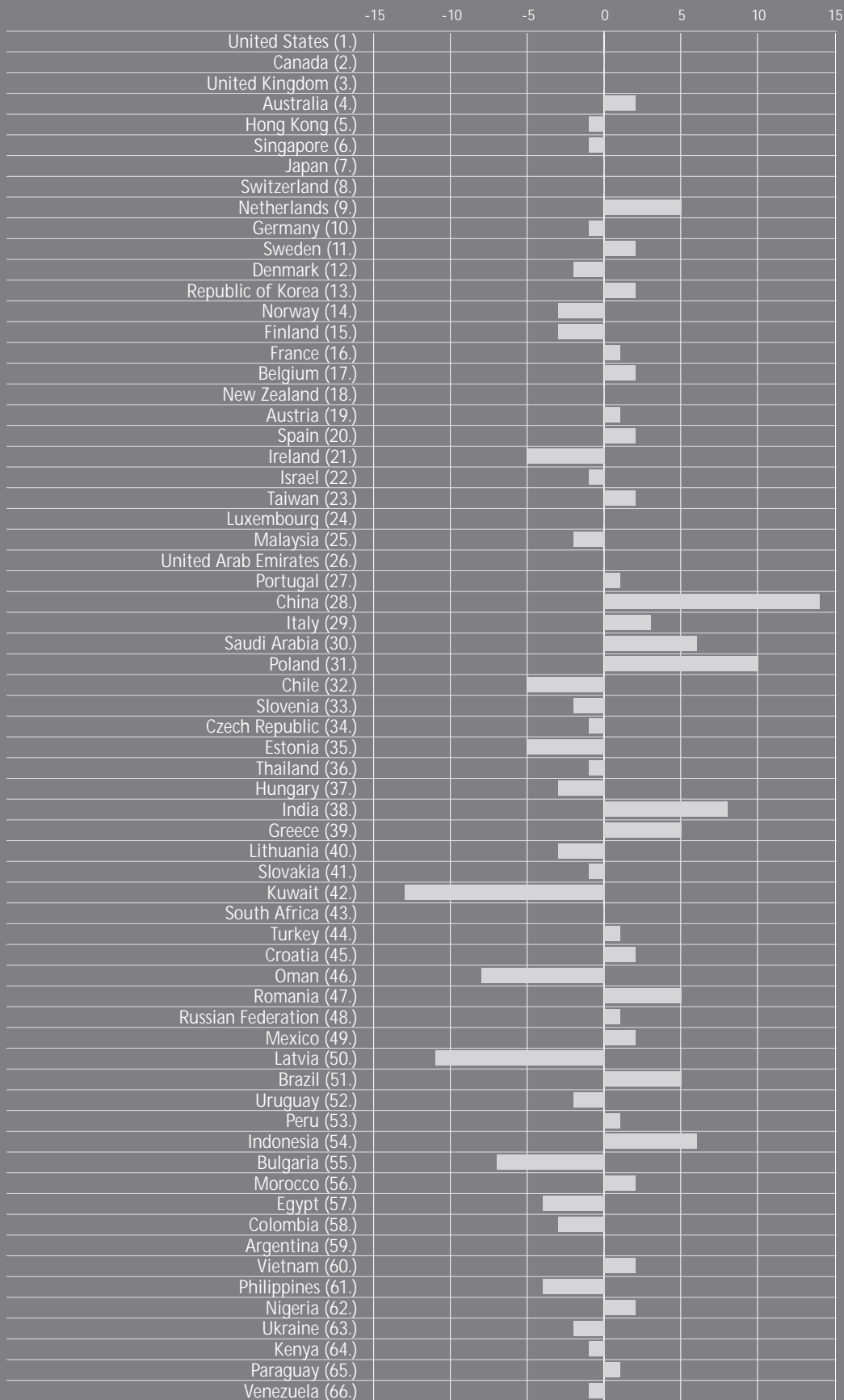


### Historic comparison –improvements of VCPE investment conditions

We can calculate back the index to the past, as far as 2005/2006. Thereby, we should note that some of the data series used (e.g., the General Innovation Index [GII]) do not date back to 2005. However, we assume that indicators like this one did not change to a large extent over the period of interest, and hence, keep them constant. The calculation of the 2005/2006 index allows interesting insights, and reveals the development and rank changes of particular countries.

Exhibit 8 underscores what we are used to learning from daily news about China, and India. Additionally, Poland improved its attractiveness for limited partners quite substantially during the last four years. For details, we refer to the individual country analyses in the appendix of this yearbook. On the left axis of Exhibit 8, we find the countries' current ranks and the bars document the rank changes between the 2005/2006 and the 2009/2010 index versions. Kuwait, Latvia, and Oman are the countries that decreased remarkably in their rankings. Kuwait lost many ranks because of a tax reform with increasing corporate tax rates and deteriorating conditions regarding the protection of investors and corporate governance. Latvia and Oman were both exposed to worsening economic conditions with high inflation during the observed period. However, it should be stressed that the index scores are always calculated relative to the other countries. That means that all the countries that lost ranking positions did not necessarily deteriorate their investment conditions in absolute terms. They might just have been outperformed by others in the international competition for capital resources.

Exhibit 8: Rank changes between index version 2005/2006 and 2009/2010



## Tracking power of our index

The idea of our index is to assess the attractiveness of a country to receive VC/PE allocations from institutional investors based on socio-economic parameters that we regard relevant. The composite measure can deviate from the actual risk capital market activity, and deviations between our attractiveness score and actual activity might either point to under- or over-funding of particular countries, or to the fact that our chosen criteria are not relevant for VC and PE investors. Experience reveals that investors are often influenced by herding behavior and follow trends to invest in certain countries or regions. The countries might not have the “infrastructure” to absorb the investments, leading to over-funding. The “infrastructure” is exactly what we aim to measure: can we expect sufficient deal opportunities resulting from the entrepreneurial culture in a country, from its economic soundness, or from innovations? Are potential transactions sufficiently supported by the financial community? Are the stock and M&A markets sufficiently liquid to facilitate divestments? Are investors’ concerns legally taken care of? We do not claim that our index provides the correct answers to these questions. But, we claim that our index is very helpful in this respect. Therefore, we expect deviations between our attractiveness measure and actual VC and PE activity in the particular countries. However, these deviations should not be great on average. If they are great we would doubt the reliability of our index. Hence, we compare our index scores with

the actual VC and PE activity in the various countries. We use data from Thomson Financial on VC and PE activity. Our activity measure is the natural logarithm of an average of all VC and PE investments made by the general partners in a certain country over the last three years. We use the natural logarithm to account for the large activity divergence (e.g., activity in the US vs. Venezuela), and we use an average over three years to smooth fluctuations. Especially for some emerging countries, annual activity fluctuates strongly from peak levels to zero in subsequent years. We chose the criterion location of the general partners - and not of the investments - for the following reason: some financial centers serve as hubs and channel VC and PE investments abroad. Investors allocate their capital in these hubs because they rely on the efficiency of the financial community there. This is exactly what we measure with our index. In fact, we focus on the demand for VC and PE in a particular economy, and likewise on the state of the professional financial community to support the supply side. Therefore, investments, according to the location of the general partners, correspond best with the idea of our index. Additionally, we use investments - and not raised funds - because our index targets the “absorption-capacity” (either caused by direct local demand or by channeling funds abroad) of the particular economies. Funds raised might deviate from this capacity due to herding behavior of investors or negligence.

The statistical measure for such a comparison is the Pearson Correlation Coefficient. It ranges between 0 and 1, where 0 signals “no” and 1 “perfect tracking”. The coefficient for our index is 0.8104, signaling that the index excellently(!) tracks a country’s capacity to actually “absorb” the committed capital. If we compare the results of our VC index with VC activity, analogue to the above defined activity measure, the correlation is 0.8100. The correlation of our PE index with actual PE activity is 0.7807. Both results are still confirmative. However, the slightly decrease of the tracking power regarding the two separate indices is partly due to inhomogeneous definitions of the two market segments in different parts of the world. In other words, in some cases, VC transactions in emerging countries might rather be called infrastructure investments, or project financing (but not VC transactions) in more developed economies.

### Does the global financial crisis have an impact on the robustness of our index?

We have seen the biggest crisis since the great depression and the question remains whether this has an impact on the robustness of our index. The data for the last quarter of the year 2008 (where quarterly data is available) and later captures the major consequences of the financial crisis. We realize that the impact on economic activity and the depth of the capital market is large for many countries, especially for those that had high ran-

kings with respect to these two key drivers before the financial crisis. IPO and M&A activity has come down significantly. The size and liquidity of the stock markets melted down. The access to loans deteriorated and interest rates increased to peak levels. It became clear that the fraction of non-performing loans is probably the highest seen in banking history, and the soundness of banks might be doubted in several countries. These are all data series we use for our index construction, and we believe that the financial crisis will have a strong impact on all of them. However, the data series are not yet updated for all countries, and hence, we are not able to draw conclusions for the quality of our index at that time.

We assume that these effects will move several emerging countries to higher ranks for one simple reason. The rationale is the typical pattern we discussed above: the high ranked countries are particularly strong with respect to their capital markets. They will be affected most by the financial crisis because they lose disproportionately their competitive advantage by the deteriorated capital market conditions. Several emerging countries with sound growth opportunities, but negligible capital markets will benefit (in terms of index scores) from the crisis. It is said that their economic growth will be affected to a minor extent, only. The crisis will hardly impact their scores with respect to the other key drivers such as Taxation, Investor Protection and Corporate Governance, the Human and Social Environment, or their Entrepreneurial Culture. Therefore,

we expect several emerging countries to strongly improve their position over the course of 2009/2010. However, we have to wait for the following yearbook edition, to provide evidence for our expectations.

### **How our index differs from other, more general indices on competitiveness**

Some institutions provide competitiveness indices or assess the general conditions for making business in various countries. These indices have a broader scope and do not focus on the particularities of the VC and PE capital market segment. Therefore, their rankings usually differ from ours and their tracking power to explain VC and PE activity is lower. For example, the Global Competitiveness Index from the WEF tracks VC and PE activity with 0.69, while the IMD World Competitiveness Index correlates with 0.57 only. This reveals that our index is the more precise indicator for VC and PE country attractiveness. The reason for the superior tracking power of our index is simply that it is tailor-made, according to the particular determinants for vibrant VC and PE markets. There is no other indicator tracking the actual VC and PE activity over the 66 countries, and over time as good as our index.

## Summary and outlook

We provide a composite measure that determines the attractiveness of 66 countries to receive capital allocations from investors in the VC and PE asset class. The composite measure is based on six main criteria: Economic Activity, the Depth of Capital Markets, Taxation, Investor Protection and Corporate Governance, the Human and Social Environment, and Entrepreneurial Culture and Opportunities. The definition of these criteria is based on an extensive review of academic literature, and on a survey we conducted among institutional investors prior to our study. The six criteria are not directly observable, so we use proxy variables to assess them for each country. As a result, we receive a country ranking, and provide detailed analyses on the strengths and weaknesses of the particular nations and information on the historic development of the criteria. Our index tracks real VC and PE activity better than any other existing indicator. However, it shall not be interpreted as a crystal ball for investment advisers. We highlight our intention to challenge discussion and to propose a valuable informational tool, but not an arbitrage instrument.

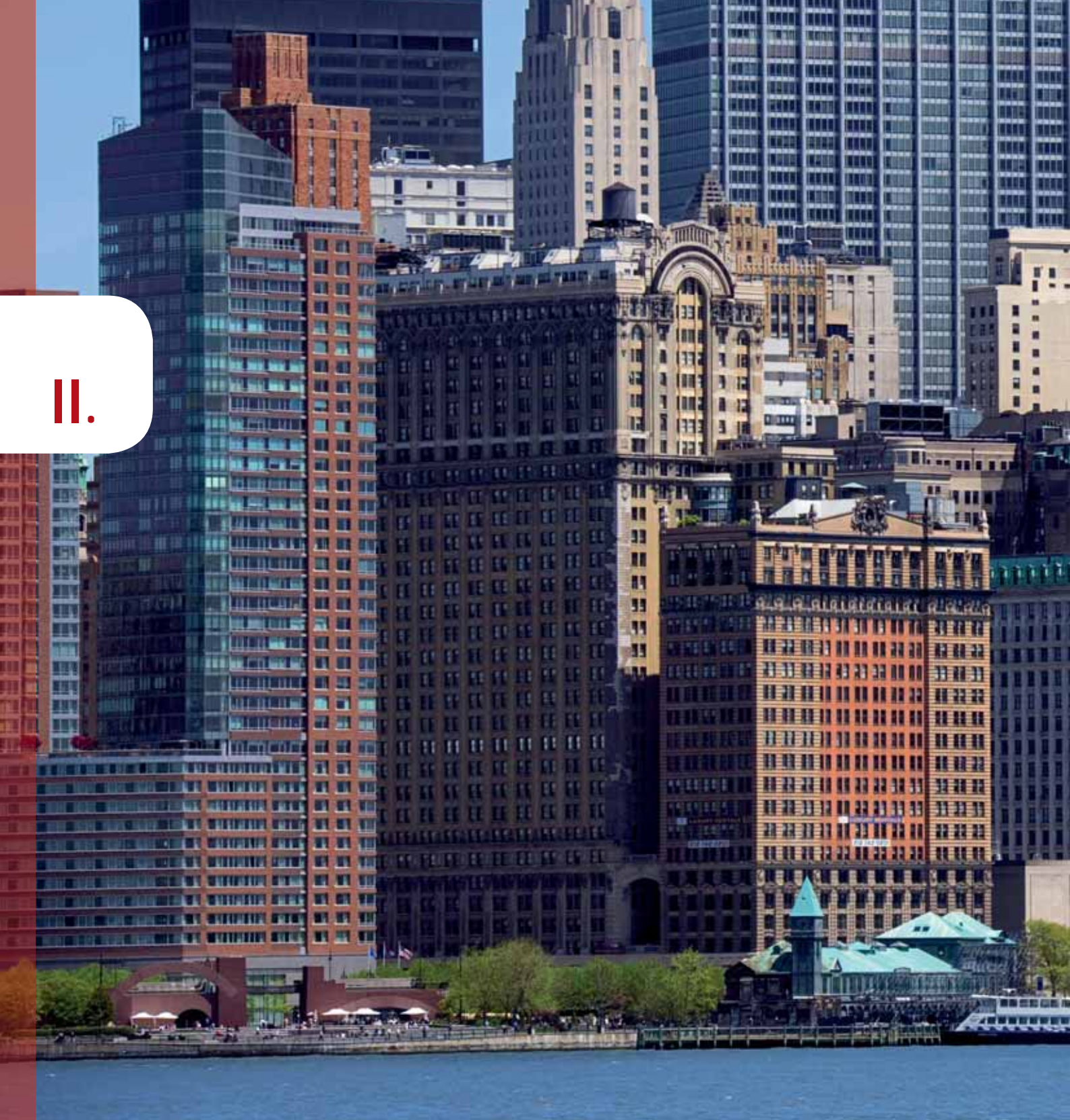
We find a general pattern if we compare the country characteristics. There is a lot of dispersion with respect to the six key drivers. Especially, the emerging countries attract investors with tax incentives. Many countries show strong Entrepreneurial Culture and Opportunities. There is great dispersion in Economic Activity, and in the Human and Social Environment. However, the two key criteria, Investor Protection and Corporate Governance, and Depth of Capital Markets, make the difference. The common law countries dominate the others regarding these criteria. We can conclude that strong investor protection leads to liquid and efficient capital markets, and these evoke the required professional community to secure deal flow and exit opportunities for VC and PE funds. This ultimately affects a country's attractiveness for institutional investments in the VC and PE asset class.

However, this discussion reflects the capital supply side only. We should also take into account that, as revealed in our analyses, many countries lack several important attractiveness criteria. Without a sufficient entrepreneurial culture and entrepreneurial opportunities, with rigid la-

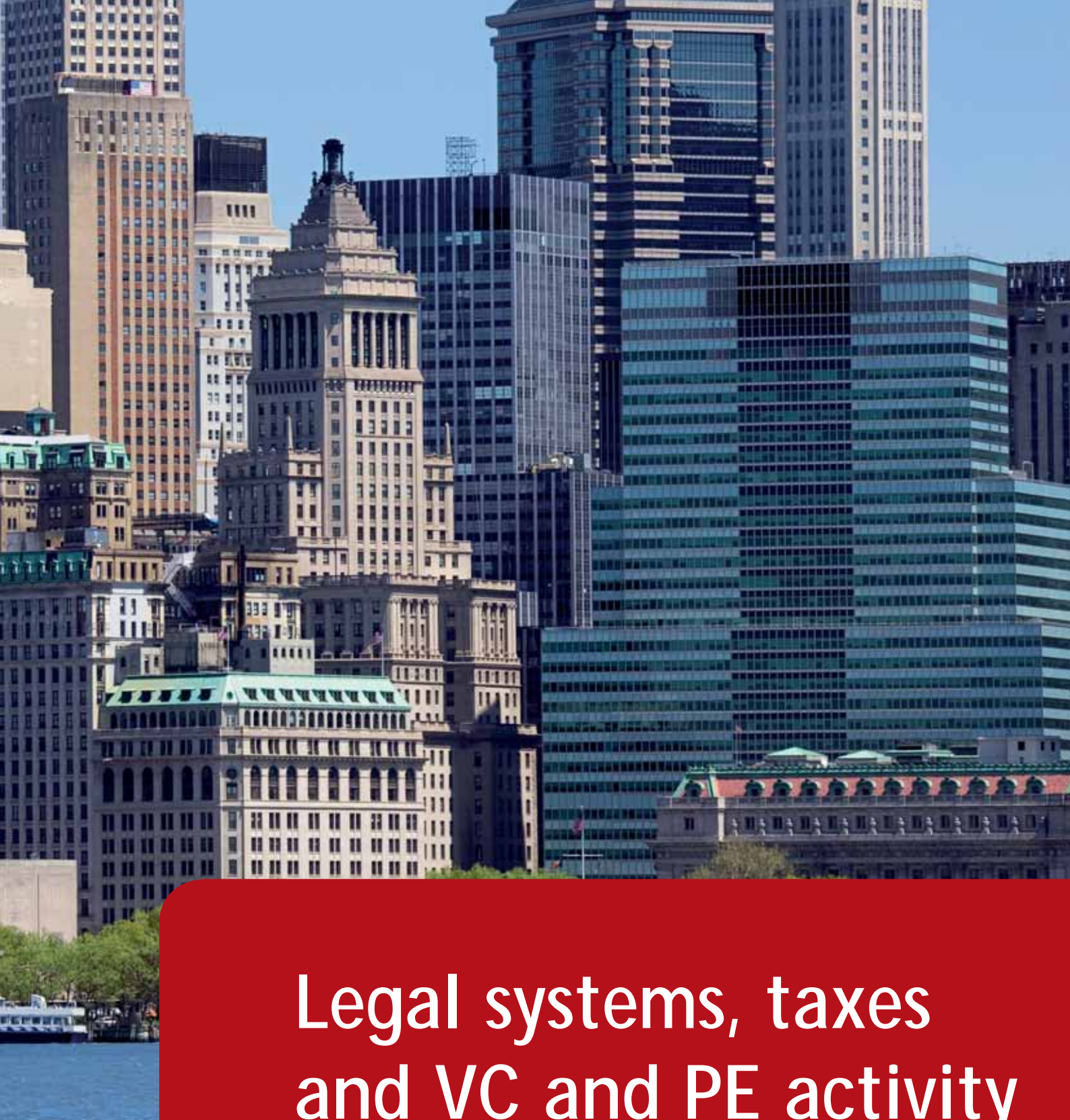
bor markets, bribery, and corruption, there will be no demand for VC and PE. If there is no demand, there is no opportunity to establish a vibrant VC and PE market.

We invite you to observe and thoroughly analyze our results. If you are an investor, please enrich the provided information with your own expertise and knowledge about the key driving forces and market conditions in the particular countries to make your allocation decisions. If you are a politician, please use our analyses as demonstration how investors evaluate and benchmark your country. If you are a researcher, and this is equally valid for the whole constituency, please do not hesitate to criticize our approach. We will continue with annual updates of our index. Thereby, we aim to cover more and more countries, include new data series (discard others), and we will optimize the data selection and index structure. Hence, we very much appreciate any critique and comments.





II.



# Legal systems, taxes and VC and PE activity

# After the storm: a global view on post-recession opportunities and challenges for the PE and VC industry

While the Global PE/VC Country Attractiveness Index reveals contrasting levels of opportunity, Ernst & Young takes a strategic view on the changing conditions, challenges and opportunities around the world.

After a period of remarkable growth in the amount of money raised and invested by VC and PE funds in the period up to 2007, the past two years have brought a number of major challenges to the industry – supporting existing investee companies, the backlog of exits, new deal pricing, debt finance constraints, fundraising, and the regu-

latory and tax regimes in which these funds operate. But the dynamic environment also brings with it opportunities for the funds to make impressive returns for their investors through backing the right businesses through the upturn. The VC and PE industry has a history of evolving to meet the challenges and opportunities it faces, and is doing so again in the context of the recent turbulence.

riod of ownership and then selling well. There are many elements to picking the right deals, of course, but a proper understanding of the geographies in which businesses operate is clearly a key part of the assessment.

## Signs of a positive future

PE funds have a significant amount of capital available to invest, and the PE ownership model can play a key role in helping businesses and the wider economy recover from the downturn. In the current environment, PE can be a solution for large corporates who may divest divisions where they can put the capital to better use elsewhere, for companies which need to time and investment to restructure. It can also be appropriate for companies with the potential to grow through investment, or through the minority investments and strategic partnerships we have seen evolving in recent times. There is recognition that a lot of people made very strong returns in the upturn from the last recession, but at the same time there is a real sense of caution not to jump too early.

In the VC sector, on a longer timescale, the innovation pipeline is quite robust, there is no shortage of capital and capital markets show signs of recovery. The indicators of recovery are, however, still just “signs”.

In both the PE and VC segments, the dramatic slowdown in exits remains a key challenge, as the PE and VC business models only work if the funds can return

## Talent comes to the fore

In investing, as in many industries, a boom period can allow average performers to look very good, whilst challenging times are more likely to differentiate between the best performers and the rest. Many PE and VC funds made excellent returns in the boom years, aided by plentiful cheap debt for the LBO deals and rising underlying markets in general. Many PE funds have spent much of the past 18 months or so working with portfolio companies whose leveraged balance sheets have been strained by the economic downturn. With debt capacity significantly reduced and new debt more expensive and equity markets less reliable as a driver of sustainable increases in valuations, the challenge for funds is to prove to existing and potential LP investors that they can outperform on the fundamentals – in both the PE and VC segments this at its most basic level is about picking the right businesses and management teams, investing at the right time and price, working with the businesses to create value during the pe-

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money to their investors. We have seen some VC-backed IPOs starting to come through again, and there is much speculation around the return of IPOs for large PE portfolio companies, but no-one really knows the pace of recovery or what volume we are going to see. The reopening of exit routes for PE and VC funds will be a major enabler of future fundraising and investing activity.

Geography will continue to be a key factor in future buoyancy, as the Global VC/PE Country Attractiveness Index shows it has in the past, although it is not always possible to generalize about which types of areas will prosper. Many people talk about China as a whole as being strong, for example, but in the US the VC ecosystem of Silicon Valley is the standard against which every other area is benchmarked.

### **A changing tax topography**

The tax treatment of venture capital and private equity is also changing rapidly. With governments easing fiscal purse strings but tightening anti-avoidance in ways pertinent to both VC and PE, investors need clear and up-to-date advice on what to do. In July, for example, the Obama administration proposed legislation that affects foreign investment in US funds – from next year, funds might have to consider how they restructure to attract foreign investment. Another big issue is the limitation of interest deductions – first applied by Germany and subsequently seen in Denmark and

Italy – which could continue to creep across Europe. Venture capital has also been pressured by the changing rules for the carry-forward of losses – in the current environment, many companies are making losses, but if the tax treatment of how those losses are carried forward changes then the investment may become unattractive. But for all of this, the tax implications on PE and VC are largely secondary to the overall quality of investment and the likelihood of a good fundamental return.

### **Picking the winners**

As LPs consider where to allocate their capital, and PE and VC funds look to make the right investments themselves, the investing landscape will inevitably change. There will undoubtedly be comparative winners and losers, and the Global PE/VC Country Attractiveness Index could prove to be a valuable tool in helping funds navigate through this uncertain time.

# Global Venture Capital and Private Equity Country Attractiveness Index - Legal Conclusions

From the perspective of a lawyer involved in private equity transactions and fund formation, the results of the Global Venture Capital and Private Equity Country Attractiveness Index invite certain conclusions. The following will highlight these general conclusions.

## Legal systems

There is a traditional distinction between legal systems of Anglo-Saxon countries, whose legal system built on a common law, and so-called civil law countries whose legal system is in the most part built on statutory law. Results of the index seem to suggest that countries whose legal systems are based on common law are clearly the more attractive countries for VC and PE. The top six spots in all indices are taken by countries deeply rooted in the common law tradition.

A bird's-eye view across jurisdictions suggests that the increased attractiveness of countries following the Anglo-Saxon common law system vis-à-vis the civil law systems are twofold.

PE and VC requires a certain degree of flexibility with regard to capital creation and capital maintenance rules, in particular with regard to structuring transac-

tions and protecting investor equity. PE investors have until very recently relied on leverage and debt push down structures to increase their return multiples. In most jurisdictions following the continental European law tradition such structures are either prohibited or discouraged under strict capital maintenance and/or creditor protection rules. As a consequence, structuring and executing such transactions in jurisdictions following the continental European law tradition is a cumbersome and introduces an additional element of risk because investors and financing banks will not be able to rely on unqualified legal opinions.

VC transactions usually require ratchets and other anti dilution mechanisms to bridge the valuation gap between investors and management/founders. Investors will under preset circumstances require the issuance of additional free shares (e.g., when certain milestones are not met or in the event of "down rounds"). The flexibility in terms of timing when executing such mechanism will in most civil law jurisdictions not be possible because the creation of new shares requires shareholder approval with qualified majorities the adherence to certain notice periods. Moreover, most jurisdictions will not allow the creation of shares without a minimum issue price.

Common law countries generally show greater flexibility with regard to capital creation. Most common law jurisdictions allow issuance of no-par-value-shares or shares with negligible par-value. In addition, rules on capital maintenance will under certain circumstances allow debt-push-down structures and enable

lawyers to give unqualified opinions on such structures.

The second, arguably more pertinent reason may be that common law countries whose economies are based on strong capital markets traditionally give very strong protection to minority shareholder rights and offer a greater transparency to such shareholders. Therefore, given the need for flexibility in structuring and strong investor protection rights, it is not surprising that countries which have common law systems are at the top of the index.

In our view the German, Scandinavian and Netherland civil law systems offer slightly stronger investor protection rights and flexibility with regard to structuring than the more Roman law based countries following the French, Italian and Spanish tradition. This may be part of the reason why countries following the German, Scandinavian and Netherland legal regimes are in terms of attractiveness in the second tier of the index.

The third obvious reason is that common law jurisdictions have traditionally relied more on capital markets as a source of financing while jurisdictions following the continental European approach have resorted to lender financing. As a result, common law jurisdictions have developed capital markets systems which offer strong investor protection rights and forcefully prohibit insider dealings. The common law history of transparency and investor protection has resulted in sophisticated and mature capital markets. Such markets in turn offer both the sources (i.e., targets) for PE as well as an impor-

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tant exit route. In summary, the common law countries were until now more successful in creating a PE and VC friendly environment with an experienced industry of market participants and advisers.

### **Investor protection - strength of judicial system – corruption**

The index clearly shows that countries with a strong judicial system and little or no perceived corruption take the top 20 places in terms of attractiveness.

Countries such as Nigeria, Venezuela or the Ukraine where judicial systems are generally said to be not very reliable and a certain degree of corruption is perceived by market participants rank at the bottom of the index. While economic and tax incentives are helpful ingredients bribery and uncertainty of enforcement of contractual commitments remain strong deterrents for building a vibrant VC and PE community. An example for this trend is Bulgaria which European Union membership notwithstanding remains troubled with regard to enforcement and transparency and thus ranks in the bottom tier of the index.

A good example for the positive development of a country is, in our view, Slovenia. Slovenia has since its accession to the European Union introduced the VC Act of 2007 and has made particular strong efforts to reform its judicial system and fight corruption. As a result, it ranks first among the former communist countries.

Therefore, one can conclude that an experienced and non-corruptible judiciary are the bed-rock for a country to be attractive for VC and PE investments.

### **Specific regulation targeted towards private equity**

The VCPI shows a certain trend: countries, which have enacted specific incentives for VC and PE, tend to be more attractive than countries which have not enacted such rules.

The UK, for example, offers generous tax-incentives to investments in certain funds that target small unquoted high-tech companies, companies in disadvantaged areas or start-ups. Under certain circumstances private individuals can obtain tax relief on investments in unquoted companies and offset losses against income tax should there be no capital gains against which to offset them.

Another good example is Israel whose economy relies heavily on the high technology sector. Israel offers generous tax breaks for founders of start up businesses as well as VC funds. This is one of the reasons why Israel has one of the most vibrant VC scenes outside the United States. Therefore, notwithstanding its precarious geopolitical situation, Israel remains comparatively attractive for VC and PE financings and is ranked top among its peer group.

Another example for a regional winner (Latin America) is Chile where tax profits made by angel or seed capital investors in risk-capital funds are exempted from capital gains.

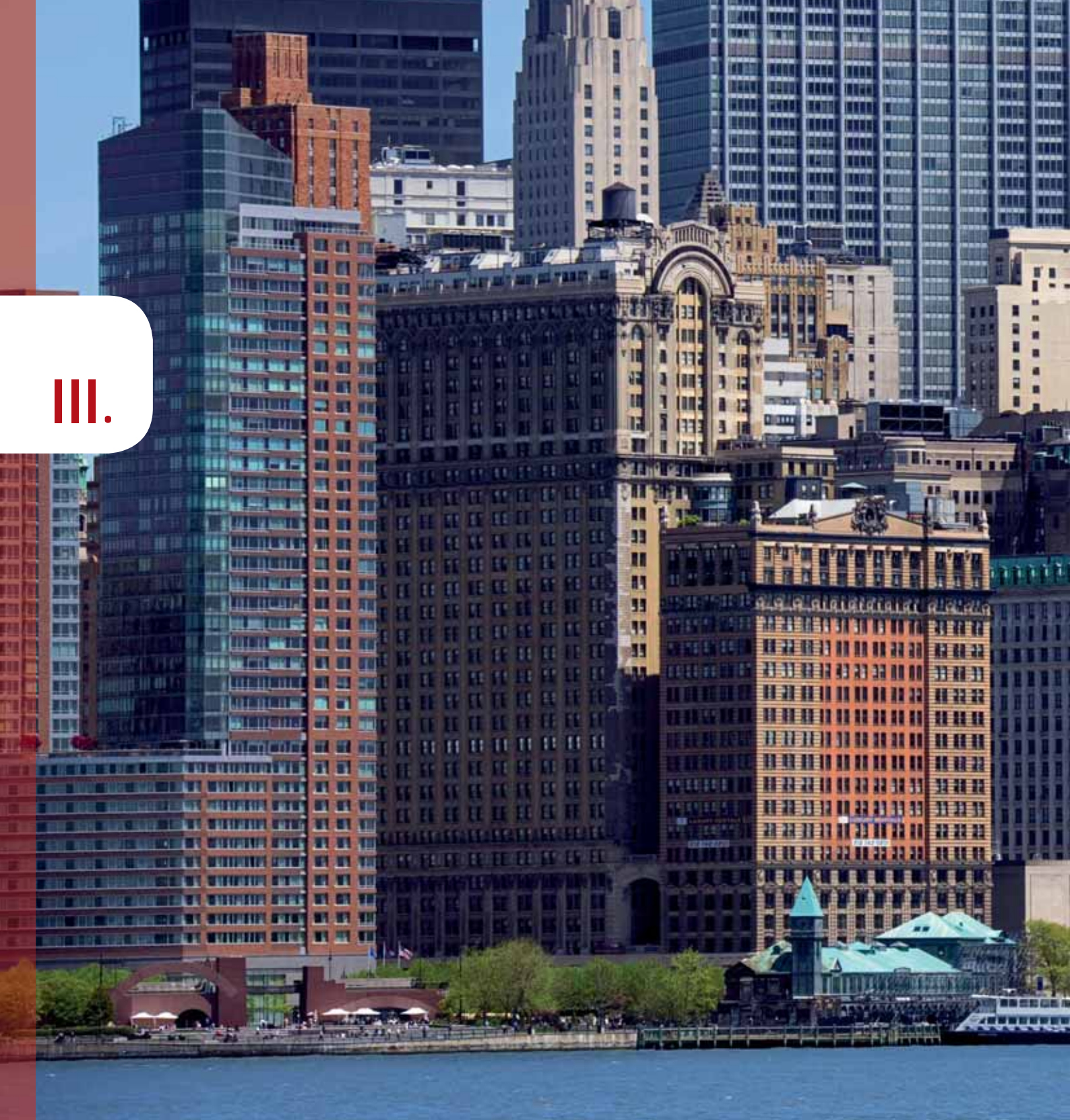
In some instances, however, specifically targeted but cumbersome regulations may not have the desired effect. One example is Austria, where notwithstanding certain legislative efforts, the hurdles to qualify for tax exemptions are

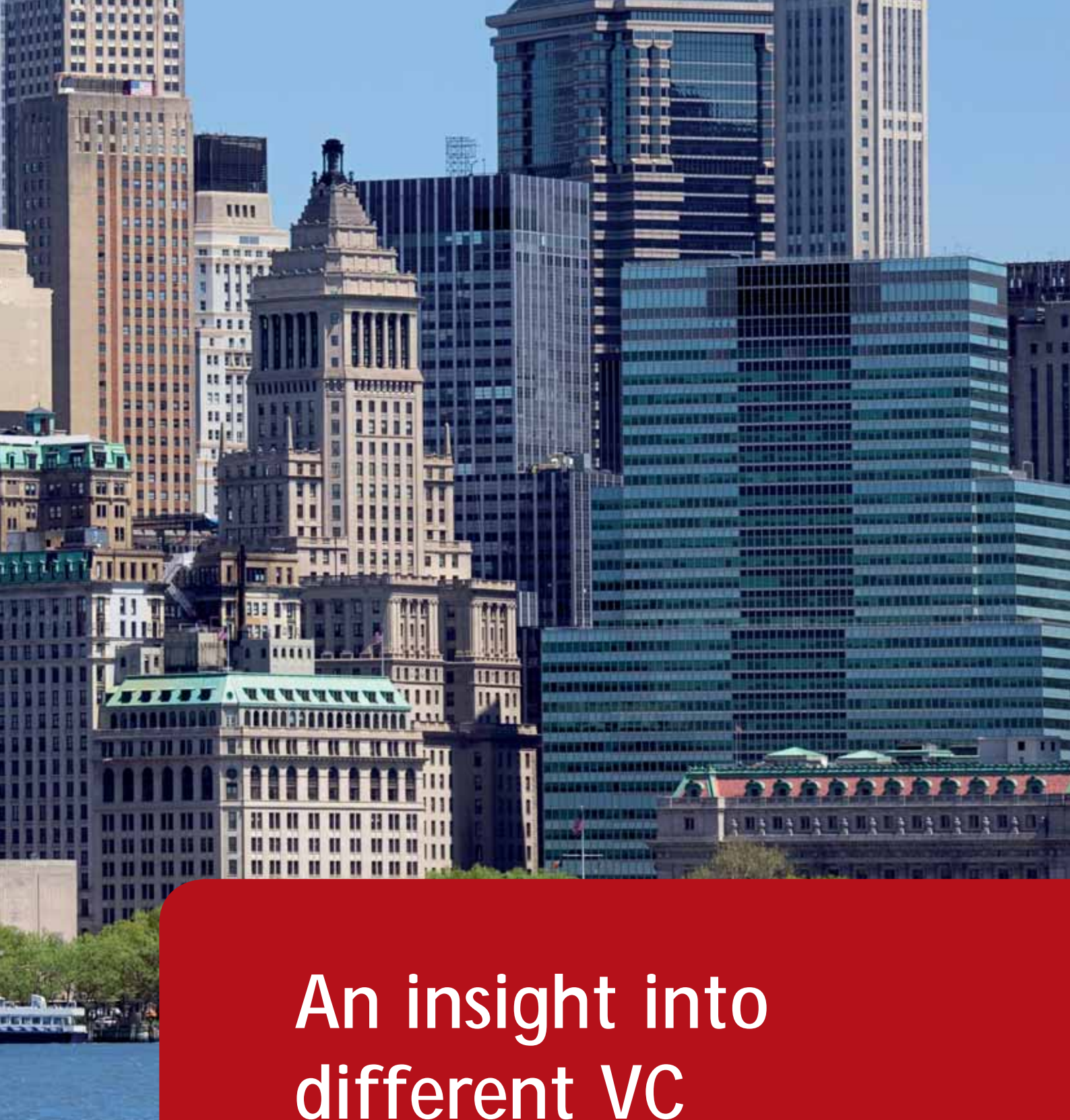
so high that in practice most funds tend to not use the specifically targeted structure but resort to more traditional or/and offshore fund structures. This may help to explain the comparatively low rank Austria takes among industrialised nations.

Other jurisdictions such as Germany have very recently enacted legislation which generally abolishes most tax advantages of certain types of PE funds by introducing a flat rate withholding tax of 25% percent for distributions.

### **Summary**

In summary it appears fair to conclude that jurisdictions with flexible and transparent legal systems with an emphasis on investor protection offer a fertile breeding ground for PE and VC investments. Specific legislation targeted towards improving PE will only improve such environment if tax incentives are not encumbered by hurdles which contravene established commercial market practice.





# An insight into different VC and PE markets

# Africa: Governance, development and budding VC and PE activity

## Introduction

According to a 2008 Organization for Economic Co-operation and Development (OECD) report, PE is "the African investment story to watch."<sup>4</sup> The International Monetary Fund (IMF) estimates that between 2000 and 2007, private capital flows into sub-Saharan African countries increased almost fivefold, from US\$11bn to US\$53bn, with Nigeria and South Africa accounting for about 47% of these figures. Within this, the amount of private equity raised, jumped by 200% between 2004 and 2006, to reach US\$2.3 billion in 2006.

According to the OECD, "This brought sub-Saharan Africa's share of emerging market private equity funds to 7%, which

although well behind Asia (58%), held up well compared to other emerging regions (Latin America: 8%; Middle East/North Africa: 8%; and CEE/Russia: 10%)."<sup>5</sup>

Significantly too, local sourcing of capital has also been on the increase, with a quarter of the funds raised for the continent coming from South Africa e.g., Pamodzi, a South African private equity firm, launched a US\$1.3 billion fund in 2007, Africa's largest. Overall, a lot of the recent activity is coming from sub-Saharan Africa, with South African funds managing 80% of total sub-Saharan VC/PE capital, followed by Nigerian funds with 10%.<sup>6</sup>

Much of this growth is driven by the efforts of an increasing number of African governments to encourage foreign participation in newly liberalized industries such as telecommunications and banking. In addition, increasing government emphasis on investments in infrastructure, along with a growth in the popularity of public-private partnerships (PPPs), were also determining factors for the considerable chunk of funds that ended up in infrastructure-related projects. As African governments turn to the private sector for help in funding urgently needed infrastructure investments (via PPPs), firms and funds with prior experience (mostly located in South Africa and Nigeria), are rolling out and replicating their business models across other countries.

Thus, VC, and especially PE, are acquiring a reputation for driving development, alongside considerable profit, in African countries. Investments in social and economic infrastructure in the areas of financial services, transportation and information and communication technologies are enhancing African development while de-

livering attractive returns to sophisticated investors. Consequently, as the previously cited OECD report put it, PE investments in "consumer-related and communications sectors ... have an arguably stronger impact on Africans' daily lives ... and stand out as a dynamic and diversified counterpoint to classic sources of foreign investment in Africa."<sup>7</sup>

## Structural problems continue to limit VC and PE growth

Nonetheless, although African funds might post higher returns than in many other markets, VC/PE investors in Africa have to contend with a number of socio-political problems which still continue to act as a dampener on growth. Fragile or/and often unrepresentative democratic institutions are still more the rule, than the exception. In many countries, freedom of the press, the rule of law and government transparency remain weak, and corruption is often extensive in the public sector.

Although the effects of the global recession, in the main, are not as severe as in most parts of the West, Africa has not been spared either. The OECD expects Africa's growth for 2009 to fall to 2.8%, after growing above 5% for four consecutive years. Nevertheless, a return to 4.8% growth is expected for 2010. In the meantime, economies like Nigeria, which are heavily reliant on commodity exports, will be harder hit in 2009/2010. In addition, persistent high prices of internationally traded food (e.g., grains and vegetable oils) and moderately rising inflation, will affect consumers, especially the urban poor.

As a result, in the short to medium term, most of the promising deals will continue to revolve around infrastructure, both social and economic, as well as around basic

4. Dickinson, T. 2008. *Private Equity: An Eye for Investment under African Skies?* OECD Development Centre Policy Insights 60: 1-2.

5. Ibid.

6. Ibid.

7. Ibid.

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needs, such as power and communication. For as long as consumer purchasing power remains low, there will be limited absorptive capacity for major funds outside the relatively wealthier African countries.

### **Africa retains a very strong medium- and long-term potential**

Nevertheless, there is a virtual consensus that Africa's long-term prospects remain attractive. Very often, steady positive and economically significant progress goes unnoticed by news channels more attuned to spectacular (usually negative) news.

For example, although democracy admittedly remains weak in many African countries, weak democracies are still a step forward from military dictatorships. As the Economist Intelligence Unit points out, "Over the next five years there will be national, multiparty elections in nearly every country in sub-Saharan Africa."<sup>8</sup> Less than 20 years ago, Africa's 54 countries were embroiled in about 10 major wars (none of which remain today), and the majority did not have functioning democracies. Today, the African country that does not profess a democratic system (even if inefficiently implemented) is very much the exception.

In fact, in a few countries, the last 10 years have also seen the appearance of a crop of younger, savvier political leaders who have begun to usher in economic development, attracting fresh investment and creating the conditions for local entrepreneurship to thrive. Such stable progress, even from poor initial conditions, creates attractive virgin soil in which VC/PE investors can find risk diversification, along with attractive returns.

The US\$3.4 billion PE-backed buyout of Mo Ibrahim's Celtel in 2006, for instance,

is emblematic of the rising opportunities in Africa's telecommunications and other infrastructure-related sectors. Similarly, Vodafone recently acquired full control of Vodacom Group Ltd, South Africa's leading wireless operator. In November 2008, it bought an additional 15% of Vodacom from Telkom South Africa Ltd., for US\$2.82 billion, raising its stake to 65%. The purchase valued Vodacom, which has 39.6 million customers in five African countries, at about US\$19.3 billion. Meanwhile, Bharti Airtel Ltd., India's largest mobile-phone operator, and Johannesburg-based MTN Group Ltd., Africa's largest operator, are in talks to buy stakes in each other to create a company with annual sales of US\$20 billion and 200 million subscribers, making it the third largest in the world. Almost 400 million Africans now have mobile phones, and Africa was the first region in the world to offer free, mobile roaming services across several countries.

Other recent deals have seen US\$382 million raised in November 2008 for Nigeria's first PPP, (and the first PPP toll road in West-Africa), the Lekki-Epe Expressway in Lagos; as well as the 2007 investment of US\$130 million in Diamond Bank (a West African bank) by Actis.

In these markets, the innovative use of information and communication technologies e.g., to scale up levels of bank-users, building on the ubiquity of mobile phones, is vital for breaking barriers to market development. For example, in Kenya, where only 26% of the population has a bank account, mobile-payment services have attracted over five million users in less than two years.

Nevertheless, good governance and the reduction of corruption remain as important as ever, since the deterioration of the economic situation could jeopardize

some of the advances made toward greater democracy and better governance. Yet, compared to 10 years ago, wiser macroeconomic policies and recent multilateral debt-relief will stand African economies in good stead. In addition, growing ties with Latin America and Asian emerging economies as development and trade partners reduce the continent's vulnerability to the global recession.

### **Governance and investment**

In the long term therefore, Africa's prospects are hinged on balancing macroeconomic fundamentals and structural reforms (infrastructure development, institutional improvements and poverty-reduction programs); sustainable fiscal policies; transparent governance; socio-political cohesion; a business-conducive environment; removal of hurdles to ICT infrastructure development; improved regulation and regional economic development.

Paul Collier, Professor of Economics at Oxford University, in a recent interview with Finance and Development said aid to Africa hasn't worked because the focus has been almost exclusively on macro issues: "It's largely a microeconomic agenda and so the macro depends upon the micro."<sup>9</sup>

To Collier, "The micro agenda that seems to work there involves freeing up firms to be able to enter quickly and exit quickly. Using the database from the World Bank's Doing Business surveys, this is what we find. Where countries have easy entry and exit for firms, the consequence of a falling commodity price is much smaller for GDP."

Multilateral organizations, economists and analysts say Africa needs a prolonged phase of investment – in physical infrastructure through public and private ca-

8. "Africa votes", The Economist Intelligence Unit ViewsWire, July 1st 2009.

9. "Still the Bottom Billion", Finance & Development, 46(2): June 2009.

pital – to catch-up with the rest of the world. According to Collier, “To catch up, to converge with other economies, (investment in Africa) needs to be over 30%. So they must move from under 20% to over 30%. That’s a big change.”

Governance also makes a huge change. The World Bank’s 2009 World Governance Indicators (WGI) lends weight to this. The report remarks that “improved governance strengthens development, and not the other way around. When governance is improved by one standard deviation, infant mortality declines by two-thirds and incomes rise about three-fold in the long run.” The rule of law provides stability. Stable laws mean businesses can predict, to some extent, future risks on potential outcomes. Risks are also minimized when there are legal institutions that curtail corruption, enforce property rights and enforce contracts.

### **African results in the Global VCPE Index**

In summary, Africa remains a continent with extraordinary potentials and challenges. The recent past has seen rapid development in Africa’s investment potential, but slower development in governance, although there has undeniably been progress on this front as well. These broad brushstrokes therefore present a context within which to understand the results of the VC/PE index. This index provides a glimpse of the opportunities, or lack thereof, facing the featured African countries.

Africa as a continent maintained the 8th position in the 2009/2010 VCPE ranking. As expected, South Africa performs best of the four considered African countries. Factors such as investors’ protection, taxation and capital markets, similar to what’s obtainable in half of the countries surveyed, buoyed South Africa’s position.

South Africa ranked 43rd overall, and 5th among its direct peers. In descending order, Israel, UAE, Saudi Arabia, Kuwait, South Africa, Oman, Morocco, Egypt, Nigeria and Kenya are the countries within this group. Between 2005/2006 and 2009/2010, South Africa slightly improved the ranking of the sub-indices capital market, and investors’ protection. Of the four African countries, Morocco’s capital market sub-index moved up the most by nine places. Overall Nigeria was ranked 62nd, slightly above Kenya (64). In Kenya, two factors, taxation and investor protection, declined strongly.

Looking forward therefore, although it is nothing new to remark that Africa remains, unfortunately, the least-developed continent, the massive upside potential that this situation implies, represents a very attractive potential for VC and PE funds, which are able to pick countries and sectors carefully in the short to medium term; as well as for those investors who are able to build significant local knowledge in the medium to long term.

# Asia: Does vibrant entrepreneurial activity and expected growth compensate some weaknesses?

## General points

The overall ranking of Asia as a region seems quite appropriate. It ranks 4th, after North America, Australasia, and Western Europe. Surprisingly, Hong Kong (5) and Singapore (6) beat Japan (7) in terms of overall attractiveness.

Malaysia (25), Taiwan (23), China (28) and Thailand (36) were in the mid-range, with their raw overall scores clustering around the sample average. Indonesia (54), the Philippines (61), and Vietnam (60) were in the bottom 20% of scores and rankings. It is surprising, though, that these countries are ranked so much worse, than for example, South Africa.

Anyway, as we will see below, these rankings may not fully reflect the opportunities in the different Asian markets, but are an interesting basis for actual de-

cision-making for VC and PE investments in the region. The qualitative factors are considered in the discussions below.

## The top Asian countries

Hong Kong took top spot in Asia, ranking 5th overall in attractiveness. It managed to obtain this ranking on the basis of high scores for all the categories, on a consistent basis. Its category ranking was 3rd in Investor Protection and Corporate Governance, 5th in Capital Market, and 9th in Taxation. In fact, Singapore ranks higher with respect to Investor Protection and Taxation. However, Hong Kong's worst position is rank 19 for Economic Activity. It is a small territory, though bigger than Singapore.

Singapore beats Japan and Korea on the basis of its attractiveness in the following areas: (1) Investor Protection and Corporate Governance, (2) Human and Social Environment, and (3) Taxation. It is a regional financial center with transparent, well-defined and well-applied laws and regulations. There are no foreign exchange controls, and capital and dividends, royalties etc., can be transferred abroad without question. Since stock market listings are not restricted to Singapore companies, a number of firms from other Asian countries are also listed at its stock exchange. The latter's rules on listings and disclosures are quite stringent and at par with world standards. Corporations, especially listed firms, play by the rules and correspondingly have good governance structures and enforcement. Thus, firms here will tend to be more transparent than in Japan or South Korea. For the second point, it has very high standard of education, which includes professors and researchers from all over the world. English is the official language. Labor regulations are fair for both employers and employees. But most of all, it has very little tolerance

for corruption. Civil servants are very well paid, with salaries that are at least comparable with the private sector. Taxes are relatively low, especially, at the indirect tax level. Income tax rates for both corporations and individuals are among the lowest in the region and compliance is excellent.

In the case of Japan, it outperforms Singapore only in the areas of Economic Activity and Depth of Capital Markets. In terms of economic activity, the size of its economy, being only 2nd to the United States, makes a lot of difference. Its inflation rate for the past two decades has been very low, and in fact, it fell into a deflationary mode from 1994-2004. However, Japan has only experienced low level economic growth in recent years. In terms of the capital markets, again the size and diversity of listed firms give it a big edge over Singapore. Its banking sector is able to provide credit to domestic firms and the availability of credit information is excellent.

South Korea plays a close third to Japan, which it outperforms only in the area of Taxation. Marginal corporate tax rates are lower than in Japan and more favorable profit tax and capital gains laws govern. It edges Singapore in capital market standing, since it has a larger and more diverse listing of companies in the stock market. The large size of the economy provides it with greater opportunities in M&A than Singapore. It should be remembered that South Korea undertook a very serious corporate and banking restructuring after it was battered by the Asian financial crisis in 1997-98. Its industry has moved to a high level of technology and is fiercely competitive in the world market. It is now threatening Japan in areas the latter used to dominate, such as in LCD technology, cell phones, shipbuilding, cars, etc. It does

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stand fairly close to Singapore in terms of economic activity, since it has recovered very rapidly and effectively from the Asian financial crisis, building up its foreign exchange reserves to absolute levels well above US\$200 billion, or next only to Taiwan in the region. It also has managed to keep the inflation rate relatively low.

### Asian countries in the middle

Taiwan (23), Malaysia (25), China (28), and Thailand (36) may be considered to be in the middle range in terms of overall attractiveness.

Malaysia easily beats China in three areas: (1) Taxation, (2) Investor Protection and Corporate Governance, and (3) Human and Social Environment. The margins are largest in the latter two categories. In terms of taxation, Malaysia's advantage lies in lower corporate and VAT rates. China's VAT rate of 17% is one of the highest in the region. Malaysia also offers better investor protection than China because it functions with a well-established rule-of-law and good corporate governance practices. It has a long tradition of legal excellence, inherited from the British, and a fairly reliable judiciary. Corporate governance is definitely better than in China since it has stricter disclosure requirements, sanctions on directors, etc. In terms of the human and social environment, Malaysia manages a small, but highly effective educational system. Labor laws are clear, and employment and firing are not problematic. Finally, it can boast of little corruption in the government. Therefore, it is more transparent and accountable than China.

Taiwan is slightly ahead of Malaysia. It does better than Malaysia in two categories: (1) Entrepreneurial Culture and Opportunities, and (2) Economic Activity. Entrepreneurial opportunities are at the forefront of computer technology with

world-class brands, and sophisticated design capability. Besides that, it has a wide basis of small-to-medium support enterprises, which have enabled the country to withstand the Asian financial crisis since these were less dependent on external financing. Economic activity is higher than Malaysia given Taiwan's status as an advanced country and slightly bigger population. It follows Malaysia in two areas: taxation and capital market development.

China performs better than Malaysia and Taiwan in two areas: (1) Depth of a Capital Market, and (2) Economic Activity. The size and diversity of its economy is reflected in its capital market. This is mirrored in magnitude and liquidity of listed shares, in opportunities for mergers and acquisitions. It edges Malaysia and Taiwan in the area of economic activity again by virtue of the size of the economy (now the third largest in the world), and its very rapid growth in the last three decades. Annual growth has averaged close to 10% during this period, even with acceleration in the second half of this period. It is one of the few countries that are expected to post a positive growth in 2009 as a result of the size of its domestic market (1.3 billion population), high savings rate, and rapidly expanding middle class. Its main drawbacks are the weak judicial system and difficulty in maintaining the rule of law. Weakness of other institutions, like the media and academia, is also pronounced because of the great control still being exercised by the government (a monopoly of the Communist Party, even though this may only be nominal).

A bit distant third among these middle countries is Thailand. Actually, it outperforms China in half of the six categories of interest, such as (1) Taxation, (2) Investor Protection and Corporate Governance, and (3) Human and Social Envi-

ronment. Thailand has a low VAT rate of only 7% compared to China's 17%. However, it still offers tax incentives to foreign investors, like Malaysia. Finally, it has minimal labor taxes compared to China. In terms of investor protection and corporate governance, Thailand has better regulations on the liability of directors and affords better security of property rights than China, as already explained above. Thailand performs better than China in providing a good human and social environment. This is evident in the ease of firing of labor and lower incidence of corruption, especially with the presence of a more independent and reliable judiciary.

### Bottom three countries

The last three Asian countries are closely bunched together: Indonesia (54), Vietnam (60) and the Philippines (61). In terms of raw score, Indonesia grabs the top spot in three areas: (1) Economic Activity, (2) Depth of a Capital Market, and (3) Human and Social Environment. Surprisingly, Vietnam tops the other two countries in (1) Taxation, and (2) Entrepreneurial Culture and Opportunities. The Philippines managed to get highest scores only in the area of Investor Protection and Corporate Governance. It should be noted that Indonesia, Vietnam and the Philippines, in terms of raw score, are clustered with the lower-tiered Latin American countries like Argentina, Brazil, Colombia and Peru.

Indonesia has the largest economy and the highest per capita income among the three countries. Even though Vietnam had the fastest growth in recent years, Indonesia and the Philippines' growth record are above average. Because of an inflation rate above 20% in 2008, Vietnam lags way behind the other two economies. Actually, the Philippines stick very close to Indonesia in economic activities. Indone-

sia's large economic size makes it also the frontrunner in the capital market, again by a slight margin over the Philippines. This means greater stock market turnover, liquidity, and diversity of firms represented in the market. This means more IPOs and M&A opportunities as well.

In terms of human and social environment, the quality of the educational system and of scientific research spelled the difference between Indonesia and Vietnam. The Philippines lags badly behind the other two in this area. It should be noted that together with China, Indonesia and the Philippines are expected to have positive growth in 2009.

The Philippines rank behind Indonesia because of its economic activity, capital market, and taxation. The size of the Philippine economy was a little less than half of Indonesia in 2008 and growth was slightly slower at 4.1%, compared to Indonesia's 6.0% growth. But the Philippines performed much better in terms of inflation in 2008, clocking at 9.3%, while Indonesia had above 12.0% and Vietnam was way above 20%. The Philippines scored most among the three countries with respect to investor protection and corporate governance. Security of property rights and regulatory capacity were the strong points noted. The courts uphold the right to private property so much that expropriations for infrastructure projects get delayed.

Although it captured the top spot in two areas, Vietnam lagged much behind in the other areas where Indonesia and the Philippines were fairly closed. It ranks high in taxation mainly because of the generosity of tax incentives and lower tax rates. In terms of entrepreneurial opportunity, it bested the other two countries with a ratio of 2:1. This relies much on the ease of starting and running a business. This is surprising, for a

formally communist regime, but understandable, since it is trying to imitate the success of China. It also had a higher ICT infrastructure rating over the other two countries.

For the last tier, the rankings may be almost maintained even with qualitative considerations factored in. Actually, Indonesia has become an increasingly attractive investment area, considering the political and judicial stability that it has recently shown, and its large need for external finance. We think Vietnam comes a far third from Indonesia and the Philippines in view of export vulnerability and weaknesses in capital market development and in investor protection.

### Summary

China, particularly in its consumer sector, is certainly a very interesting country for VC and PE allocations. The breadth of market opportunities due to its rapid economic growth, the depth of talent and the capital markets, overcome the negative factor of poor investor protection. The latter is often addressed by having a reliable domestic partner and a management team that is attuned to the demands of government.

By virtue of their "being part of Greater China", as well as their specific strong points discussed above, we think that Hong Kong and Taiwan are particular attractive too. These territories both offer excellent jump-off points for the China market. Singularly, however, they have sufficiently high levels of income and sophistication in the capital markets that render them especially attractive.

South Korea is technologically very much advanced, supported by a large, highly qualified labor pool. It has a relatively large economy, and a powerful export sector. The capital market has improved dramatically in the last decade. Its currently

depressed export sector, and the improving consumer sector are clear areas where VC and PE can be quite promising, considering a long history of overleveraging. All these would tend to negate a somewhat less favorable situation of its investor protection and corporate governance.

Finally, Indonesia gains attraction. Its continued relatively strong growth since it began more serious reforms after the Asian financial crisis is providing ample opportunities in this largest population in the Association of Southeast Asian Nations (ASEAN). Improved political stability and the judicial system are proving to be responsive to an economy that was thought to be particularly vulnerable to China's emergence as an economic super power in the region. All these would tend to offset negative assessments on investor protection and corporate governance.

# Latin America: VC and PE in Latin America after the crisis

PE funds may become a fabulous tool for promoting economic and business development in the emerging Latin American markets, once the financial crisis starts to recede.

Considering the lack of much previous VC and PE activity in Latin America, the asset class can still be considered a “new species” in the region. However, taking into account the growth levels the asset class experienced in developed markets, the growth potential for VC and PE in Latin America seems enormous.

Worldwide, the total volume raised by VC and PE funds amounts more than US\$3.5 trillion.<sup>10</sup> The funds raised in Latin America are a very small part of this total. However, if the future growth of the asset

10. 2009 Preqin Global Private Equity Review, p. 34.

class in Latin America is only a fraction of what it was in the developed countries, we would be dealing with a phenomenon of considerable magnitude.

## Prospects for Latin America

Although the value of investments in emerging markets has been hit hard by the global financial crisis, we should keep in mind that the sources of the crisis were definitely not the emerging countries. These markets did not suffer any severe credit crises. Mortgages – which triggered the crisis – were not and will not be a cause of concern in the region.

Some Latin American economies might be better prepared to recover from the crisis than several of the more developed economies. They are, in principle, in better economic shape. The level of consumer debt among the Latin American middle classes is much less than that of developed countries and the banking system can be regarded stronger and more stable. A number of Latin American countries have followed orthodox macroeconomic policies, and some have even generated stabilization funds to support their economies.

Experts consider that the Latin American countries that seem to offer best conditions for a strong growth in VC and PE activity are Brazil and Chile.

Brazil is one of the emerging countries with the greatest appeal for the investment community.

- As one of the renowned BRIC (Brazil, Russia, India, and China) countries, Brazil has become an attractive target for VC and PE allocations because of the confidence created by the continuously good economic management of different democratic governments.

- The country's strong appeal arises from the size of its domestic market, the strength of the industrial sector and the expected high growth rates among several Brazilian industries.
- Moreover, the tax law in Brazil includes significant tax incentives for this type of investment.

Chile has been for some years a major target for foreign direct investment. This development could be similar for the flow into VC and PE funds.

- The Chilean economy has a strong foundation built on commodity production, particularly copper.
- The country's political leaders have won the trust of the investment community through the consistent economic policy followed by different democratic governments.
- One example that highlights successful efforts of Chilean policy makers has been the creation of a stabilization fund during the years of strong growth. This fund allows the present government now to soften the impact of the financial crisis.
- The country has a dynamic, modern entrepreneurial class with a strong focus on growth and exports. Within the region, a large number of leading Chilean companies have embarked upon a significant expansion process with investments in neighboring countries.

Another two countries can be added to the former two: Mexico, obviously, because of its strong ties to the US, and Peru, because of its strong recent growth. Similarly, Colombia and Uruguay showed sound economic growth in the last few years.

However, for various reasons, the analysts and the investment community

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are still not convinced about the development of the economies of Argentina, Paraguay, Ecuador, Bolivia and Venezuela.

### **“The Global Venture Capital and Private Equity Country Attractiveness Index”**

This index provides a good snapshot of the status of this type of asset class around the world, especially for emerging regions such as Latin America. By observing the relative position of individual Latin American countries and the region compared to the world, it is possible to infer the opportunities arising from likely future developments.

The index groups multiple factors in six dimensions. Latin America shows strengths in only two of the six dimensions analyzed: Economic Activity and Taxation. Within economic activity, the sub-factor with greatest importance is the annual growth rates of the GDP.

It is precisely in this aspect, where the main opportunities valued by investors in Latin America apparently lie: the region's enormous capacity for investments in businesses that showed growth in developed countries but which are not yet existent or only at infant stages in the region.

With respect to the impact of taxes on the attractiveness of VC and PE in Latin America, it becomes evident that tax incentives contribute comprehensively to the region's appreciation.

On the other hand, the other four dimensions where the region shows weaknesses are: the Depth of Capital Markets, Entrepreneurial Culture and Opportunities, Investor Protection and Corporate Governance, and the Human and Social Environment. Among these, the dimension in which the region is most fragile is the Depth of Capital Markets with

respect to the small number of listed domestic companies, the IPO opportunities, as well as the low dynamic of the M&A market.

Recapitulating, the index shows the importance of the level of economic activity for the development of VC and PE in Latin America. An analysis of the data provided by the index on the region's perceived weaknesses enables us to understand which key factors need to improve to achieve greater growth of the asset class in Latin America.

First, in developed countries, the PE's business model was originally based on extensive leverage. However, the current crisis will lead to a change in the business model, even in the more developed countries, as, at least for some time access to credit will not be as generalized as it was before the credit market crash. Consequently, it will not be possible to finance investments using a leveraged buy-out (LBO) type model. Instead it will be necessary to rely on capital from investors who seek growth.

In emerging countries in general, and Latin America in particular, PE activities were unable to apply the original model due to the lack of local debt finance. In fact, the PE funds showed incipient growth in the countries with the least lending facilities. Within the Depth of a Capital Market construct, the factor Debt and Credit Markets shows an interesting discriminating power between the various Latin American countries. This is not only consistent with the aforementioned, but also with the perception of these aspects in the investment community. For example, Argentina, which was the “Cinderella” of Latin America in the 1990's, now takes a poor ranking position. This is perfectly in line with Argentina's cur-

rent political and economic inclinations. On the other hand, Chile, a country with orthodox economic policies and management, is at the top of the Latin American ranking, with some sub-index rankings as good as those of Germany for example.

The results of the Global Venture Capital and Private Equity Attractiveness Index confirm what experts have been asking for a long time. The index points to the particular determinants for growth of VC and PE activities. We are especially talking about the urgent need for strong capital markets in the region. Depth of capital markets provide one of the main exit routes to investors in VC and PE funds – initial public offerings. This exit route, so common in the more developed markets, is virtually non-existent in Latin America. Consequently, financial investors mostly sell their holdings to strategic buyers.

The index also shows investors' fragility in certain countries from the region with respect to the protection of their rights. The protection of investors' rights is a clear weakness that, unfortunately, is widespread in almost all Latin American countries and inevitably has an impact on the perception of the region as a whole. Within this construct, the item that gives most fragility to the investors' perception of security is the protection of intellectual property. Although almost all of the countries in the region score poorly in these aspects, it is interesting to see how precisely the report differentiates between countries, with, for example, Venezuela at the bottom of the ranking and Chile at the top.

To close my remarks, I want to highlight that it is interesting to reflect on the characteristics of Latin America compared to the world average, using

the index results. The spider chart below shows significant gaps in the perception of the six key driving dimensions for VC and PE markets between the region and the average of all the countries included in the study.

We can conclude that, in general, the results obtained by the index are consistent with each country's economic fundamentals and realities. Consequently, the prepared information provides a valuable tool to enable governments implementing policies that favor investment and economic development, and investors receive important support for their allocation decisions.

