
THE PCI – A GLOBAL RISK INDEX FOR THE SIMULTANEOUS ASSESSMENT OF MACRO AND COMPANY INDIVIDUAL INVESTMENT RISKS

Christina Pakusch

Bonn-Rhein-Sieg University • Sankt Augustin, Germany

Franz W. Peren

Bonn-Rhein-Sieg University • Sankt Augustin, Germany

Markus Arian Shakoor

Price Waterhouse Coopers • Duesseldorf, Germany

ABSTRACT

Companies often have difficulties determining which criteria to base their investment decisions in different countries on. When considering direct foreign investment several risk indices are available. The PCI (Peren-Clement-Index) in its original form was developed in 1998. Its further refinement improves the PCI in three major ways: First, it offers a dynamic adjustment of criteria and consideration of recent changes in the international environment. Second, it provides business specificities of a company or its industrial sector to be considered in addition to macroeconomic aspects by a two-dimensional presentation, which ensures a customized assessment. Third, the PCI allows for consolidating investment decisions by combining a resource-orientated with a market-oriented view. The PCI allows, unlike other indices, a customized and company-specific strategic planning process. Ultimately companies must take up both perspectives in the context of an international investment decision. The use of risk indices in corporate planning for assessing global investments decision creates a fundamentally new of risk assessment.

Keywords: Risk Analysis, Scenarios, Strategic Planning, Country Risks, Internationalization

INTRODUCTION

Companies often have difficulty determining which criteria to choose for their investment decisions in different countries and specific locations. Due to the fact that location decisions cannot be easily revised (Cheng and Kwan 2000; Morschett, Schramm-Klein and Swoboda 2010), it is expected that companies use in a wide range of criteria for their considerations and review of possible sites (Moran 2001;

Berlemann and Tilgner 2006).

Foreign direct investment (FDI) is the financial participation by an investor in a company located in another country that aims to have a lasting impact on the management of that company. According to international standards a lasting influence is to be expected, if the investment represents at least 10% of the company's capital stock in the target country (UNCTAD 2006: 294; IMF (Ed.) 1993: 86).

To consider a FDI decision several risk indices are available. The PCI (Peren-Clement-Index) was published in its original form in 1998 (Peren/Clement 1998). The index is firmly established in the literature as an instructional tool (Wankel 2009: 137; Roebuck 2011: 472; Hiram 2012). The PCI has been further revised into version 2.0 with the following three objectives:

1. Creating a process for dynamic adjustment of criteria and consideration of recent changes in the international environment. These include:
 - Intensification of globalized economic relations, which have led to technology and knowledge transfers in emerging and developing countries.
 - The emergence of outsourcing and offshoring in many industrial sectors.
 - Increasing openness and transparency of corporate decisions due to globally available information and communications technologies.
 - Progress in reduction of tariff and other trade barriers
2. Critics claim that risk indices do not consider the specificities of a company or its industrial sector (Daum, Greife and Przywara 2009: 186). This problem has now been addressed by a two-dimensional presentation, which ensures a customized assessment.
3. Unlike other indices, the PCI uses a theoretical basis to consolidate investment decisions. Fundamentally, it combines two main streams of thought within the strategic planning: combining a resource- and a market-oriented view (Barney, Wright and Ketchen 2001; Newbert 2007).
 - The resource based view looks at the uniqueness of the resources of a site as the basis for competitive advantage. These resources have limited mobility and tradability. They interact with the internal resources of an enterprise (inside-out perspective).
 - The market-based view takes an outside-in perspective. Thus the industry structure (production and sales) affects how a company can be positioned in a market.

These two perspectives are not mutually exclusive, but complement each other. Ultimately companies must address both perspectives in the context of an

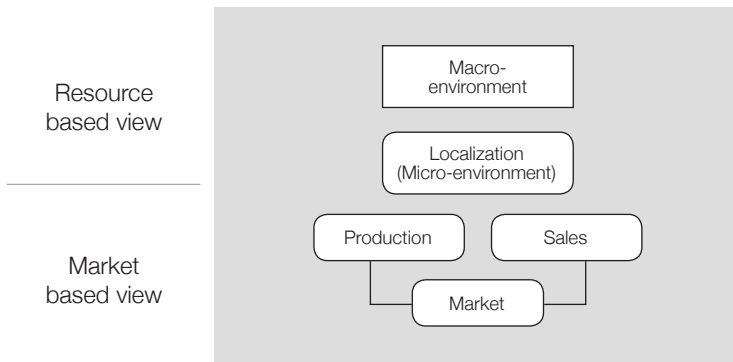
international investment decision and consider them as complementary elements in their strategic planning.

The quality of location of a region can neither be observed nor easily measured. Attempting to measure quality with an empirical study requires that appropriate indicators (variables) need to be identified. As part of an econometric analysis, the market entry motive and the identification of the local production conditions can be identified as significant motives for FDI. Additionally, the political and legal frameworks of a site are important (Tallmann 1988; Chung and Alcácer 2002; Yeaple 2003; Berlemann and Göthel 2008).

FRAMEWORK FOR DECISION MAKING

Investment decisions of companies should correspond to a systematic and structured order. A differentiation must be drawn between the macro-environment and company-individual micro-environment. On the site-specific micro-level, core competencies can be identified that have a positive impact on the individual competitiveness of a company. In addition, concrete production and sales-oriented motives that reflect the supply and demand conditions of an observed market can be found as well. This framework is illustrated in Figure 1.

Figure 1
Framework for decision making of international location decisions



The framework for decision making of these factors is broken down into 20 criteria. These 20 criteria is assigned a point value of 50 points. Each criteria is then weighted from 0 to 2 points, so that the 20 criteria has a maximum total score possible of 100 points.¹

¹The weighting is based on an extensive literature review.

Macro-environment

This category is largely predefined for companies and the elements are exogenous (Table 1). The company observes or anticipates these factors and reacts with strategic adaptation. To assess the macroeconomic environment, a number of current international statistics and aggregate assessments in the form of indices are available that facilitate classification. However, the different norms of these indices and their different characteristics for the measurement and quantification of risk and opportunities for direct investment need to be considered.

A few examples:

- To assess characteristics such as economic policy, legal security and solvency the detailed analysis of the World Economic Forum can be used (World Economic Forum (Ed.) 2014a). A high score in the Global Competitiveness Report (e.g. Switzerland in 2014, rank 1 with 5.67 points) implies a low risk for direct investment, a low score (e.g. Algeria in 2014, rank 100 with 3.79 points), a corresponds to a higher risk (World Economic Forum (Ed.) 2014b).
- The indicator of political and social stability describes the capabilities of a government to implement its program, the unity of government, its legislative power and its public support. A high index value expresses a high degree of stability and is thus associated with a lower risk of direct investment. Relevant data are, for example, provided by International Country Risk Guides (ICRG) (The PRS Group (Ed.) 2014).
- To evaluate the bureaucratic obstacles, data from the “Index of Economic Freedom” developed by the Heritage Foundation can be used (The Heritage Foundation (Ed.) 2014). This index measures the degree of economic freedom on the basis of property rights and the extent of government regulations of the market. Other parameters are government corruption, restrictions on foreign trade, income and corporate taxes, and the rule of law. The highest score is set at 100. A high score (e.g. Hong Kong in 2014 with 90.1 points, rank 1) is associated with greater freedom and tends to be associated with a relatively lower risk of direct investment. A low score (e.g. Indonesia in 2014, rank 100 with 58.5 points) would point to a significantly higher risk due to bureaucratic obstacles to foreign direct investment.

Table 1
Macro-environment Factors

Macro-environment	Points	Weighting	Sum
Political and social stability		4	
Bureaucratic obstacles		2	
Economic policy		3	
Legal security		3	
Solvency		3	
Sum		15	

Localization (micro-environment)

In the globalized world, usually regions, not countries, are competing to attract productive enterprises. Here, other factors, as identified in Table 2, are important and may not be offered, or may be of lower quantity or quality, at other sites. This dimension can be theoretically linked to the resource-based view (Peteraf 1993).

Specifically, a site's endowment of human capital, their transport connections, the existing management skills, their access to markets and the quality of life offered are all important. Additionally, all the above-mentioned factors are impacted by a variety of other items. For example, the quality of life of a site as a "soft factor" is usually higher the lower the crime rate, the better the health care system and the lower the regional price level is, i.e., the higher is the purchasing power of a monetary unit. Other positive effects on the quality of life are cultural activities, education and training opportunities, quality of environment and local recreation and leisure opportunities (Cheng and Kwan 2000; Berlemann and Tilgner 2006).

These factors are generally not transferable and can be duplicated by competing sites only within limits. The importance of these relationships is emphasized by the factor conditions in Porter's Diamond Model (Porter 1990).

In this context the interaction effects between corporate and site-specific resources are especially important. First, local resources affect the attractiveness of a site for companies. Second, the investments of companies add to and generate the development and the know-how of a site (Windsperger 2006). Resources that are available at a site then generate a competitive advantage if company-specific resources and skills are complemented by site-specific resources. Therefore, a change

of location or an alternative location would result in a competitive disadvantage for companies (Peteraf and Barney 2003).

Table 2
Localization (micro-environment) Factors

Localization	Points	Weighting	Sum
Human capital		4	
Transport connections		2	
Management skills		2	
Access to markets		2	
Quality of life		3	
Sum		13	

Even if a country can offer an investment-friendly environment, FDI will not take place unless additional company-specific reasons are present. Theoretical literature and empirical studies differentiate particularly production-oriented and market-oriented elements. Both market aspects- supply and demand- can thus be recorded.

In theory, both dimensions can be linked with the market based view, which was strongly shaped by Porter (Porter 1980), making the analysis of the market an elementary task. Competitive advantages of a company emerge mainly due to the proper selection of a market or segment of a target market and (over time) superior positioning within this market (outside-in view) (Sakarya, Eckman and Hyllegard 2007; Weber 2008: 277).

Production

Of fundamental importance for location decisions is the prevailing economic and property rights, which defines the way in which rights or actions are distributed to economic goods or to the economic actors. These include (see Table 3) for example, the right to use assets (decision and right of use), the right to change the ownership of a property or vary it (right to require a change) or the right to transfer the asset completely or partly (transfer rights). Moreover, freedom of contract and the principle of liability should be clarified before a location decision is made (Berlemann and Tilgner 2006: 18).

Taken as a whole, it can be assumed that a set of economic and property rights, not based on market principles, significantly inhibits the activity of a company and has a negative effect on prospect settlement decisions. In this context, empirical analyzes also demonstrates the importance of property rights on intellectual property (e.g. patent protection).

Establishing a company is often based on cost-oriented motives. This can be, for example, lower labor costs, tax benefits, or purchasing and procurement advantages (Bevan and Estrin 2004). In terms of labor cost advantages the relationship between wages and embodied human capital (unit labor cost) is crucial. Low costs in rich countries, neither define the competitive advantage of companies, nor the economic growth of countries. On a macroeconomic level, low costs and high per capita income in the long run may even be contradictory. The stock of human capital thus acts as a kind of procurement advantage in addition to cost orientation.

For the implementation of investments companies often need additional capital. If an investment cannot be financed with retained earnings and its current shareholders won't add additional funds, other appropriate resources can be procured from external equity with either a loan or the issuance of new equity capital. Accordingly, positive effects can be a well-functioning capital market and the presence of sufficient investment capital.

Likewise, important for a stable production are complementary production sectors that are capable of supplying key raw and auxiliary materials. The motive for purchasing and procurement security is particularly relevant for foreign direct investment in countries that are rich in raw material. Thus, for example, uncertainties in the pricing of preliminary products can be reduced, if company subsidiaries provide the raw materials.

In terms of production-oriented motives, investment incentives are also relevant. They can be provided by the host country, the home country of the investing company, or from multinational agencies. According to the OECD Investment Reform Index, incentives may appear in the following three forms (OECD (Ed.) 2010: 43):

- Regulatory incentives, such as relaxation of working, environmental and social standards.
- Financial incentives, such as grants for training specialized personnel by the government, subsidized loans and guarantees for loans.
- Fiscal and tax incentives, e.g., tax reductions for foreign investors such as reductions in the corporate income tax or a temporary tax allowance and the establishment of special tax-privileged areas.

Table 3
Production Factors

Production	Points	Weighting	Sum
Economic and property constitution		2	
Manufacturing costs		2	
Capital procurement		3	
Complementary production sectors		2	
Investment incentives		2	
Sum		11	

Sales

Location decisions are often based potential market development with the aim at serving a non- or poorly served market (Dunning 1998; Berlemann and Tilgner 2006: 19). Table 4 identifies the factors that are likely to impact sales. Of initial importance is the size and dynamics of the market. High per capita income can be used as an indicator of a well-funded demand and turns an otherwise uninteresting location into a potentially interesting market for local market development investments (Berlemann and Göthel 2008: 41). If trade barriers exist between the current location of a company and the potential sales market, this can require a separate location in the target country. Trade barriers including both tariff and non-tariff barriers. For the successful development of new markets, adequately functioning distribution structures as well as a high level of confidence in the local distributor are of significant importance.

Table 4
Sales Factors

Sales	Points	Weighting	Sum
Size and dynamic of the market		3	
Per capita income		2	
Avoidance of tariff barriers		2	
Reliability of local contractors		2	
Distribution structures		2	
Sum		11	

RISK ASSESSMENT

The design of the PCI is based on the cost-benefit analysis which is also called an Index Scoring Model. The index is thus one of the quantitative, non-monetary, analytical methods of the decision theory.

The objective is the analysis of alternative courses of action for the purpose of organizing preferences for the decision maker in a multi-dimensional scoring system. Results are ordered by specifying the utility values (total) values of the alternatives. The allocation of points is just like other comparable indices e.g. Business Environment Risk Intelligence Index (BERI) (BERI S.A. (Ed.) 2014) – carried out with a subjective point of view. An option can be the Delphi method where points are allocated by various experts.

Based on the degree of fulfillment of the criteria the following points can be awarded:

0	=	not acceptable
0.5	=	questionable
1	=	acceptable
1.5	=	good
2	=	very good

The 20 criteria, which are identified in Tables 1--4 have a total weighting of 50. When each factor is multiplied by the points identified above, a site can receive a maximum of 100 points. Based on this point value each site receives a classification of foreign risks can be constructed as shown in Table 5.

Table 5
Gradation of Country Risks

Gradation of country risks (maximum 100 points)	Points
Hardly recognizable risk	> 80
Low risk	70 - 79
Moderate risk, barriers in daily operations, risk covering recommended	60 - 69
Relatively high risk, strongly defected investment environment, risk covering inevitable	50 - 59
Location is not recommended for direct investments	< 50

Of great benefit is the use of critical variables (knock-out variables). If certain key factors are defined as knock-out variables and a location receives a score of 2 or less among these key factors, a direct investment is rejected. This would also apply even if all other factors had received positive valuations and the overall score showed a good result which made the location appear to be a positive choice.

Examples:

- A company particularly wants to use foreign human capital. However, the de facto use seems questionable. In this case the resulting value is: 0.5 (questionable) $\cdot 4$ (Weighting of the criterion human capital)² = 2 points
- A company intends to benefit from cost advantages in production. In this case, the total evaluation for the criterion must be at least acceptable so that the value is above 2: 1.0 (acceptable) $\cdot 3$ (Weighting of the criterion manufacturing costs)³ = 3 points.

The PCI allows, unlike other indices, a customized and company-specific presentation. The assessment of the investment risk is based on a two-dimensional presentation. Therein both the economical-macroeconomic and the company-individual point of view are combined in a useful way. This approach will now be explained in an exemplary case study.

Case Study

Company A and Company B wish to internationalize through direct foreign investment, and are considering the two countries/regions X and Y. For the measurement and comparative-quantitative assessment of country risks, both companies use the PCI index. The PCI shows a total score of 71 for country X (Table

² See Table 2.

³ See Table 3.

6). This value implies a relatively low investment risk.

The calculation for the alternative country/region Y also reaches a total score of 71 points (Table 7). Company A and Company B now know that both direct investments would be associated with a relatively low risk. However, the site that would be the most appropriate location for the company cannot be derived from the economical-macroeconomic risk assessment.

Table 6
Risk Assessment for Country/Region X

Investment alternative 1: Country X PCI = 71

Macro-environment	Points	Weighting	Sum
Political and social stability	1.5	4	6
Bureaucratic obstacles	2	2	4
Economic policy	2	3	6
Legal security	1.5	3	4.5
Solvency	1.5	3	2.5
Sum		15	4.5

Localization	Points	Weighting	Sum
Human capital	0.5	4	2
Transport connections	2	2	4
Management skills	0	2	0
Access to markets	1.5	2	3
Quality of life	2	3	6
Sum		13	15

Production	Points	Weighting	Sum
Economic and property constitution	2	2	4
Manufacturing costs	2	2	4
Capital procurement	2	3	6
Complementary production sectors	2	2	4
Investment incentives	2	2	4
Sum		11	22

Sales	Points	Weighting	Sum
Size and dynamic of the market	0	3	0
Per capita income	0.5	2	1
Avoidance of tariff barriers	2	2	4
Reliability of local contractors	0.5	2	1
Distribution structures	1.5	2	3
Sum		11	9

Total Score PCI	71
------------------------	-----------

This evaluation deficiency using only the risk indices, shall now be supplemented with another company-individual dimension.

Table 7
Risk Assessment for Country/Region Y

Investment alternative 2: Country Y PCI = 71

Macro-environment	Points	Weighting	Sum
Political and social stability	2	4	8
Bureaucratic obstacles	1	2	2
Economic policy	1	3	3
Legal security	2	3	6
Solvency	1.5	3	4.5
Sum		15	23.5

Localization	Points	Weighting	Sum
Human capital	1.5	4	6
Transport connections	2	2	4
Management skills	1.5	2	3
Access to markets	2	2	4
Quality of life	1.5	3	4.5
Sum		13	21.5

Production	Points	Weighting	Sum
Economic and property constitution	2	2	4
Manufacturing costs	0.5	2	1
Capital procurement	0	3	0
Complementary production sectors	0	2	0
Investment incentives	0.5	2	1
Sum		11	6

Sales	Points	Weighting	Sum
Size and dynamic of the market	2	3	6
Per capita income	2	2	4
Avoidance of tariff barriers	1.5	2	3
Reliability of local contractors	1.5	2	3
Distribution structures	2	2	4
Sum		11	20

Total Score PCI	71
------------------------	-----------

The two companies are pursuing their internationalization with different company-specific goals. The weighting of these goals is shown in Table 8. While it is most important for Company A to develop the overseas market and expand the resources available through acquiring additional resources from foreign locations, Company B focuses on the cost/benefits that can be generated in producing at the foreign location.

Table 8
Company-Specific Internationalization Goals

Internationalization Goals / Company A	Weighting (=100%)
Sales in overseas market	50%
Expanding resources through localization	30%
Safeguard foreign location / strategic importance (macro-environment)	15%
Generating cost benefits (production)	5%

Internationalization Goals / Company B	Weighting (=100%)
Generating cost benefits (production)	70%
Safeguard foreign location / strategic importance (macro-environment)	15%
Expanding resources through localization	10%
Sales in overseas market	5%

The companies now combine this second dimension, shown in Table 8, with the weightings of their individual goals to the individual factors of the PCI. The factors “macro-environment”, “localization”, “production” and “sales,” shown in Tables 1 – 4, with the company-specific goals shown in Table 8. The result is a company-specific, two-dimensional total score, which now allows for a particular goal-oriented decision (fig. 2).

The two-dimensional cumulative scores now clearly shows - in contrast to all prevailing risk indices - which site is best suited for which investor for direct investment. Company A should opt for direct investment in country/region X, since it will best be able to achieve its individual company goals at its best there. Country / region X reaches with company A a company-specific total score of 20.275 points, while the country/region Y is company individually evaluated only with a total of 13.85 points. The reason for the now visible distinction is that the two factors “Sales” and “localization”, which are the most important for company A, (“sales in the foreign market: 50% “and” expanding resources by localization: 30%”) provide a better starting position in country/region A.

Company B wants to internationalize in order to achieve cost advantages in production (“generating cost savings in production: 70%”). Therefore, company B should choose location Y. The country / region Y with a total company-specific score of 21.1 points is much better suited for a direct investment for company B as the country / region X (total score of 10.875 points).

Figure 2
Individual Assessment of Country Risks

Company Specific Country Results: Country X

Company A:

Factor	PCI	Target Weights	Sum
Macro-environment	23.5	0.15	3.525
Localization	21.5	0.30	6.450
Production	6	0.05	0.300
Sales	20	0.50	10.000
Total Score PCI	71	1.00	20.275

Company B:

Factor	PCI	Target Weights	Sum
Macro-environment	23.5	0.15	3.525
Localization	21.5	0.10	2.150
Production	6	0.70	4.200
Sales	20	0.05	1.000
Total Score PCI	71	1.00	10.875

Company Specific Country Results: Country Y

Company A:

Factor	PCI	Target Weights	Sum
Macro-environment	25	0.15	3.750
Localization	15	0.30	4.500
Production	22	0.05	1.100
Sales	9	0.50	4.50
Total Score PCI	71	1.00	13.850

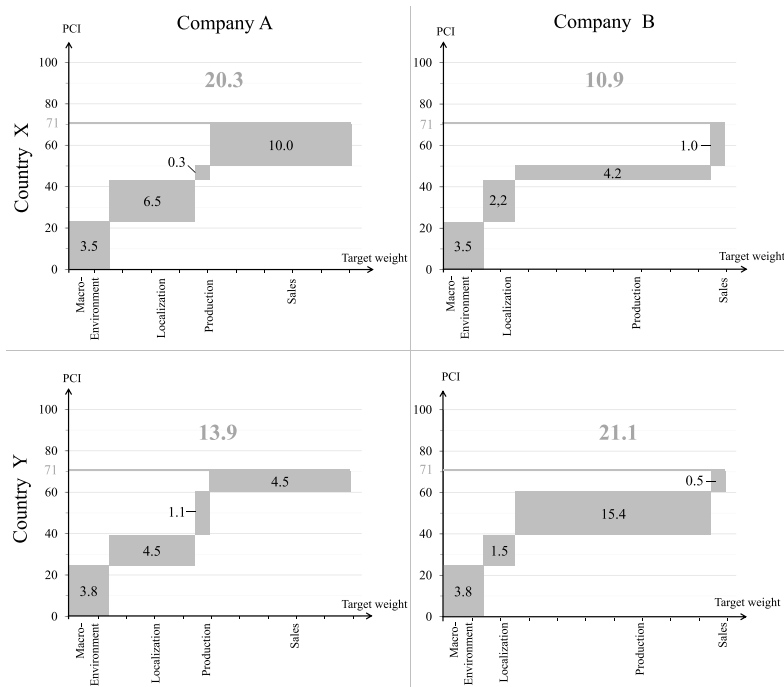
Company B:

Factor	PCI	Target Weights	Sum
Macro-environment	25	0.15	3.750
Localization	15	0.10	1.500
Production	22	0.70	15.400
Sales	9	0.05	0.450
Total Score PCI	71	1.00	21.100

This two-dimensional, graphical presentation clearly shows the advantages of such a combinatorial assessment on an economic macro level on the one hand and company-individual objectives on the other hand, using the example of country/region X versus country/region Y (Fig. 3).

Figure 3

PCI - Simultaneous Assessment on an Economic Macro-Level and Company-Specific Goals in Direct Investments



CONCLUSION

The PCI (Peren-Clement-Index) has been revised and reorganized to reflect and account for changed global conditions. Various levels of assessment are now combined, which should be considered in a direct foreign investment decision.

An international location decision is often performed in stages, the first looks at the macro- and the micro-environment which offers core competencies and will have a positive impact on a company’s competitiveness. In addition, concrete production and sales-oriented motives that reflect the supply and demand sides must also be incorporated into the investment decision.

The index presented in this paper links two main currents of thoughts in strategic planning in the context of an international investment decision -- the resource view and the market-oriented view:

- The resource based view uses the uniqueness of the resources of a site as the basis for competitive advantages. These resources have a limited mobility and tradability. They interact with the internal resources of an enterprise (inside-out perspective).
- The market-based view takes up an outside-in perspective. Thus the industry structure (production and sales) affects how a company can be positioned in a market.

These two perspectives are not mutually exclusive, but complementary. Ultimately companies must consider both perspectives in the context of an international investment decision and use them as complementary elements in their strategic planning.

By a two-dimensional linkage of the economically relevant macro level with the company-individual goals of a prospective direct investment a practical decision-making is facilitated. The use of risk indices in the corporate planning for assessing global investments reaches a fundamentally new quality.

REFERENCES

- Barney, J., Wright, M., & Ketchen, D. J. (2001). The resource-based view of the firm: Ten years after 1991. *In: Journal of Management*, 27(6), 625-641.
- BERI S.A. (Ed.) (2014). The leading country risk rating agency since 1966. URL: <http://www.beri.com/>.
- Berlemann, M., Göthel, M. (2008). Determinanten der internationalen Standortwahl von Unternehmen – Ergebnisse einer empirischen Analyse (Determinants of the choice of the international location). *In: ifo Dresden berichtet*, Issue 4, 33-43.
- Berlemann, M., Tilgner, J. T. (2006). Determinanten der Standortwahl von Unternehmen (Determinants of the choice of the international location). Ein Literaturüberblick. *In: ifo Dresden berichtet*, Issue 6, 14-24.
- Bevan, A. A., Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *In: Journal of Comparative Economics*, 32(4), 775-787.
- Cheng, L. K., Kwan, Y. K. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. *In: Journal of International Economics*, 51(2), 379-400.

- Chung, W., Alcácer, J. (2002). Knowledge seeking and location choice of foreign direct investment in the United States. *In: Management Science*, 48(12), 1534-1554.
- Daum, A., Greife, W., Przywara, R. (2009). *BWL für Ingenieurinnen und Ingenieure (Business for engineers)*. Wiesbaden.
- Dunning, J. H. (1998). Location and the multinational enterprise: A neglected factor? *In: Journal of International Business Studies*, 45-66.
- Hiram, E. C. (Ed.) (2012). *Peren-Clement Index*. Plac Publishing, London.
- IMF (Ed.) (1993). *Balance of Payments Manual*, 5th edition, Washington DC.
- Moran, T. H. (2001). *Foreign Direct Investment*. Blackwell Publishing Ltd., Hoboken, New Jersey.
- Morschett, D., Schramm-Klein, H., & Swoboda, B. (2010). Decades of research on market entry modes: What do we really know about external antecedents of entry mode choice? *In: Journal of International Management*, 16(1), 60-77.
- Newbert, S. L. (2007). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *In: Strategic Management Journal*, 28(2), 121-146.
- OECD (Ed.) (2010). *Investment Reform Index 2010. Monitoring Policies and Institutions for Direct Investment in South-East Europe*. URL: http://www.rciproject.com/rcibhreports_files/IRI.pdf [as of: 30.10.2014].
- Peren, F.W., Clement, R. (1998). Globale Standortanalyse (Global location study). *In: Harvard Businessmanager*, 20(6), 70-77.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *In: Strategic Management Journal*, 14(3), 179-191.
- Peteraf, M. A./ Barney, J.B. (2003). Unravelling the Resource-Based Tangle, *Managerial and Decision Economics*, 24, 309-323.
- Porter, M. E. (1980). *Competitive Strategy. Techniques for Analyzing Industries and Competitors*, New York .
- Porter, M. E. (1990). *The Competitive Advantage of Nations*, New York.
- Reineke, R. D., Bock, F. (Ed.). *Gabler Lexikon Unternehmensberatung*, Wiesbaden.
- Roebuck, K. (2011). *Risk Management Standards: High-impact Strategies – What You Need to know: Definitions, Adoptions, Impact, Benefits, Maturity, Vendors*. Emereo Pty Limited, Brisbane.
- Sakarya, S., Eckman, M., & Hyllegard, K. H. (2007). Market selection for international expansion: Assessing opportunities in emerging markets. *International Marketing Review*, 24(2), 208-238.

- Springer Gabler Verlag (Ed.) (2014). Gabler Wirtschaftslexikon, Stichwort: Peren-Clement-Index, 18th Edition, Volume 4 Wiesbaden.
- Tallman, S. B. (1988). Home country political risk and foreign direct investment in the United States. *In: Journal of International Business Studies*, 219-234.
- The Heritage Foundation (Ed.) (2014). 2014 Index of Economic Freedom. URL: <http://www.heritage.org/index/>. [as of: 30.10.2014].
- The PRS Group (Ed.) (2014). International Country Risk Guide. URL: <https://www.prsgroup.com/about-us/our-two-methodologies/icrg>. [as of: 29.10.2014].
- UNCTAD (2006). World Investment Report 2006. *FDI from Developing and Transition Economies: Implications for Development*, United Nations, New York, Geneva.
- Wankel, C. (2009). Encyclopedia of Business in Today's World, Volume 1, California.
- Weber, J. (2008). *Das Advanced-Controlling-Handbuch, Richtungsweisende Konzepte, Steuerungssysteme und Instrumente*, 2nd Edition, Weinheim.
- Windsperger, J. (2006). A Resource-based View of the Competitive Advantages of Cities: Empirical Results on Advantages for Headquarters in Vienna for Central Europe. *In: South East European Journal of Economics and Business*, 2.
- World Economic Forum (Ed.) (2014a). Reports. URL: <http://www.weforum.org/reports/> [as of: 22.10.2014].
- World Economic Forum (Ed.) (2014b). Global Competitiveness Report 2014-2015. URL: <http://www.weforum.org/issues/global-competitiveness> [as of: 28.10.2014].
- Yeaple, S. R. (2003). The complex integration strategies of multinationals and cross country dependencies in the structure of foreign direct investment. *In: Journal of International Economics*, 60(2), 293-314.

BRIEF BIOGRAPHICAL SKETCH OF AUTHORS

Christina Pakusch is a Research Assistant at the Bonn-Rhein-Sieg University and is a doctoral candidate at the University of Siegen. She received her M.Sc. from the Heinrich Heine University Duesseldorf. Her field of research comprises sharing and service economies and sustainable development with the focus on future mobility.

Franz W. Peren, Ph.D., is a Professor of Business Administration specializing in quantitative methods at the Bonn-Rhein-Sieg University, Germany, where he has taught since 1993, and at the Columbia University in New York,. His practical experience includes working as a consultant for the German automotive industry at

the Federal Ministry of Economics and as a strategy consultant for global companies

Markus Arian Shakoor is a Consultant in Finance at PricewaterhouseCoopers. He studied Business Administration at Bonn-Rhein-Sieg University. He completed his postgrad studies in International Business (M.Com.) at Swinburne University of Technology in Melbourne and in Leadership (M.Sc.) at Northeastern University in Boston.