



Paradise postponed? Venture capital emergence in Russia

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Abstract

Purpose – How does venture capital (VC) emerge in emerging and developing economies? This paper aims to use case data from an early Russian VC fund to extend a previous model exploring that question.

Design/methodology/approach – Case studies of VC emergence from South Africa, Botswana, and Russia are compared, from which a conceptual model is developed.

Findings – VC emerges in a process consisting of four stages: enabling, coproducing, diffusing, and replicating. The Russian case shows that these stages are linked in a circular process, i.e. replicating can lead to enabling. VC emergence can also begin at any stage. A higher degree of public-private coproduction may outweigh the absence of a completed enabling stage, suggesting that strength in one stage can compensate for weakness in others.

Research limitations/implications – This paper invites scholars to reconsider VC emergence in a more nuanced manner that takes into account its complex, processual nature. The inclusion of Russian data also encourages researchers to examine more closely the subtle ways in which the private and public sectors may interact in emerging markets in pursuit of common goals. This study's findings have important linkages with other critical accounts of international business. The study addresses weaknesses in earlier literature by employing a multi-disciplinary, cross-context approach that utilizes data from a foreign VC investing in Russian small to medium-sized enterprises.

Practical implications – VCs considering investment in Russia should examine how early entrants to the industry formed cooperative relationships with local governments. Policymakers should re-examine the relative importance of national and local efforts to promote VC and other innovation-related initiatives in emerging markets.

Originality/value – This study moves beyond current economics-dominated understanding of VC, which focuses on antecedents (enabling conditions). It reports the central role of public-private coproduction in VC emergence, the feedback between diffusion and coproduction in emergence, and, most importantly, the diminished importance of enabling conditions. This paper presents the first fund-level study of Russian VC.

Keywords Venture capital, Emergence, Russia, Transition economy, Case studies, Emerging markets, National economy

Paper type Research paper



Introduction

Russia's road to an innovation-driven economy has been of growing interest to researchers (Bruton and Rubanik, 1997; Kontorovich, 1999; Puffer and McCarthy, 2001; Kihlgren, 2003), practitioners (*The Economist*, 2010), and policymakers (Boltramovich *et al.*, 2004; Gianella and Tompson, 2007). As part of this effort, researchers have sought to understand the distinctive character of a key instrument of innovation – i.e. entrepreneurship (McCarthy *et al.*, 2010) – and, in particular, the persistently low levels of new venture creation in the post-Communist period in comparison to other transition and emerging economies. Entrepreneurs and investors have sought new

paths to profit from Russia's growing and resource-rich economy, especially given the recent emergence of Russian technology entrepreneurs investing in Western firms, e.g. Digital Sky Technology's investments in Facebook in 2009 and Twitter in 2011. Policymakers – both Russian and foreign – have sought to understand whether the current Russian government's ambitious plans to “jumpstart” an innovation-driven economy through state investment and tech-friendly regulation are feasible or desirable, as well as the implications of these plans for innovation in other economies.

However, little attention to date has been paid in the Russian context to a key resource for innovation – venture capital. Venture capital has been a central resource in the development of innovative new ventures in many developed economies (Organisation for Economic Co-operation and Development, 1986; Cumming and Johan, 2012), accounting for 8 percent of all industrial innovations in the USA during the period 1983-1992 (Gompers and Lerner, 2004). Venture capital has also become a significant international business activity, as practices pioneered in the USA have been diffused to and adapted by actors in both developed and emerging economies. An important recent element of this activity has been the shift from national venture capital industries to cross-border venture capital activity (Wright *et al.*, 2005). The collapse of the Soviet Union, technological evolution, and the spread of neoliberalism have facilitated Russia's integration into the global economy (Roberts and Fuller, 2010), paving the way for venture capital emergence.

Moreover, even in developed economies, we still know relatively little about how venture capital industries emerge, other than that “replicating Silicon Valley” is not a feasible option in most cases. Many venture capital industries – particularly in developing and emerging economies – remain in a nascent state, and those industries that have emerged often contain organizational forms that vary significantly from those found in developed economies. Data from developed economies suggest that diffusion of venture capital practice from nearby populations (Manigart, 1994), the efficient operation of the venture capital cycle (Gompers and Lerner, 2004), and enabling conditions (Gilson, 2003) are antecedents of active venture capital industries. More recent studies from emerging and developing economies argue that institutional factors (Bruton *et al.*, 2009) and public-private coproduction (Lingelbach *et al.*, 2008) may also shape the venture capital industry emergence process.

Public-private coproduction highlights the role of power relations between fund managers and external stakeholders such as government. The relations between venture capital and government – and the consequent issues of power – have been generally been minimized in the literature, despite evidence that venture capital industries are often established with active government support (Jääskeläinen *et al.*, 2007). While earlier researchers emphasized the role of power in international business activity (Hymer, 1976; Vernon, 1971; Barnett and Mueller, 1974; Cowling and Sugden, 1987), this broader issue has remained under-addressed in more recent literature (Roberts and Dörrenbächer, 2012).

We still lack a general process-based model of venture capital emergence using a global dataset incorporating data from emerging, developing, and transition economies. Current attempts at such a model have made some progress by incorporating data from Africa (Lingelbach, 2009), Latin America and Asia (Bruton *et al.*, 2009), but have not yet considered venture capital emergence in transition economies. In one population of venture capital funds geographically proximate to

Russia – Central and Eastern European economies – venture capital emergence has displayed both differences (Karsai *et al.*, 1997; Karsai *et al.*, 1998; Farag *et al.*, 2004; Klonowski, 2006) and similarities (Klonowski, 2005) with venture capital practice in developed economies. For example, in Poland the venture capital investment process – one stage of venture capital emergence – varies from that in developed economies. In the origination stage of that process, venture capitalists source potential deals through the privatization process and by proactive solicitation, while in the screening stage firm-specific screens are limited to investment size (Bliss, 1999). Another study from Poland argued that the emergence of venture capital occurred in four stages:

- (1) development;
- (2) expansion;
- (3) stagnation; and
- (4) buyout (Klonowski, 2011).

While formal venture capital activity in Russia began in 1993, the industry became active in 1997, when the Russian Venture Capital Association (RVCA) was established[1]. As of 2012, a small number of dedicated venture capital funds exist alongside specialist technology investment companies such as Digital Sky Technologies. Most current funds focus on the internet and telecommunications industries. More recently, government-related venture capital investment activity has expanded to include nanotechnology (Rusnano); energy, aerospace, pharmaceuticals, and strategic information technologies (the Skolkovo initiative); and a fund-of-funds (Russian Venture Company) (Musatova, 2012).

Like many other venture capital industries, Russian venture capital expanded from 2001 to 2008, but new funds raised have fallen from \$US4.3bn at its peak in 2008 to \$US1.7bn in 2010. Seed, startup, and early-stage investment activity (the focus of venture capital funds) ranged between \$US108m and \$US153m during the period 2007-2010, with average deal sizes of \$US1.9M and \$US3.2m over this period (Russian Venture Capital Association, 2011).

The Russian venture capital experience is particularly important, given the strategy of the current Russian government to develop a more innovative economy, the size of the Russian economy, and its relatively under-researched status (Michailova *et al.*, 2011). The role of venture capital in financing innovation is well established, as is Russia's status as a natural resource-dependent economy categorized as efficiency-driven. In order to become an innovation-driven economy, Russia will need to address its relative weakness in innovative new firms' access to venture capital. Thus, understanding the process through which Russian venture capital has emerged to date, and comparing that process to those experienced in other developing and emerging economies, may have important implications for practitioners and policymakers, both in Russia and elsewhere, as well as for researchers hoping to gain a process-based understanding of venture capital and other new industry emergence.

The purpose of this paper is to build theory by extending an earlier model of venture capital emergence with Russian data. Specifically, I ask: how, if at all, does the venture capital emergence process in Russia differ from that observed in other transition, developing, and emerging economies? I extend an earlier process model of venture capital emergence developed from sub-Saharan African data (Lingelbach,

2009) and show, as a result, that the venture capital emergence process is circular rather than linear, as was observed in Lingelbach (2009). This process consists of four sub-processes:

- (1) enabling;
- (2) coproducing;
- (3) diffusing; and
- (4) replicating.

Venture capital emergence can commence with any one of these sub-processes.

The Russian case demonstrates that emergence can begin with the diffusion of venture capital practice from other populations and without first establishing enabling conditions, such as sufficient levels of opportunity-oriented entrepreneurship, pools of risk capital, and specialized financial institutions. The resultant model provides a more complete account of venture capital emergence and suggests four possible entry points for institutional entrepreneurs (Lawrence, 1999) wishing to establish a national venture capital industry.

The paper is organized as follows. After reviewing the relevant literature and describing my research design, I then present results, from which some propositions and a conceptual model emerge. I conclude with a discussion of the implications of this paper's findings.

Venture capital in Russia—what shapes its emergence?

Venture capital in the presence of insufficient enabling conditions?

While entrepreneurship during the Soviet era was periodically robust (Ageev *et al.*, 1995), the environment for venture capital development in Russia has remained unpromising since the fall of the Soviet Union. A rapid shift from Socialism to a market economy (Svejnar, 2002), high degrees of industrialization (Meyer and Peng, 2005), and the Socialist legacy produced lower levels of new venture creation in transition economies than other emerging economies at comparable income levels (Aidis *et al.*, 2008).

A variety of enabling conditions have been identified as antecedents to active national venture capital industries, including equity markets targeted at entrepreneurial firms, reduced capital gains taxes, and lighter labor regulation (Da Rin *et al.*, 2006); liberal bankruptcy laws and a favorable legal environment (Armour and Cumming, 2006); and legality, which includes both laws and regulations and their enforcement, as well as accounting standards (Cumming *et al.*, 2010). The process by which venture capital emerges requires that, once an adequate set of laws and regulations exist, three conditions must develop in parallel with each other for venture capital to emerge:

- (1) stocks of opportunity-oriented entrepreneurs;
- (2) pools of risk capital; and
- (3) institutions capable of supporting the specialized financial institutions required for venture capital investment (Gilson, 2003; Armour and Cumming, 2006).

This simultaneous development is unlikely to occur organically and is difficult for governments to engineer (Gilson, 2003).

Early studies of post-Communist Russia suggested that low levels of entrepreneurial activity have been present since the mid-1990s (Kontorovich, 1999). More recently, when measured by the percentage of the total labor force engaged in early-stage entrepreneurial activity, Russia has continued to have amongst the lowest levels of such activity in comparison to other transition and emerging economies (see Table I). These levels have remained consistently low over the past several years (see Table II).

We can measure the next two enabling conditions – pools of capital and specialized financial institutions – by examining the level of venture capital activity. This activity is a consequence of pools of risk capital and specialized financial institutions and is therefore an appropriate measure of these enabling conditions. These figures are compiled for Russia, China, India, Brazil, and South Africa (BRICS) and selected transition economies in Table III.

Of the BRICS countries, Russia had the second lowest level of venture capital activity, while in comparison to other transition economies it had the lowest level. This indicates that Russia is likely to have insufficient pools of risk capital and specialized financial institutions on which to build an active venture capital industry. Low levels of

Table I.
Cross-country
comparison of early-stage
entrepreneurial activity,
selected emerging and
transition countries, 2009

Country	Early-stage entrepreneurial activity (TEA), percentage of total labor force	Improvement-driven opportunity, percentage of TEA	Improvement-driven opportunity as a percentage of total labor force
Russia	3.9	30.3	1.2
China	14.4	34.3	4.9
Brazil	17.5	45.9	8.0
South Africa	8.9	31.1	2.8
Romania	4.3	47.2	2.0
Bosnia and Herzegovina	7.7	29.8	2.3
Croatia	5.5	48.8	2.7
Hungary	7.1	42.9	3.0
Latvia	9.7	50.8	4.9
Macedonia	8.0	22.8	1.8
Montenegro	14.9	38.2	5.7

Source: Adapted from Verkhovskaia and Dorokhina (2008-2010)

Table II.
Recent development of
entrepreneurial activity
in Russia

Year	Early-stage entrepreneurial activity (TEA), percentage of total labor force	Improvement-driven opportunity, percentage of TEA	Improvement-driven opportunity as a percentage of total labor force
2010	3.9	30.3	1.2
2009	3.9	37	1.4
2008	3.5	N/A	N/A
2007	2.7	N/A	N/A

Sources: Verkhovskaia and Dorokhina (2008-2010), Verkhovskaia (2007)

Country	Number of venture capital investments, 1996-2006 (Li and Zahra, 2012)	Active population (ages 15-64), 2012 (CIA, 2012)	Venture capital activity (number of venture capital investments/active population)
Russia	52.8	99.59	0.53
Brazil	262.9	136.3	1.93
India	762	771.5	0.99
China	478.5	983.3	0.49
South Africa	38.5	32.3	1.19
Bulgaria	6.6	4.8	1.38
Czech Republic	47	7.1	6.6
Hungary	68	6.8	10.0
Poland	148.5	27.5	5.4
Romania	50.6	15.4	3.29
Slovakia	15.4	4	3.85

Venture capital emergence

209

Table III.
Venture capital activity, selected countries

opportunity-entrepreneurship, risk capital and specialized financial institutions indicate that enabling conditions have not been conducive to the venture capital emergence.

Public-private venture capital coproduction?

Since the fall of Communism, Russia has suffered from the weak legitimacy of formal institutions, including the state (Puffer and McCarthy, 2011). Consequently, external finance by entrepreneurs has been based on social networks (Batjargal, 2003), where trust between venture capitalists, intermediaries, and entrepreneurs has been important (Batjargal, 2007a, b). At the same time, the state has increased its involvement in the economy (McCarthy *et al.*, 2000). As a result of weak formal institutions, informal institutions – such as culture and cognition – have filled the void. With low levels of generalized trust, connections (*sviazi*) and favors (*blat*) have become principal means by which business transactions of all types are concluded between Russians.

In this weak institutional environment, the relationship between the public and private sectors in Russia has become problematic. Connections and favors played a central role in a seminal transaction between the private and public sectors: the 1995 loan-for-shares deal. In this transaction, the private sector – represented by a coalition of emergent oligarchs – gained the upper hand over the Yeltsin government. Once Vladimir Putin was appointed Prime Minister in 1999 and elected President in 2000, the balance of power between the Russian public and private sectors was reversed. An iconic representation of this reversal was the 2003 arrest, trial, and imprisonment of Mikhail Khordokovsky – one of the principal oligarchs involved in the loan-for-shares deal. The country's Soviet and Czarist past has led to a number of cultural influences that favor a strong state, including "paternalism, admiration for strong leaders, and fear of responsibility" (Puffer and McCarthy, 2011, p. 25).

Public-private coproduction of venture capital has been identified as one possible mechanism to overcome both problematic public-private relations in emerging and developing economies and address the "equity gap" associated with small seed, start-up, and early-stage investments (Lingelbach *et al.*, 2008). Coproduction refers to the joint development of public goods by public and private actors (Ostrom, 1996) and

in the context of venture capital emergence involves the public provision of low-cost, long-term investment capital to venture capital funds managed by private fund managers. Such “hybrid” funds have been a significant factor in European venture capital emergence (Jääskeläinen *et al.*, 2007).

Given Russia’s strong state in comparison to other economies that have attempted to establish venture capital industries, and its relatively weak enabling conditions, it seems less likely that venture capital activity will emerge there through purely market mechanisms. Consequently, public-private coproduction may be more important than it would be in other economies where the state is relatively weaker and/or enabling conditions are stronger.

Given Russia’s status as a transition economy, venture capital coproduction – if it develops – is likely to have different characteristics than those found so far in other emerging economies. For example, foreign public actors such as development finance institutions may play a more important role early in the venture capital coproduction process, and the Russian state’s interaction with its private fund manager partners may be more directive than in market-based economies such as South Africa and Botswana where venture capital coproduction has been observed (Lingelbach, 2009).

Strong informal institutions as a substitute?

Institutional theory has argued that weak formal institutions, such as laws, regulation, and enforcement, are substituted for in emerging markets by strong informal institutions, such as culture and norms (Khanna and Palepu, 1997). This suggests that, at the level of institutions, one process can substitute for another. Institutions also play a central role in shaping the processes through which industries and firms emerge (Whitley, 2008). Venture capital development in Europe has been influenced by significant public sector engagement and investment (Bottazzi and Da Rin, 2002; Leleux and Surlemont, 2003), in an attempt to substitute for weak enabling conditions, including relatively low levels of opportunity-oriented entrepreneurship in some economies and small pools of private risk capital reflecting relatively more conservative risk appetites by investors.

Informal institutions have a moderating impact on venture capital activity. Given a level of formal institutional development, societies with higher levels of uncertainty avoidance and collectivism have lower levels of venture capital activity (Li and Zahra, 2012). Uncertainty avoidance and collectivism are the informal cultural-cognitive aspects of institutions most closely associated with venture capital activity. While these informal institutions cannot completely substitute for formal institutions in the venture capital emergence process, they can partially compensate for the latter’s weakness. In Russia’s case, its relatively high levels of uncertainty avoidance and collectivism suggest relatively weak cultural-cognitive aspects of informal institutions unlikely to compensate for its equally weak formal institutions. Consequently, we face the paradox of weak formal and informal institutions, yet an active Russian venture capital industry. One possible explanation for this paradox may be that some other mechanism – such as coproduction – has overcome these relatively weak institutional endowments.

Venture capital emergence as a circular process?

Many process-based models of change in business and management studies have been structured as a linear sequence of stages. However, the principal processes of social

change – evolution, dialectic, life cycle, and teleology – are all circular in nature, in which a final stage feeds back to an initial stage. Processes involving multiple units undergoing change, such as an industry, generally are either evolutionary or dialectical in structure. In the well-known evolutionary model, variation (stage 1) is followed by selection (stage 2) and retention (stage 3), with retention then feeding back to affect variation. In the dialectical model, parallel stages of thesis (stage 1a) and antithesis (stage 1b) come into conflict with one another (stage 2), leading to a synthesis (stage 3), which then leads to a new thesis (Van de Ven and Poole, 1995).

Earlier attempts at modeling venture capital emergence have recognized that this process may also be circular. For example, an industry life cycle model was developed to account for Israeli venture capital emergence (Avnimelech and Teubal, 2006). Circular theories of industry emergence have generally assumed that such processes must rationally begin at a particular stage, i.e. variation for the evolutionary theory and thesis for the dialectical theory. However, theories of self-organization and complexity have argued that in many emergent social systems there is no clearly identifiable inception stage and that emergence occurs in a nonlinear fashion. This theoretical perspective represents a more accurate portrayal of new venture and industry creation processes, which are non-equilibrium phenomena (McKelvey, 2003).

This literature review has suggested some themes to which I should remain alert as I gather and analyze data. I now describe this process.

Research design

I develop an exploratory case study consisting of both qualitative and quantitative data from the Russian venture capital industry, including previously unpublished archival data of an early and now closed fund (hereafter “Mercury”). This case is then compared with an earlier model of venture capital emergence developed from comparative case analysis using South African and Botswana data.

Research setting

Given the nascent state of research on venture capital in emerging and developing country contexts, an exploratory case study approach has been employed to identify patterns and generate propositions on which additional theory-building could be based. Following the guidance suggested for such a research setting (Eisenhardt, 1989; Yin, 2003), data were collected from archival settings and then coded to identify patterns and propositions (Edmondson and McManus, 2007). Such single case studies can generate important insights when theory is in the early stages of development (e.g. Barker, 1993).

This study closely follows earlier studies employing single case studies to explore international business, for example Marschan-Piekkari and Ghauri (1998), Boussebaa and Morgan (2008), Hartt *et al.* (2012). The grounded theory approach is a feasible research method in cases where little is known about the subject studied (Eisenhardt, 1989). The method could also bring a new perspective to a topic that has already received attention in empirical work (Hitt *et al.*, 1998). It also allows researchers to benefit from the quality of rich, qualitative data (Birkinshaw, 1997). Specifically, following earlier studies (Siggelkow, 2001, 2002) and guidance (Siggelkow, 2007), the study used a single case design with a single unit of analysis, given the revelatory nature of the phenomenon – an early Russian venture capital fund. A second

justification for the use of a single case design is that data for this case was previously inaccessible to scientific investigation, enhancing its revelatory nature. Single case research designs are appropriate in these situations (Yin, 2003; Siggelkow, 2007).

The Mercury case is believed to be particularly illuminating. Because of Russia's transition status, French legal origin, and low rule of law and property rights scores, this case can be contrasted with those in South Africa and Botswana. These settings are both English legal origin economies with higher rule of law and property rights scores. Neither economy has experienced a transition from Socialism to a market economy.

The Mercury case is also unusually revelatory due to the unique research access to previously unpublished fund-level data from a pioneering Russian venture capital fund. These data consist of financial statements, investment memoranda, and various internal and external communications. Taken together, they provide a complete written record of Mercury during the first three years of its operation. Additional secondary data sources include industry association and foreign donor evaluation reports. While these data are mainly in English, those in Russian have been translated by the author, who is fluent in Russian and has five years of experience in the country.

The Mercury case is then compared with an earlier model of venture capital emergence (Lingelbach, 2009), from which a revised and extended model of venture capital emergence is developed. Table IV highlights the differences between the three cases on which the resultant model is based, demonstrating the broad range of institutional conditions – and resultant possible generalizability of findings – on which the extended model is based.

Mercury was based in a large regional city, and foreign sources provided its initial round of capital. It was established in the early 1990s and raised a second round of financing – also from foreign sources – in the mid-1990s. Mercury was managed by both foreign and Russian staff and maintained friendly relations with the local government. Data was collected regarding all aspects of Mercury's operations, including fund establishment, fundraising, investments, exits, and government policy and support. The case permits generalization to theory, which is essential to grounded theory building (Eisenhardt, 1989; Yin, 2003; Strauss and Corbin, 1998). As is typical in case research, future theory-testing studies can determine more specifically the domain to which the results can be generalized. Since the focus of the study is the emergence of a national venture capital industry, the relevant unit of analysis is that of national venture capital industries.

	Russia	South Africa	Botswana
Legal origin	French	English	English
GNI/capita (date of first venture capital activity and 2009), current USD	2,900 (1993) 9,340	3,150 (1999) 5,760	3,220 (1997) 6,260
Establishment date of national venture capital association	1997	1999	None established to date
Total entrepreneurial activity as a percentage of labor force (Kelley <i>et al.</i> , 2011)	3.9	8.9	N/A
Rule of law score (Kauffmann <i>et al.</i> , 2006)	– 0.89	0.17	0.65
Property rights score (Heritage Foundation, 2011)	40	50	70

Table IV.
The Russia, South Africa,
and Botswana cases
compared

Data collection

The primary data source was a 1,305-page archive of internal documents obtained from a former Mercury officer. These documents were mainly in English and consisted of investment memoranda for Mercury's existing and potential investments (292 pages); internal management records, including portfolio summaries, reports on potential investment opportunities, accounting records, and legal documents associated with Mercury's organization (570 pages); and personnel records, and correspondence with Mercury's parent company and investors (443 pages). These archival records are believed to be amongst the most comprehensive fund-level data utilized in venture capital research to date.

Fund-level archival data were supplemented with industry-level data from the Russian Venture Capital Association (RVCA), the national industry association. These data consist of surveys of RVCA members over the period 1997-present, although they also contain some summary data going back to the industry's establishment in the early 1990s. These data are available mainly in Russian, although English summaries of some data were also utilized.

Given the sensitive and confidential nature of Mercury's archival data, the author has been unable to share these data with other researchers to code and analyze independently. However, the resultant model and an earlier version of this paper were presented at an international research conference in Moscow, where Russian researchers provided valuable feedback.

Data analysis

In analyzing the data, several powerful procedures suggested by Eisenhardt (1989), Miles and Huberman (1994) and Yin (2003) were used. A within-case analysis (Eisenhardt, 1989) was conducted first. This analysis began inductively by building a narrative timeline of Mercury's emergence from the archival data. Then, this timeline was coded using a system derived deductively from the literature to identify key themes. These themes were arrayed alongside the timeline to develop a graphical narrative for the case, from which phases began to emerge. These phases were then compared against industry-level data to confirm or disconfirm the existence of phases.

The analysis involved the continuous rotation among data, literature and emergent themes that is, in essence, called for by Eisenhardt (1989), Strauss and Corbin (1998) and Yin (2003). Comments were obtained from colleagues to supplement and test the insights. I used various displays (Miles and Huberman, 1994) to reduce the data. Existing literature was also consulted, particularly in the phase following data collection, and I generally made use of my knowledge of earlier literature, following the current understanding of grounded theory (Eisenhardt, 1989), which runs counter to the traditional understanding (Glaser and Strauss, 1967) in this respect.

The iterative process of comparing material and findings is important in improving the internal validity of the study (Yin, 2003). Earlier literature of various fields provided a basis on which to build a model and a basis for comparison. This basis was represented by a set of propositions, which allowed me to reduce the complexity of the industry emergence process to a manageable model.

Analysis

Evidence from the Mercury case demonstrates that the fund faced an opportunity set consisting of a small number of opportunity-oriented entrepreneurs, shallow pools of risk capital with an interest in the fund, and a weak infrastructure in support of the specialized financial institutions required for venture capital investing. Therefore, Mercury – and, I argue, the Russian venture capital industry as a whole at its inception – faced insufficient enabling conditions.

The stock of opportunity-oriented entrepreneurs can be measured in two ways, i.e. at the macro and micro levels. At the macro level, general statistics about the level of opportunity-oriented entrepreneurship can be collected and analyzed, while at the micro level a venture capital fund’s deal flow can be analyzed to either confirm or disconfirm findings from the macro level. Ultimately, however, deal flow matters more than macro findings for venture capital emergence, as venture capital funds require an adequate deal flow in order to achieve expected returns.

As indicated earlier, Russia has suffered from low levels of entrepreneurship in the post-Communist period. The new venture formation rate in Russia grew rapidly from 1992 to 1994, but then slowed. At its peak in 1994, 896,900 small businesses were registered in Russia, employing 15.1 million (Kontorovich, 1999). Thus, macro level indicators confirm that inadequate stocks of new ventures existed in Russia to support venture capital emergence.

But is that the situation faced by Mercury? A timeline of Mercury’s development is depicted in Figure 1.

At the end of the second quarter of its fourth year of operations, Mercury had closed on nine investments and approved four more. These investments were drawn from a deal flow of 191 projects that had been evaluated since the fund began. Including both closed and approved investments, 6.8 percent of all projects that Mercury evaluated had been approved since the fund’s inception. This approval rate is much higher than seen in other institutional settings. For example, venture capital funds in developed

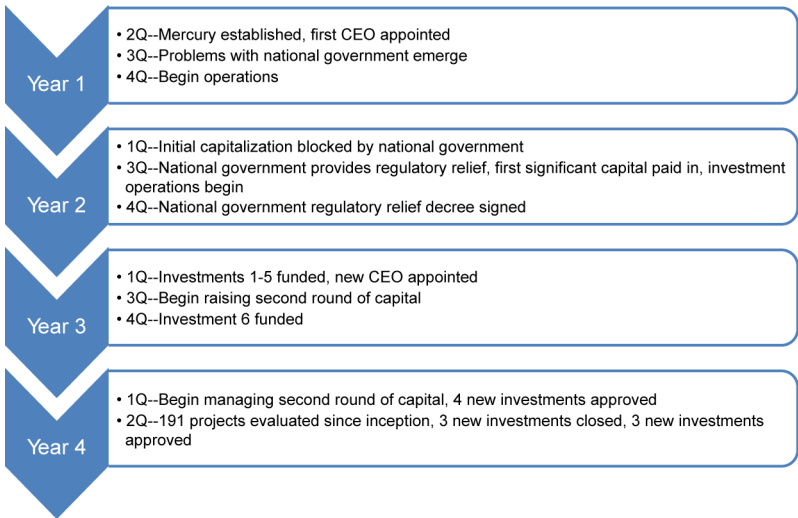


Figure 1.
Mercury chronology

economies invest in less than 1 percent of the deals that they receive. By comparison, Mercury was much less selective in the transactions it approved.

Deal flow is also measured by the quality of investments. The quantity of potential transactions is strongly influenced by the number of opportunity-oriented new ventures forming in an economy. In Mercury's case, of the six investments funded at the end of Year 3, one investment – representing 26 percent of total investments – was bankrupt and the remaining five firms were operating. The estimated average internal rates of return (IRR) on operating investments – a measure of investment quality – was 27 percent and ranged from 6 percent to 49 percent. However, Mercury had not yet realized any returns on these operating investments. At that same time, approved investments had a weighted average IRR of 39 percent. These returns are broadly consistent with returns expected by venture capitalists elsewhere in the world at that time.

However, the industries in which Mercury invested were largely agriculture and food-processing related – typically low growth and low return in nature – while its one technology-oriented investment had failed. Consequently, it is difficult to believe that realized returns on Mercury's investments were likely to be as high as the fund had estimated. Given the high approval rate of investments – suggesting relatively low selectivity – and questionable realizable returns given the industries in which it had invested, I conclude that Mercury faced inadequate stocks of opportunity-oriented entrepreneurs, a key enabling condition for venture capital emergence in other economies.

A second enabling condition is adequate stocks of risk capital. Mercury is believed to be among the first venture capital funds established in post-Communist Russia. Its establishment was driven by its parent company's strategy, which was to operate funds focused on the SME sector in Central and Eastern Europe and the former Soviet Union. Mercury was the third such fund established by the parent.

Mercury was established in the second quarter of Year 1 and appointed a foreign CEO soon thereafter. The fund's legal structure was established in Russia prior to a closing on the first round of funding and before a significant deal flow had been established. Mercury's owner and lead investor were primarily motivated by developmental objectives in the fund's establishment, rather than pure profit maximization. However, the owner in particular believed that the fund's internal rate of return (IRR) must be sufficiently high in order to attract a second round of funding, as well as to support the owner's fundraising efforts elsewhere. At the time that Mercury was established, only one investor was interested in the fund, and, even then, the funding from that investor was problematic.

Rather than contributing cash as capital to the fund, the investor offered in-kind capital in the form of commodities. Mercury and its owner would then need to ship these commodities to Russia, sell them on the open market, and use the resultant cash to capitalize Mercury. However, in the process of shipping and selling these commodities, Mercury and its owner encountered significant difficulties, mainly in the form of interference by the national government. This interference was resolved in Mercury's favor, but this process delayed opening the fund until the third quarter of Year 2.

This type of investment capital – an in-kind contribution – is very unusual in venture capital. Mercury's agreement to establish its fund using this illiquid capital is a strong indicator that the pool of risk capital available to invest in Russian venture capital funds was quite shallow at that time. The size of the Russian venture capital industry in 1995 was estimated at less than 0.1 percent of GDP, which is equivalent to a

maximum of \$US271m. This can be compared with 0.5 percent of GDP in Hungary, 0.4 percent in Poland, and 0.3 percent in the Czech Republic, Romania, and Slovenia at the same time. Although it was the largest transition economy, Russia represented only 4 percent of total venture capital investment in Central and Eastern Europe and the former Soviet Union at that time (Aylward, 1998). Therefore, I suggest that the pool of risk capital available to venture capitalists in Russia at that time was inadequate.

A third enabling condition is the existence of specialized financial institutions amenable to venture capital investment. Venture capital funds require a variety of specialized financial institutions in order to realize adequate IRRs on their investments. First, venture capitalists must be able to structure their investments in order to appropriate value from their investees. Second, venture capitalists must be able to liquidate their investments in order to realize returns and return capital to investors, if required. Third, venture capitalists must be able to manage their investments in a portfolio housed within an appropriate legal structure providing adequate protection for both the fund's rights and those of its investors. None of these conditions were present in Mercury's case.

In order to structure its investments, Mercury was limited by Russian corporate law and the resources and preferences of its investees. Specifically, Mercury found it nearly impossible to invest in its investees' equity. Consequently, Mercury's investments were structured as back-to-back loans, in which Mercury deposited money in a Russian bank and the bank then lent that money to Mercury's investee. Mercury's relatively high IRRs noted earlier reflected the high interest rates prevailing in Russia at that time. This structure severely limited Mercury's upside, as it could not sell its investments to a third party or list the investee on the stock exchange. These exit mechanisms typically provide the high returns sought by venture capitalists, given the high risk associated with their investments. The liquidity of Mercury's investments was provided as its investees paid interest and principal on its loan to the local bank, which then released Mercury's investment in a like amount. In order to service this debt, Mercury's investees required a positive cash flow from operations. This condition is atypical of new ventures but is common in lower-risk businesses. So, while Mercury was obtaining a steady return on its investments, that return was not significantly different from that of a bank.

Mercury was organized as a Russian closed joint stock company, analogous to a private business in the USA. Its shares were owned by its parent company. This structure was atypical of a venture capital fund, where investors' liability and taxation are typically limited through a partnership structure. Consequently, while this legal structure was adequate to house an investment portfolio, it exposed its parent and its other funds to significant risk. I conclude that Mercury faced an environment in which specialized financial institutions were inadequate to support venture capital emergence.

The enabling conditions that Mercury faced as it developed appeared to be inadequate to support venture capital emergence. The stock of opportunity-oriented entrepreneurs – and resultant deal flow – was small and of low quality, little or no risk capital was available to invest in venture capital funds like Mercury, and specialized financial institutions to support Mercury's investing activity were inadequate. Yet, Mercury succeeded in raising a second round of funding in Year 4. Moreover, the Russian venture capital industry has developed from Mercury's in the early and mid-1990s efforts and became active in 1997, as evidenced by the establishment and

continued operation of a national venture capital association (RVCA). Therefore, I suggest that:

- P1.* Russian venture capital emergence is complicated by the absence of sufficient enabling conditions.

Next, I examined the case data for evidence of public-private coproduction. From its inception, Mercury found itself entangled with both the national and local governmental authorities in Russia. As noted earlier, when it sought to sell the commodities that would be used to capitalize the fund, Mercury was prevented from doing so by a powerful official in Moscow. That official asked for a bribe amounting to most of the fund's capital and, in exchange, would allow Mercury to operate with the remaining capital.

In response, Mercury sought the assistance of the local government in the area of Russia in which it would be operating. That government offered a better deal. In exchange for Mercury contributing 40 percent of its first round of capital to a trust to be administered jointly by the local government and Mercury, Mercury would be allowed to operate free of all interference, including from the notorious tax inspection service, whose officials were well-known solicitors of bribes. The trust would be used to fund various humanitarian projects. Mercury agreed to this offer, obtained approval from its investor, and experienced no difficulty in operating thereafter. The local government did not interfere in its investment operations.

The relationship between Mercury and the local government is strong evidence of coproduction between public and private actors. As a private actor, Mercury provided both capital and skills to this relationship. The local government filled the institutional void characteristic of post-Communist Russia and represented by bribe-taking and poor legal enforcement. Together, Mercury and the local government were able to launch the fund, despite the weak enabling conditions that existed at the time. The coproduction of this fund attracted the attention of other venture capital and private equity funds, who decided to establish operations in this locale despite weak enabling conditions and in part because of Mercury's experience in working with the local government. Consequently, I argue that:

- P2.* Coproduction between public and private actors in Russia is more important for venture capital emergence than in other economies, but has a distinctive character.

How did Mercury's relationship with the local government substitute for the poor enabling conditions existing in Russia at that time? The local government provided no funding to Mercury, which is a common contribution of public sector actors when they seek to coproduce venture capital with private fund managers. Instead, the local government provided a valuable and scarce resource – i.e. security – to Mercury, its employees, and its investees. The local government functioned as Mercury's *krysha* (roof). In an environment in which many private ("Mafia") and public (tax inspection and customs service) actors were seeking bribes from businesses – both Russian and foreign – against the threat of robbery, violence, or even death, Mercury operated without interference of this kind. In two instances when outsiders attempted to interfere with the firm's operation, the situation was quickly resolved in Mercury's favor with the help of the local government. As a result, Mercury was able to limit its

risk by forming a relationship with the local government, allowing it to focus on the already highly risky venture capital investments that were its principal focus.

According to its archival documents, Mercury understood that it was not essential that its fund quickly realize high returns on its investments. Instead, it simply needed to make a sufficient number of investments to attract interest from other investors. Stable and secure operations were more important than highly profitable ones, in the judgment of Mercury's management and owners. A good working relationship with the local government offered the highest likelihood of that outcome.

Therefore, coproduction substituted for enabling conditions, enabling Mercury (and other venture capital funds active in Russia at that time) to commence operations. This suggests that:

- P3.* Weakness in one stage of the venture capital emergence process can be compensated for by strength in another stage.

When the timeline of Mercury's development (Figure 1) is examined, a curious sequence is noted. Unlike the venture capital emergence process observed in Southern Africa – in which enabling conditions lead to coproduction, diffusion, and then replication – the emergence of venture capital in Russia began with diffusion. Mercury established a local corporation, imported foreign executives, and then hired and trained local investment officers, most of whom already had some Western training. Mercury's owner was closely involved in its establishment, as were foreign executives from the owner's other funds. This pattern indicates that venture capital emergence began with diffusion of venture capital practice from other institutional settings.

Once established, and as depicted in Figure 1, Mercury's challenges in paying in its capital led it to form a coproducing relationship with the local government. So coproduction followed diffusion in the emergence process.

As observed in Southern Africa, once coproduction has been established, diffusion can be influenced. This was also observed in Mercury's case. The need to manage Mercury's relationship with the local government altered how it diffused venture capital practice. For example, it hired a full-time Western corporate attorney onto its staff, increased the number of visits to the local government by the owner, and also participated actively in local events or organizations that were believed by Mercury to show support for the local government. The way in which Mercury practised venture capital was significantly different to that of its owner's other funds.

Once Mercury had diffused venture capital practice, coproduced with the local government, altered diffused practice in response to that coproduction, and began making investments, other venture capital funds were established across Russia. These funds displayed considerable variation, both from Mercury's model and from one another. Some were privately funded, while others received investment from various governmental and development finance institutions. Some focused on early-stage technology investments, while others concentrated on later-stage private equity transactions. This variation process – typical of replication – was followed by selection in favor of a survivable set of venture capital models. That selection process continues today. The Russian government's heavy recent investment in three venture capital funds (Gianella and Tompson, 2007) may be evidence of a slow movement toward the completion of the selection process and a move to "retention" in favor of a state-sponsored venture capital model.

Venture capital emergence does not need to commence by the establishment of enabling conditions. Instead, venture capital emergence in Russia began with diffusion, continued to coproduction, revisited diffusion, and then proceeded to replication, which remains underway. However, there is no evidence to suggest yet that replication will lead to establishment of enabling conditions. That link is highly suggestive, however, and would lead to a fully circular process of venture capital emergence. The Russian government's recent efforts to promote venture capital may be a step in encouraging the completion of this cycle. Therefore, I argue that:

P4. Venture capital emergence is circular and can commence at any stage.

Discussion and conclusion

I extend an earlier model of venture capital emergence in developing and emerging economies to include data from an under-researched BRIC, i.e. Russia. Informed by the relevant literature, I find evidence for four propositions related to various aspects of the venture capital emergence process. These four propositions suggest a cyclical model of venture capital emergence, depicted in Figure 2.

Utilizing four processes first identified from South African and Botswana data, this model accommodates and explains Russian venture capital data. These data demonstrate that the diffusing, coproducing, and replicating processes have operated

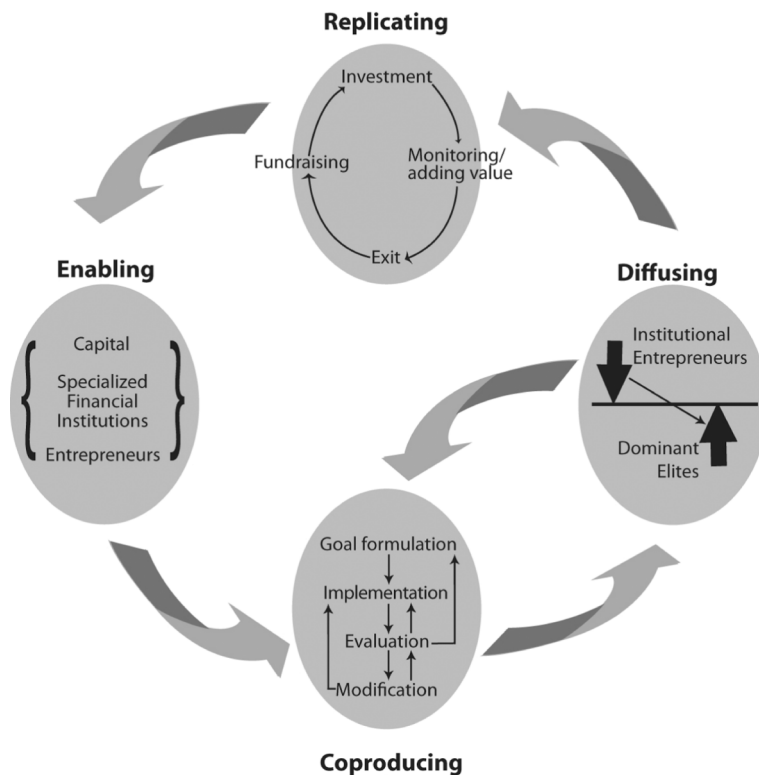


Figure 2.
Cyclical model of venture
capital emergence

before the enabling process, unlike the sequence identified from South African and Botswana data. To date the Russian enabling process remains incomplete, largely due to an inability to generate sufficient stocks of opportunity-oriented entrepreneurs of the type required to meet venture capitalists' requirements for near-term returns. This model also indicates that the diffusing and coproducing processes influence one another.

The Russian data provide some clues that help explain why the model in Figure 2 provides a better account of venture capital emergence. First, the coproducing process in Russia was more significant than that observed in earlier studies. Stronger public-private cooperation in venture capital emergence offset weaker enabling conditions in Russia, suggesting that stronger processes can offset weaker ones in venture capital emergence. Second, unlike in other studies of venture capital emergence in transition economies (Bliss, 1999), privatization was not a significant source of potential deals in the replicating sub process.

The findings of this study have a number of implications for both research and practice. By emphasizing how public-private coproduction can overcome weak formal and informal institutions, it extends earlier work on the legal and regulatory antecedents to venture capital activity and demonstrates one possible pathway to overcoming these weaknesses. This study also challenges the market-dominant narrative of venture capital development rooted in neoclassical economic assumptions, which focuses on how improving incentives is the principal path to venture capital emergence. For practitioners, the ability of coproduction to overcome weak initial conditions calls attention to the need to forge appropriate relationships with public sector actors and for these ties to be seen in a broader perspective than simply corruption. Mercury's own relationships with Russian government officials were closely examined by a variety of oversight bodies, and its officers and owners believed that these relationships were both legal and proper. Yet many venture capitalists – especially when crossing borders into weaker institutional environments such as Russia's – would be reluctant to form such relationships. This study suggests that this reluctance should be rethought, particularly when entering a market where venture capital remains in the early stages of emergence.

This study contributes to the effort to build a "holistic, cross-disciplinary, and contextual approach" (Jonsen *et al.*, 2010, p. 44) in the study of international business. It thus contributes to a key weakness in that literature: the absence of "cross- or trans-disciplinary (studies) that (seek) to build understanding of the complexities of IB and place IB activity into a broader context of economy, politics, society and ecology" (Cairns and Roberts, 2011, p. 290). In contrast to attempts to center the IB conversation around research questions derived from economics and strategy such as "what determines the international success or failure of firms" (Peng, 2004, p. 100), this paper follows efforts to develop IB research strategies that are comparative, multilevel, interdisciplinary, context-rich, and case-study based (Shenkar, 2004).

Consequently, this study has a number of significant linkages with other critical perspectives on international business, as well as addressing important gaps in these perspectives. First, it provides a multi-disciplinary perspective on an emergent phenomenon by extending earlier work on Russian entrepreneurship (e.g. Puffer and McCarthy, 2001) to include finance. Second, the model developed from this study crosses contexts rarely studied together, i.e. sub-Saharan Africa and Russia. Third, by utilizing a case involving venture capital investment in the SME sector, it addresses the

imbalance in the literature favoring multinational enterprises. Fourth, the case of foreign venture capital investing in Russia complements earlier studies of MNC investment in that economy, as well as contributing to the growing literature on cross-border venture capital investment. Fifth, the coproduction process described in this study sheds new and more subtle light on issues of corruption in emerging economies, as well as the issue of power in these settings. Each of these issues is of growing concern and relevance to the IB community (Roberts and Dörrenbächer, 2012).

This study suffers from a number of limitations. As a revelatory single case study, these findings should be confirmed by looking at a larger sample of Russian venture capital activity, including more recent data. Students of Russia are also familiar with a quote attributed to Prince Pyotr Vyazemsky, a nineteenth-century Russian poet and Pushkin's closest friend. Vyazemsky said: "If you want a foreigner to make a fool of himself, just ask him to make a judgment about Russia" (Braithwaite, 2002). As a non-Russian author, I recognize my limitations in interpreting this study's data in light of Russia's complex institutional landscape.

In conclusion, this paper is a first step toward gaining a better understanding of venture capital emergence in the Russian context. It shows how, despite unpromising enabling conditions, venture capital – and the innovation that it seeks to finance – can develop with public-private coproduction. This study also contributes to the growing importance of a process-based understanding of organizational change and development. The study of Russian entrepreneurship has already generated new insights in entrepreneurship generally. This paper is another step in that direction.

Note

1. The formation of a national venture capital association is an indicator of an active venture capital industry (Kenney *et al.*, 2006).

References

- Ageev, A.I., Gratchev, M.V. and Hisrich, R.D. (1995), "Entrepreneurship in the Soviet Union and post-socialist Russia", *Small Business Economics*, Vol. 7 No. 5, pp. 365-76.
- Aidis, R., Estrin, S. and Mickiewicz, T. (2008), "Institutions and entrepreneurship development in Russia: a comparative perspective", *Journal of Business Venturing*, Vol. 23 No. 6, pp. 656-72.
- Armour, J. and Cumming, D. (2006), "The legislative road to Silicon Valley", *Oxford Economic Papers*, Vol. 58 No. 4, pp. 596-635.
- Avnimelech, G. and Teubal, M. (2006), "Creating venture capital industries that co-evolve with high tech: insights from an extended industry life cycle perspective of the Israeli experience", *Research Policy*, Vol. 35 No. 10, pp. 1477-98.
- Aylward, A. (1998), "Trends in venture capital finance in developing countries", Discussion Paper 36, International Finance Corporation, Washington, DC.
- Barker, J.R. (1993), "Tightening the iron cage: concertive control in self-managing teams", *Administrative Science Quarterly*, Vol. 38 No. 3, pp. 408-37.
- Barnet, R.J. and Mueller, R.E. (1974), *Global Reach: The Power of the Multinational Corporation*, Simon & Schuster (Touchstone), New York, NY.
- Batjargal, B. (2003), "Social capital and entrepreneurial performance in Russia: a longitudinal study", *Organization Studies*, Vol. 24 No. 4, pp. 535-56.

- Batjargal, B. (2007a), "Comparative social capital: networks of entrepreneurs and venture capitalists in China and Russia", *Management and Organization Review*, Vol. 3 No. 3, pp. 397-419.
- Batjargal, B. (2007b), "Network triads' transitivity, referral and venture capital decisions in China and Russia", *Journal of International Business Studies*, Vol. 38, pp. 998-1012.
- Birkinshaw, J. (1997), "Entrepreneurship in multinational corporations: the characteristics of subsidiary initiatives", *Strategic Management Journal*, Vol. 18 No. 3, pp. 207-29.
- Bliss, R.T. (1999), "A venture capital model for transitioning economies: the case of Poland", *Venture Capital*, Vol. 1 No. 3, pp. 241-57.
- Boltramovich, S., Filippov, P. and Hernesniemi, H. (2004), "The innovation system and business environment of northwest Russia", discussion paper, The Research Institute of the Finnish Economy, Helsinki, 7 December.
- Bottazzi, L. and Da Rin, M. (2002), "Venture capital in Europe and the financing of innovative companies", *Economic Policy*, Vol. 17 No. 34, pp. 229-70.
- Boussebaa, M. and Morgan, G. (2008), "Managing talent across national borders: the challenges faced by an international retail group", *Critical Perspectives on International Business*, Vol. 4 No. 1, pp. 25-41.
- Braithwaite, R. (2002), *Across the Moscow River: The World Turned upside down*, Yale University Press, New Haven, CT.
- Bruton, G.D. and Rubanik, Y. (1997), "High technology entrepreneurship in transitional economies: the Russian experience", *Journal of High Technology Management Research*, Vol. 8 No. 2, pp. 213-23.
- Bruton, G.D., Ahlstrom, D. and Puky, T. (2009), "Institutional differences and the development of entrepreneurial ventures: a comparison of the venture capital industries in Latin America and Asia", *Journal of International Business Studies*, Vol. 40, pp. 762-78.
- Cairns, G. and Roberts, J. (2011), "Reflections on seven years of critical perspectives on international business: an extended editorial", *Critical Perspectives on International Business*, Vol. 7 No. 4, pp. 289-96.
- CIA (2012), *World Factbook*, available at: www.cia.gov (accessed August 1, 2012).
- Cowling, K. and Sugden, R. (1987), *Transnational Monopoly Capitalism*, Wheatsheaf, Brighton.
- Cumming, D. and Johan, S. (2012), "Venture capital contracts: implications for emerging markets", *Private Equity in Emerging Markets: The New Frontiers of International Finance*, Palgrave Macmillan, New York, NY.
- Cumming, D., Schmidt, D. and Walz, U. (2010), "Legality and venture capital governance around the world", *Journal of Business Venturing*, Vol. 26 No. 1, pp. 54-72.
- DaRin, M., Nicodano, G. and Sembenelli, A. (2006), "Public policy and the creation of active venture capital markets", *Journal of Public Economics*, Vol. 90 Nos 8/9, pp. 1699-723.
- (The) Economist (2010), "Modernizing Russia: another great leap forward?", *The Economist*, March 11.
- Edmondson, A.C. and McManus, S.E. (2007), "Methodological fit in management field research", *Academy of Management Review*, Vol. 32 No. 4, pp. 1155-79.
- Eisenhardt, K.M. (1989), "Building theories from case study research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532-50.
- Farag, H., Hommel, U., Witt, P. and Wright, M. (2004), "Contracting, monitoring, and exiting venture investments in transitioning economies: a comparative analysis of Eastern European and German markets", *Venture Capital*, Vol. 6 No. 4, pp. 257-82.

- Gianella, C. and Tompson, W. (2007), "Stimulating innovation in Russia: the role of institutions and policies", working paper, Economics Department, Organization for Economic Co-operation and Development, Paris, 15 January.
- Gilson, R.J. (2003), "Engineering a venture capital market: lessons from the American experience", *Stanford Law Review*, Vol. 55, pp. 1067-103.
- Glaser, B.G. and Strauss, A.L. (1967), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Weidenfeld and Nicholson, London.
- Gompers, P. and Lerner, J. (2004), *The Venture Capital Cycle*, MIT Press, Cambridge, MA.
- Hartt, C., Mills, A.J., Mills, J.H. and Durepos, G. (2012), "Markets, organizations, institutions, and national identity: Pan American Airways, postcoloniality and Latin America", *Critical Perspectives on International Business*, Vol. 8 No. 1, pp. 14-36.
- Heritage Foundation (2011), "2011 Index of Economic Freedom", available at: www.heritage.org
- Hitt, M., Harrison, J., Ireland, R.D. and Best, A. (1998), "Attributes of successful and unsuccessful acquisitions of US firms", *British Journal of Management*, Vol. 9 No. 2, pp. 91-114.
- Hymer, S.H. (1976), *The International Operations of National Firms: A Study of Foreign Direct Investment*, MIT Press, Cambridge, MA.
- Jääskeläinen, M., Maula, M. and Murray, G. (2007), "Profit distribution and compensation structures in publicly and privately funded hybrid venture capital funds", *Research Policy*, Vol. 36 No. 7, pp. 913-29.
- Jonsen, K., Aycan, Z., Berdrow, I., Boyacigiller, N.A., Yoko Branner, M., Davison, S.C., Dietz, J., Gluesing, J., Kwantes, C.T., Lazarova, M., Madzar, S., Maloney, M.M., Maznevski, M., McDonough, E.F. III, Taylor, S., Thomas, D.C. and Weber, T.J. (2010), "Scientific mindfulness: a foundation for the future themes in international business", in Devinney, T., Pedersen, T. and Tihanyi, L. (Eds), *The Past, Present and Future of International Business and Management, Advances in International Management*, Vol. 23, Emerald Group Publishing, Bingley, pp. 43-69.
- Karsai, J., Wright, M. and Filatotchev, I. (1997), "Venture capital in transition economies: the case of Hungary", *Entrepreneurship Theory and Practice*, Vol. 21 No. 4, pp. 93-110.
- Karsai, J., Wright, M., Dudzinski, Z. and Morovic, J. (1998), "Screening and valuing venture capital investments: evidence from Hungary, Poland, and Slovakia", *Entrepreneurship and Regional Development*, Vol. 10 No. 3, pp. 203-24.
- Kauffmann, D., Kraay, A. and Mastruzzi, M. (2006), "Governance matters V: aggregate and individual governance indicators for 1996-2005", working paper, World Bank, Washington, DC.
- Kelley, D.J., Bosma, N. and Amoros, J.E. (2011), "Global Entrepreneurship Monitor: 2010 Global Report", Babson College, Babson Park, MA and Universidad del Desarrollo, Santiago.
- Kenney, M., Haemmig, M. and Goe, R. (2006), "The globalization of the venture capital industry", unpublished working paper.
- Khanna, T. and Palepu, K. (1997), "Why focused strategies may be wrong for emerging markets", *Harvard Business Review*, Vol. 75 No. 4, pp. 41-51.
- Kihlgren, A. (2003), "Promotion of innovation activity in Russia through the creation of science parks: the case of St Petersburg (1992-1998)", *Technovation*, Vol. 23, pp. 65-76.
- Klonowski, D. (2005), "The evolution of the venture capital industry in transition economies: the case of Poland", *Post-Communist Economies*, Vol. 17 No. 3, pp. 331-48.
- Klonowski, D. (2006), "Local laws and venture capital contracting in transition economies: evidence from Poland", *Post-Communist Economies*, Vol. 18 No. 3, pp. 327-43.
- Klonowski, D. (2011), "Private equity in Poland after two decades of development: evolution, industry drivers, and returns", *Venture Capital*, Vol. 13 No. 4, pp. 295-311.

- Kontorovich, V. (1999), "Has new business creation in Russia come to a halt?", *Journal of Business Venturing*, Vol. 14, pp. 451-60.
- Lawrence, T.B. (1999), "Institutional strategy", *Journal of Management*, Vol. 25 No. 2, pp. 161-87.
- Leleux, B. and Surlemont, B. (2003), "Public versus private venture capital: seeding or crowding out?", *A pan-European analysis, Journal of Business Venturing*, Vol. 18 No. 1, pp. 81-104.
- Li, Y. and Zahra, S.A. (2012), "Formal institutions, culture, and venture capital activity: a cross-country analysis", *Journal of Business Venturing*, Vol. 27 No. 1, pp. 95-111.
- Lingelbach, D. (2009), "Neither pirates nor politicians: the emergence of venture capital in weak institutional environments", unpublished PhD thesis, University of Exeter, Exeter.
- Lingelbach, D., Gilbert, E. and Murray, G. (2008), "The rise and fall of South African venture capital: a coproduction perspective", paper presented at International Council for Small Business World Conference, Halifax, 22-25 June, available at: www.smu.ca/events/icsb/proceedings/challenges_g.html (accessed 30 January 2012).
- McCarthy, D.J., Puffer, S.M. and Darda, S.V. (2010), "Convergence in entrepreneurial leadership style: evidence from Russia", *California Management Review*, Vol. 52 No. 4, pp. 48-72.
- McCarthy, D.J., Puffer, S.M. and Naumov, A.I. (2000), "Russia's retreat to statization and the implications for business", *Journal of World Business*, Vol. 35 No. 3, pp. 256-74.
- McKelvey, B. (2003), "Toward a complexity science of entrepreneurship", *Journal of Business Venturing*, Vol. 19 No. 3, pp. 313-41.
- Manigart, S. (1994), "The founding rate of venture capital firms in three European countries (1970-1990)", *Journal of Business Venturing*, Vol. 9, pp. 525-41.
- Marschan-Piekkari, R. and Ghauri, P.N. (1998), "Growing pains in multinationals: controlling subsidiaries through regional centers", Research Report 98B39, Research Institute Systems, Organization and Management, University of Groningen, The Netherlands.
- Meyer, K.E. and Peng, M.W. (2005), "Probing theoretically into Central and Eastern Europe: transactions, resources, and institutions", *Journal of International Business Studies*, Vol. 36, pp. 600-21.
- Michailova, S., Puffer, S.M. and McCarthy, D.J. (2011), "Russia: as solid as a BRIC? Special Issue call for papers", *Critical Perspectives on International Business*, Vol. 8 No. 1.
- Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, Sage Publications, Thousand Oaks, CA.
- Musatova, M. (2012), "Contours of Russian private equity", in Klonowski, D. (Ed.), *Private Equity in Emerging Markets: The New Frontiers of International Finance*, Palgrave Macmillan, New York, NY.
- Organisation for Economic Co-operation and Development (1986), *Government Programs for Venture Capital*, Organisation for Economic Co-operation and Development, Paris.
- Ostrom, E. (1996), "Crossing the great divide: coproduction, synergy, and development", *World Development*, Vol. 24 No. 6, pp. 1073-87.
- Peng, M.W. (2004), "Identifying the big question in international business research", *Journal of International Business Studies*, Vol. 35, pp. 99-108.
- Puffer, S.M. and McCarthy, D.J. (2001), "Navigating the hostile maze: a framework for Russian entrepreneurship", *Academy of Management Executive*, Vol. 15 No. 4, pp. 24-36.
- Puffer, S.M. and McCarthy, D.J. (2011), "Two decades of Russian business and management research: an institutional theory perspective", *Academy of Management Perspectives*, Vol. 25 No. 2, pp. 21-36.
- Roberts, J. and Dörrenbächer, C. (2012), "The futures of critical perspectives on international business", *Critical Perspectives on International Business*, Vol. 8 No. 1, pp. 4-13.

-
- Roberts, J. and Fuller, T. (2010), "International business: past, present and futures", *Futures*, Vol. 42, pp. 901-9.
- Russian Venture Capital Association (2011), *RVCA Yearbook: Russian Private Equity and Venture Capital Market Review*, Russian Venture Capital Association, Saint Petersburg.
- Shenkar, O. (2004), "One more time: international business in a global economy", *Journal of International Business Studies*, Vol. 35, pp. 161-71.
- Siggelkow, N. (2001), "Change in the presence of fit: the rise, the fall, and the renaissance of Liz Claiborne", *Academy of Management Journal*, Vol. 44 No. 4, pp. 838-57.
- Siggelkow, N. (2002), "Evolution toward fit", *Administrative Science Quarterly*, Vol. 47 No. 1, pp. 125-59.
- Siggelkow, N. (2007), "Persuasion with case studies", *Academy of Management Journal*, Vol. 50 No. 1, pp. 20-4.
- Strauss, A. and Corbin, J. (1998), *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, Sage Publications, Thousand Oaks, CA.
- Svenjar, J. (2002), "Transition economies: performance and challenges", *Journal of Economic Perspectives*, Vol. 16 No. 1, pp. 3-28.
- Van de Ven, A.H. and Poole, M.S. (1995), "Explaining development and change in organizations", *Academy of Management Review*, Vol. 20 No. 3, pp. 510-40.
- Verkhovskaia, O. (2007), "Global Entrepreneurship Monitor: Russia 2006", Graduate School of Management, St Petersburg State University, St Petersburg.
- Verkhovskaia, O. and Dorokhina, M. (2008-2010), "Global Entrepreneurship Monitor: Russia 2007/2008/2009", Graduate School of Management, St Petersburg State University, St Petersburg.
- Vernon, R. (1971), *Sovereignty at Bay: The Multinational Spread of US Enterprises*, Basic Books, New York, NY.
- Whitley, R. (2008), *Business Systems and Organizational Capabilities: The Institutional Structuring of Competitive Competences*, Oxford University Press, New York, NY.
- Wright, M., Pruthi, S. and Lockett, A. (2005), "International venture capital research: from cross-country comparisons to crossing borders", *International Journal of Management Reviews*, Vol. 7 No. 3, pp. 135-65.
- Yin, R.K. (2003), *Case Study Research: Design and Methods*, Sage Publications, Thousand Oaks, CA.

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