

States, firms, and the structure of market risk

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Abstract

Market integration is a dynamic, interactive, and spillover-driven process. Markets integrate along organizational, spatial, and temporal dimensions. States and firms comprise the organizational dimension. A bargaining matrix distributes their respective advantages according to different types of international investment transactions, the temporal or time-based dimension. A three-dimensional market structure – organizational, spatial, and temporal (OST) – emerges and allows us to ‘construct’ the structure of market risk associated with different types of international investment.

Key words: Market integration, Market organization, State-specific advantages (SSAs), Firm-specific advantages (FSAs), Market risk structure (MRS)



Introduction

Some 40 years after the rise of the “low politics” (Morse, 1970) of transnational actors, the market has become an integral part of the international system. The market is a systemic, yet boundless structure – a transnational realm. Integration with world capital and goods markets raises new policy challenges for all countries (Wallack & Srinivasan, 2006). States are constrained from above by global economic forces and from below by peoples asking for rights, participation, or independence (Streeten, 2001). The ubiquitous ‘presence’ of the market and its perceived “non-territoriality” has reduced the “mutual exclusivity” of states (Ruggie, 1993). States have “lost” the capacity to control their own borders, at least in terms of economic transactions (Caporaso, 1997). This has led to the emergence of a new form of state – and thus a new states system – that breaks down the spatial coincidence between the state-as-actor and the state-as-structure (Wendt, 1994). As a result, territoriality, the central constitutive principle of the Westphalian system, has been called into question (Caporaso, 1997).

The differentiation of power has changed the parameters of competition and cooperation. It has led to *ad hoc* bargaining to resolve conflicts and induce cooperation. States, instead of struggling for power, are expected to defend their preferences and cooperate when cooperation is deemed necessary for their realization (Haas, 2004). Cooperation is a strategically rational if the game is potentially infinite or if it is simultaneously linked to a wide variety of other games with the same players (i.e., an iterative game) (Lipson, 1984). In an iterative game, the trade-off between relative gains and absolute gains versus a minimum discount factor is required to support cooperation in the future (i.e., a discount factor applied to the next period reduces the value of future benefits of cooperation relative to current benefits). In other words, the present value of cooperation exceeds its future value, especially if there is an expectation that the game will be repeated in the future (Lipson, 1984).

Interests do not change, but the interaction and ties among actors do, as the circumstances under which perceived interests are acted on undergo change (Haas, 2004). Policy interdependence is the critical theoretical link between state preferences, on the one hand, and the behavior of one or more states, on the other (Moravcsik, 1997). Interdependent actors pursue their respective interests in fields – legal, political, and economic domains of interest in which systemic relations among them take place – and in doing so assert and transform their mutual ties (Haas, 2004). The loss of state capacity to control its borders is, to a large extent, been consciously given away, partly in the interest of efficiency (Caporaso, 1997). States know that they can readily verify compliance with economic agreements and will have time to discuss possible violations and, if need be, adjust to them. These favorable conditions facilitate trust and diminish the risks of cooperating (Lipson, 1984).

Market organization

One of globalization’s principle effects is to shift activity into transnational space, whether it is geographic space (oceans and atmosphere), natural resource space (climate, fisheries, and biodiversity), or cyberspace (monetary transactions and information) (Mathews, 2001). Scholte (1997) distinguishes between the international realm as a patchwork of bordered countries and the global sphere as a web of transborder networks. Sum (1999) points

to the importance of “the space of flows” and identifies four key aspects of time-space movements: finance, industry, commerce, and culture: 1) Finance “denationalized” in “electronic space;” 2) Industry shaped by networks of multinational firms interacting with regional and more locally based firms within the evolving regional division of labor/knowledge; 3) Commerce organized by networks of multinational service firms, located in “global-gateway” cities, coordinating time-space of global-regional and regional-local production and distributive chains; and 4) Cultural time-space influenced by social practices embedded in networks of intra- and/or cross-cultural ties.

The increasing internationalization of the economy is accompanied by the “disenclosure” of the assumed relationship between national societies, national economies and national states (Laepfle, 1999). International organization, in terms of multilevel linkages, norms, and institutions, is another type of world political structure (Keohane & Nye, 2001). Sassen (1999) describes a “frontier zone of politico-economic interaction” between global actors that produces many different outcomes. Haas (2004) describes pragmatic constructivism as a complexity of interests and issue areas organizing the international system. The evolution of political-economic structure results from the interaction of independent changes along each dimension (market/hierarchy and politics/economics) and from complex feedback effects that occur as the consequence of that interaction (Cerny, 1995). Understanding the coherence of a world-economy directs us to examine the complex and multi-level interactions between its boundaries, realms, and temporal rhythms (Germain, 1997). Fewer barriers – natural or artificial yields what Cerny (1995) describes as a set of economic and political structures and processes deriving from the changing character of goods and assets that comprise the base of the international political economy, in particular, the increasing structural differentiation of traded goods and assets.

Table 1 (Market Dimensions) describes market integration as a three-dimensional process – organizational, spatial, temporal (OST). The organizational dimension of market integration is almost unlimited. Interaction between firms (F–F), between states and firms (S–F), and between states (S–S) integrates markets along the organizational dimension. States and firms act on their own interests. Firms are driven by profitability and the growth of their internal markets, while states are shaped by a broader set of values and interests and are driven, in the economic realm, toward maximizing the competitiveness of their constituent economies (Castells, 2000). Attachment to institutions remains instrumental so long as interests derived from market rationality remains ascendant (Haas, 2004).

Table 1 Market Dimensions

Organizational	Spatial	Temporal
F–F	Global	Portfolio Investment (Debt and Equity Securities), Financial Derivatives
S–F	Regional	Foreign Direct Investment (FDI)
S–S	Local/Domestic	Commercial and Concessional Loans, Trade Credits, Currency Deposits, Official Reserve Assets

Source: Author's illustration.

The territorial or spatial dimensions of market integration also vary widely. The basis of cooperation is not spatially bound by organizational structure (Beck, 1992). Neither is competition. Scale economies both internal and external to the firm are central to newer models of the spatial aspects of integration (Robson, 1998). Firms build economies of scale not only in terms of production cost efficiency, but also in terms of sources of supply (e.g., resources, intermediate goods, etc.), consumption market coverage, internal market size, knowledge accumulation, research and development (R&D) economies of scale, access to financing, pools of risk capital and accompanying risk management, market and non-market networks, etc. The scale of goods and assets produced, exchanged and/or used in a particular economic sector or activity diverges from the structural scale of the national state – both from above (the global scale) and from below (the local scale) – and the more those divergences feed back into each other in complex ways the more the authority, legitimacy, policymaking capacity, and policy-implementing effectiveness of states will be challenged from both without and within (Cerny, 1995).

The firm is the most formal private sector economic organization. It embodies market integration. The ability of the firm to affect international organization underlies functionalist integration theory. Its interests as a going-concern and its function as the means by which technology is invested in and transmitted to the market also add to its organizational capability. The consolidation of industries and the economic output of some firms that rival that of states is another indicator of the firm as a formative international organization. Indeed, firms, both domestic and foreign, shape the institutional development of the economies of countries (Jackson & Deeg, 2008) and the dynamism of their comparative advantages (Dunning, 2009).

Firms are not limited to one geographic location. They are active in a variety of different markets (Helleiner, 1989). Firms place the ‘organizational center’ of market integration at the micro level according to its various activities. In other words, as the firm grows so does the market. Not every market is global in scope. The more activities a firm pursues, the greater the number of coalitions it concludes with other firms, and the more countries in which it produces, then the more its global competitiveness is likely to rest on its ability to integrate these activities systematically (Dunning, 1997). Systemic interdependence (Beck, 1992) integrates markets at any number of levels – global, regional, local or domestic.

Time-based international investment adds the temporal dimensions to market integration. Market integration, in terms of international investment, is driven by capital and financial integration, as much as it is by FDI. Time-based international investment relationships extend market integration beyond the trade-generated “product life cycle” (Vernon, 1966) to include not only the subsequent investment for domestic production in those markets, but also the management of the earnings generated from international goods and services trade, investment, production, and risk management.

The time-based nature of international investment is an indicator of expectations of future interdependence. The ‘invest in technology imperative’ has driven market integration since the mid-1990s. An investment exchange involves a degree of an inherent permanence because the initial exchange of capital and its return or repayment takes place at two different points in time. The dynamic interaction between states, as in an investment exchange, presents conditions under which states cooperate in anarchy (Lipson, 1984; Snidal, 1991).

International investment also requires state-firm interaction. The more specific an asset is to its current use, the more substantial is the cost of moving the asset from its current use to its best alternative use, and the greater the incentive for the owner of the asset to lobby for supportive government policies (Frieden, 1991).

Issue areas

The changing nature of competition and cooperation has multiplied the number of issue areas and on-going games between states, between firms, and between states and firms. The state and economy are complex compounds of market and hierarchy, as well as the outcome of the interaction between politics and economics (Cerny, 1995). Cooperation [and competition] includes linkages between state policy processes, private interests of market actors, and the global/regional patterns of integration in the world economy (Coleman & Underhill, 1998). Rather than collapsing economic life into a “system of states,” it is more useful to look at how the two structures intersect, with all the inherent possibilities for new forms of cooperation and conflict (Bernard & Ravenhill, 1995).

There is tension between the micro-efficiency-driven behavior of firms and the macro-efficiency and distributional objectives of governments (Rugman & Verbeke, 1998). States and firms bargain based on their respective advantages. The states bargaining capabilities are based on the specific advantages it enjoys. The state’s most fundamental advantage is its geographic location. State-specific advantages (SSAs) are primarily defined as the natural factor endowments of a nation – basically the variables in its aggregate production function (Gestrin & Rugman, 1994). The state’s location-specific advantages (LSAs) include sovereign control over its territory, legal and regulatory framework, and foreign and macroeconomic policy (i.e., interest rate and exchange rate management). Many of the state’s advantages can be influenced, indeed changed, by government policies (Gestrin & Rugman, 1994). The ability of a country to upgrade its technological and human capabilities is a function of its own location-bound endowments, including its natural assets, the characteristics of its markets, and the macro-organization strategies of its governments (Dunning & Narula, 1996).

Ownership and other competitive advantages determine the bargaining capabilities of firms. The firm’s competitive or firm-specific advantages (FSAs) include its ability to reduce transaction costs through its efficient organization, discovery of product and production technology, and the ownership of other intellectual products such as management expertise. FSAs are either location-bound or non-location bound (Rugman & Verbeke, 1998). They determine whether (the): 1) Government policy will be viewed as an endogenous or exogenous variable; and 2) Benefits of national responsiveness versus integration will be pursued in its business-government interaction. Location-bound FSAs reflect proprietary competencies and capabilities, which can be exploited in only a limited geographic region, e.g., an excellent reputation, a well-positioned retail network, privileged relationships with domestic economic actors, etc. (Rugman & Verbeke, 1998). Government policy is an endogenous variable when firms’ activities decentralized and FSAs are location-bound. In other words, business-government interaction is nationally responsive. The result often is the multinational firm is able to secure advantages, which it would not be able to secure if all the official functions, or, at least, the responsibility for important decisions concerning them, were centralized in one powerful body (Lall & Streeten, 1977). Non-location-bound FSAs include

global brand names and technologies that can easily be transferred internationally, either as an intermediate good or embodied in a final product (Rugman & Verbeke, 1998). Firms are centralized and government policy is an exogenous variable.

Gestrin & Rugman (1994) identify two additional advantages particular to multinational enterprises, the: 1) Ability to internalize portions of their value-added chains, and 2) Capacity to change the environment in which they operate. Market internalization is the process of, “bringing market transactions in-house by controlling the sources of supply, distribution and even ancillary services” (Williams, 1997). It reduces transaction costs, thereby realizing efficiency gains, and also affords the multinational firm strategic behavior aimed at market control (Robson, 1996).

While states and firms contest their relative bargaining abilities in the market, their interests are met there, as well. States and firms cooperate through trade and investment promotion, formal public-private partnerships (PPPs), and informal relationships. States’ lost capacity to control their borders has been a political process, too, not just an efficiency project, with holders of mobile forms of capital benefiting more than others (Caporaso, 1997). The activities of multinational companies and banks create the principal constraints on national policies (Streeten, 2001). Firms, in the early stages of introducing a new product, producers are confronted with a number of critical, albeit transitory, conditions that deeply affect the choice of a production site (Vernon, 1971). They respond to the stable conditions and policy initiatives of host states. They cluster in certain areas in response to government incentives. Through internalization, the multinational firm maximizes the strategic benefits of the combination of FSAs or the competitive strength of the firm and SSAs that characterize the national economies in which the it operates (Gestrin & Rugman, 1994).

If it is true that the modern firm is as much a creator of new, as an exploiter of old, competitive advantages the very problem of the transaction as the primary unit of analysis is raised with increased seriousness (Hedlund, 1996). This calls for an analysis of politics at different levels of interaction, as well as by a hierarchy of issues or “issue structuralism” (Keohane & Nye, 2001).

Different types of investment establish different types of relationships depending on their duration. Short- and variable-term investment are much like simultaneous trade transactions and reflect the competitive advantages of firms. Long- and medium-term loans once extended are in jeopardy – at greater risk – of not being repaid in a more distant future. Figure 1, Alternative Environments of International Investment, illustrates the effect of the firm’s advantages through FDI in the first two issue areas. FDI belongs more to the theory of industrial organization than to that of international capital (i.e., portfolio investment flows) (Kindleberger, 1970). It is an integrated package of the range of business operations available to firms (Kojima & Ozawa, 1984). FDI is a location-specific asset that establishes a presence in overseas markets to produce goods or services abroad previously produced at home and exported abroad (Hymer, 1976; Kindleberger, 1970; Aliber, 1970; Caves, 1971, 1996; Frischtak & Newfarmer, 1996). It tends to involve market conduct that extends the recognition of mutual market dependence – the essence of oligopoly – beyond national boundaries (Caves, 1971). Mergers and acquisitions (M&As) have altered the nature of inter-firm competition and changed the landscape of the private sector. More than 80 percent of FDI typically takes place in industries where the four-firm concentration ratio is higher than 50 percent (Moran, 1996). Resource extraction, energy, and certain areas of manufacturing,

transport, communication, and business services (e.g., finance including banking, etc.) are large-scale industries and thus characterized by large-scale enterprises (Audretsch, et al., 2003).

Oligopolistic competition in the first issue area is comprised of those industries of the economy in which states and firms have bargaining positions of approximately equal strength. States' LSAs are strong as are firms' OSAs, which are location-bound in industries and have large economies of scale and high barriers to entry. However, neither the state nor the firm has a decisive advantage. The coincidence of the respective advantages states and firms leads to oligopolistic competition vis-à-vis each other despite their absolute strengths. The industries are mature and firms well established and there is competition among them across the globe (Knickerbocker, 1973). Stopford (1996) refers to industries where there is a concentration of globally competitive multinational firms. Some of the most global industries – oil, natural gas, water, and electricity – are in the resource sector. Territorial expansiveness and vertical integration are strategic objectives of commodities and other natural resource firms.

Oligopoly is typical in industries that undertake “vertical” direct investments to produce abroad a raw material or other input to their production process at home (Caves, 1971). However, these firms have weak concentration advantages because “no gain arises from the physical integration of process [of preparation of raw-material inputs] when say a steel company establishes an iron-ore mine, since the technology at the two stages of production has nothing in common” (Caves, 1971).

Host state-foreign firm bargaining in this issue area has been problematic in the past. Vertical FDI in the resource sector is long-term. The resource sector is often subject to what Vernon (1971; 1998) describes as an “obsolescing bargain” between host states and foreign investors. Natural resources, as well as agriculture, are also among the most politically sensitive economic sectors. Agriculture and energy industries remain central to national interests. They are also among the most uncompetitive industries in the economy, especially if domestic resource firms are state-owned enterprises (SOEs). Bargaining between states and firms in this issue area therefore tends to be contentious. It most closely fits the realist argument of relative gains (Baldwin, 1993) and adversarial relationships between narrowly self-interested states and oligopolistic firms in consolidated industries. Close state-firm cooperation has led to highly politicized interaction. The state has historically been in a stronger bargaining position because natural resources are location-specific.

The vertical FDI investor therefore has historically been in a weak position *vis-à-vis* the host state because of the risk of invested capital being expropriated. FDI in low-technology industries was particularly vulnerable to expropriation. (Low-technology manufacturing – textiles, shoes, steel – were politically sensitive industries.) It comprises a greater portion of the total direct outflow from a country with a smaller domestic resource base (Caves, 1971). The direct investor is further disadvantaged in a foreign market not only because it is using foreign factors of production, but it is also a long distance from his decision-center (Kindleberger, 1970). In developing countries, for example, state-firm relations are sometimes inseparable and operate in a framework of “bilateral monopoly,” with the [foreign] firm controlling sector-specific capabilities (i.e., the capital, management, and technology needed to bring an operation to fruition) and the host state controlling the conditions of access (Penrose, 1959, 1968; Moran, 1998). Hence, while oligopolistic firms and exchange-

determined prices globally integrate commodities markets, host states determine the conditions of access to resources.

Figure 1 Alternative Environments of International Investment

		<i>Dispersion of:</i> State (S) Location-specific advantages (LSAs)	
		<i>Strong</i>	<i>Weak</i>
<i>Dispersion of:</i> Firm (F) Ownership-specific advantages (OSAs)	<i>Strong</i>	<p>1 <i>Oligopolistic competition</i></p> <p>Resource sector Commodities/Vertical FDI</p>	<p>2 <i>Regulated competition</i></p> <p>Manufacturing & Services/Horizontal FDI</p>
	<i>Weak</i>	<p>3 <i>Political competition</i></p> <p>Official reserve assets, Bank term loans & currency & deposits</p>	<p>4 <i>Competitive advantage</i></p> <p>Portfolio debt and equity investments, financial derivatives, money market investments</p>

Sources: Adaptation of “Triads of Relationships” in Stopford & Strange, 1991, Figure 5.2 (Alternative Environments for International Trade), in Stopford, 1996; Figure 2 (Institutional Determinants of MNE-Government Interactions) in Rugman & Verbeke, 1998.

Regulated competition in the second issue area reverses the relative the firm’s bargaining capabilities in the first issue area (i.e., oligopolistic competition). The firm has a decisive advantage while states’ LSAs are weaker because horizontal FDI is not as location-bound as vertical FDI. FDI in this issue area has not been significant source of conflict between states and firms. Bargaining in this issue area tends to regulate markets. Regulated competition is a form of extensive strategic interplay between states and firms in such politically sensitive industries as automobiles, telecommunications equipment, computers and semiconductors (Stopford, 1996), industries in the manufacturing sector. “Ad hoc incrementalism” typifies a market along the production process in the manufacturing sector (Kojima & Ozawa, 1984). Manufacturing firms rationalize production in any number of regions and sub-national economic zones in order to reduce costs and increase profits through sourcing, production, and inventory management, exchange rate, interest rate, and wage differentials, transfer pricing, etc. The result is a string of operations in different geographic locations. This affects the definition of direct investment: A direct investment chain of ownership where at least one link in the chain involves two (foreign) enterprises in the same economy (IMF, 2004).

The direct equity interests of firms through FDI have become an incentive for state-firm cooperation. State policies in this area have become responsive to firms and their expanding activities. States' LSAs have weakened because the policy incentives, land, and labor it offers in exchange for FDI are more plentiful than increasingly technology-intensive FDI. Communication technology has reduced the negative effect of distance in the firm's operations. Even FDI in the resource sector has become more technology-intensive. The increasing cost of technology-intensive and large-scale resource and resource processing projects shifts state-firm bargaining in the oligopolistic competition issue area toward other forms of FDI. (The empirical analysis that follows discusses all FDI in issue area four in order to reflect this shift.) Competition between states to host FDI also intensified, as the rapid rise in the number of bilateral investment treaties (BITs) indicates. The bargaining position of FDI investors has increased as joint ventures, M&As, and other strategic alliances have strengthened intra- and inter-firm networks (i.e. cooperation), which in turn have consolidated industries moving the first two issue areas toward oligopolistic competition. Areas of contention persist between host states and investing firms over how the firm manages the earnings generated from its invested assets (e.g., the percentage of profit remitted from ongoing operations versus reinvested earnings and transfer pricing of repatriated earnings, etc.).

The regulated competition issue area is still distinct from oligopolistic competition because firms in this issue area are less location-bound, at least at the national level. Horizontal direct investment (FDI_H) is the equivalent of entry into a regional sub-market by a firm established in at least one other sub-market (Caves, 1971). The affiliates of investing firms become embedded in host countries (Dunning, 1998).

A symmetrical position of inward and outward FDI at the public policy level, and a geographically dispersed FDI configuration at the firm level, lead to complexities in terms of optimal business-government interactions that cannot be solved at the national level (Rugman & Verbeke, 1998). Horizontal FDI is an incentive for cooperation at the regional level. The senescent oligopoly is one in which, economies of scale and entry barriers cease to be effective deterrents and producers reconcile themselves to competitive pressures, with location of production being determined by competitive forces acting on interregional cost differentials (Vernon, 1974). This can potentially play a key role in reducing regional disparities in economic performance not only as a source of income and jobs, but also as a means of transferring technology and know-how to lagging regions (European Commission, 2004).

Political competition in the third issue area is where the state is in a relatively strong bargaining position *vis-à-vis* the firm. States' location and other advantages are strong and FSAs are weak because they are very location-bound and government policy is an important endogenous variable.. In other words, the state's means of intervention is more important than market factors (Stopford, 1996). Political competition and cooperation among states throughout the international system take place in this issue area. In terms of international investment, foreign currency and other official reserve assets, and other investments in the balances of payments (i.e., non-traded debt: trade finance, term loans including commercial or syndicated and long-term concessional loans and currency & deposits) comprise in this issue area.

Capital markets are more international than global. They are segmented due to informational asymmetries (Portes & Rey, 2000). Most financial instruments that are issued in

domestic capital markets are location or country-specific because they are not easily traded internationally. The market for domestic debt securities is almost five-times larger than the international market for debt securities (IMF, *ICM*, 2001). The international lender, like the vertical FDI investor, is in a relatively weak position because the location of investment is fixed and is longer-term in duration. Multinational firms' exchange-rate risk management also requires substantial local borrowing by their subsidiaries in host country markets in order to help balance their local-currency claims and liabilities (Caves, 1971). Term loans, while potentially tradable (i.e., the interest rate and principle of a loan transaction can be separated (i.e., stripped or swapped) or debt can be securitized and traded independently of the initial financing), have the greatest effect in the economy of the country in which they are located. It is hoped a liquid capital market will emerge over time offering firms more options to manage their investment earnings.

The stability of the domestic economy and political system is an important factor determining whether or not the loan is repaid at maturity. Monetary authorities – central banks and other macroeconomic policy makers – operate payment systems and manage the country's money supply and foreign currency reserves to affect inflation, interest and exchange rates. International lending depends on the stability of the banking sector, the foundation of the capital market and key to the soundness of the financial sector (Padoa-Schioppa, 2003). Trade finance, currency deposits, and longer-term investment financing relationships also rely on the state to foster a viable capital market (e.g., provide a risk-free benchmark in the government debt market, provide deposit insurance, etc.), consistent investment policies, maintain effective interest rate and exchange rate policies, and effectively manage official reserve assets (e.g., foreign currencies, monetary gold, etc.), as well as a domestic capital market infrastructure, such as suitable legal, regulatory, and settlement framework, along with market-making dealers, and sufficient volume of buyers and sellers (IMF, 3/2007). Overnight repurchase agreement (repo) markets ensure capital market liquidity. Real-time gross settlement systems and central bank cooperation through currency swap agreements further facilitate capital market development.

Political competition and relative gains typify the banking sector. Government policy and the domestic banking sector are inextricably linked. The banking is a systemically important institution; a core national interest (US FRB, 2/23/09). Indeed, the banking sector is closely tied to the stability of the political system. The current crisis and policy measures to resolve it illustrate just how central a stable banking industry is to economic and political systems.

Capital markets [and the banking system at its core] rely on macro and political stability, including a government securities market to build a benchmark yield curve and a dealer community, economic growth that generates a sufficient number of issuers, inflation, and interest rate structures that are not too high or volatile, legal frameworks (e.g., securities laws, bankruptcy codes, etc.) that support the market and tax policies that do no disadvantage issuers or investors (Harwood, 2000). Central bank money indirectly monetizes promises of the real economy and therefore is the ultimate tradable good of an economy (Tumpell-Gugerell, 2003). Central banks create money and implement monetary policy through the banking industry and its lending function. Banking sector concerns have often been motivated by monetary policy action (or inaction) (IMF, 1996). A fragile banking sector is vulnerable to higher interest rates and central banks are faced with a trade-off between containing inflationary pressures and averting a widespread banking crisis (IMF, 1996). Severe banking

sector weakness spurs governments to guarantee credit markets, bank loans, and even to nationalize banks. The risk of sovereign debt default, in turn, threatens domestic capital markets and the banking system.

Competitive advantage in the fourth issue area is comprised of the most dynamic sectors of the economy. The global financial market is comprised of the global financial market and large-scale portfolio investors. The most dynamic international investments – portfolio investment in tradable equity securities, bonds and notes, securitized debt), financial derivatives and employee stock options, money market instruments – comprise this issue area. This is where the bargaining advantages of both states and firms are weak although firms have had a decisive advantage over states. Government policy is an exogenous variable because of the level of economic interdependence. Stopford and Strange (1991) single out technology and the structure of international finance as the primary driving forces for change in economic and competitive imperatives in the world system.

The structural power of finance, in both institutional and market terms, has increased markedly within the world-economy over the last twenty years (Germain, 1997). Even though most bond and equity securities are issued and listed in domestic markets, foreign investors trade a substantial portion of them. (Foreign portfolio investors own 25 percent of bonds and 20 percent of equities worldwide (Farrell et al., 2007).) As a result, global financial markets exercise a powerful discipline on national governments, particularly in domestic capital markets. Bond markets “create competition with the local banking sector, which can reduce lending rates” (Harwood, 2000). Debt and equity securities trade is also fast-paced and arbitrage-driven. Money markets are central to capital allocation – the efficient distribution of liquidity among financial institutions and the hedging of short-term risks (Asian Capital Markets Monitor, 2009).

Firms in this issue area enjoy considerable bargaining advantage because the volume and velocity of their transactions challenge the regulatory capabilities of states – monetary policy, balance of payments, reserves management – and the liquidity and stability of domestic capital markets. The pace of change (i.e., transaction rate in financial markets and technological development) makes it difficult for states to monitor firms in this area. States’ LSAs therefore have been weak. (The rise of states’ official reserve assets indicates a trend toward more policy initiatives to increase state bargaining capabilities in this issue area.)

Even though firms have greater bargaining power than states in this issue area, it is among the most heavily contested among firms. Firms manage risk and seek liquidity in this issue area. Their investments are short- and variable-term and profit-driven. Hence, while firms have a bargaining advantage *vis-à-vis* states, they usually do not among themselves. Portfolio investments are traded in organized financial markets (IMF, BPM5, 2004) and in over-the-counter (OTC) markets between large contracting parties. Portfolio investors have no significant influence over the operations of enterprises in which they invest (IMF, BPM5, 2004). Firms’ OSAs advantages are neither relatively strong nor location-bound. They are due to risk management capabilities.

Short- and variable-term investments are also the most geographically dispersed and easily transferred around the globe and therefore are the most difficult market transactions for the state to monitor (and therefore the least interaction between states and firms). Indeed, many financial market transactions take place offshore – outside the regulatory bounds of any state. They are “space-time movements in denationalized electronic space” (Sum, 1999).

Financial market transactions flow through telecommunication networks (e.g., telephone, interbank wire, internet, etc.) between accounts in bank and non-bank financial institutions, many of which are located in international financial centers – London, New York, Tokyo, etc. – and offshore financial centers – the Cayman Islands, Hong Kong Special Autonomous Region (SAR), the Bahamas, Luxembourg, Singapore, etc. As much as half of the world's stock of money either resides in tax havens or passes through them (Palen, 2002).

Market risk structure

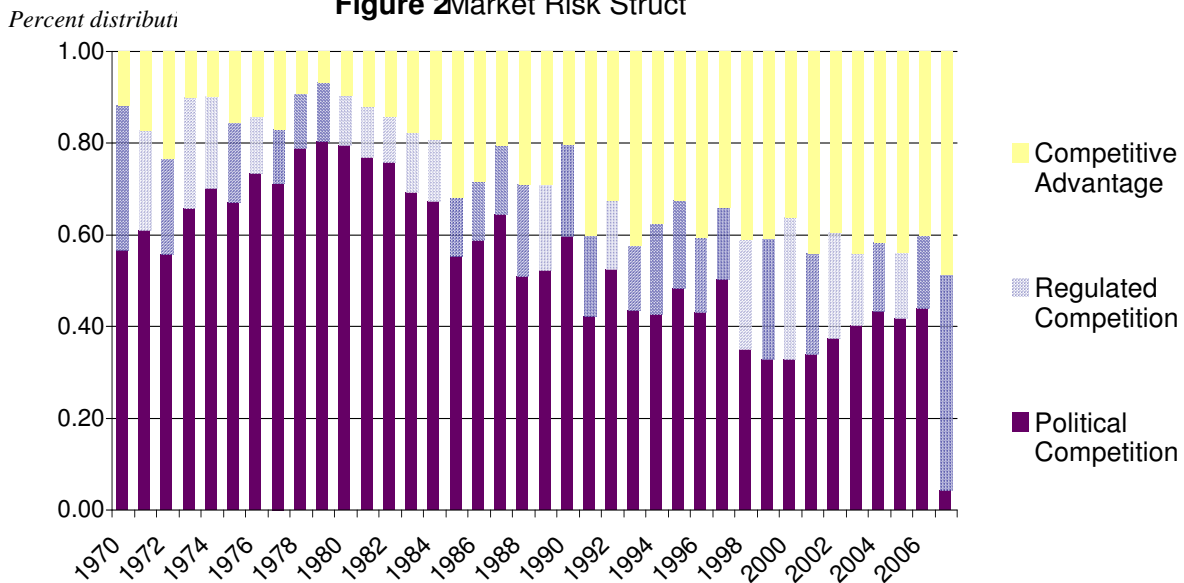
The respective organizational capabilities of states and firms, in terms of different types of international investment, affect the structure of market risk. Figure 2 (Market Risk Structure) is the outcome of state-firm bargaining in the three international investment issue areas discussed above – the organization of market risk. It illustrates the changing structure of market risk from the beginning of the 1970s and the collapse of the Bretton Woods fixed exchange rate system through the debt crisis in the 1980s, the end of the Cold War in the early 1990s, the series of financial crises that began in Mexico in 1993-94, the introduction of the euro at the end of the 1990s into the 2000s, and the global financial crisis that began in 2007.

The period proceeded with an increasing rate of political competition – the state and banking industry in the global structure of market risk. The most disproportionate distribution of market risk was with the peak of political competition in 1979 and 1980. The debt crisis that followed redistributed market risk, ushering in the most striking feature of Figure 2 – a shift away from political competition to competitive advantage and regulated competition and back again. The most significant trend throughout the period was the steady rise of the relative importance of competitive advantage as a source of market risk, mostly at the expense of political competition. The figure indicates market risk has become more evenly distributed over time, especially since the end of the Cold War in the early 1990s. Competitive advantage surged to 40 percent of total market risk in 1993, just before onset of a period of financial crises. The most even distribution of market risk was in 2000 when regulated competition peaked at as a source of market risk and political competition reached its lowest point. The period ended with a steady share of competitive advantage, a declining share of regulated competition, and rising share of political competition, albeit at a lower scale than at the beginning of the period. The onset of the global economic crisis spurred the resurgence of political competition.

Capital market integration through international bank lending, trade financing, and currency deposits, accounted for, on average, 44 percent of total international investment transactions throughout the period, for as much as 81 percent of market risk in 1980 and as little as 34 percent in 2000. Political competition's share of market risk declined from its period high to 59 percent by 1985 as the rate of international dropped after the onset of the debt crisis in 1981. Political competition returned again 1986 and 1987, 1990, 1992, 1995, and 1997, and between 2002 and 2005, indicating the risk reducing, intervention advantage of the state's macroeconomic policy during times of uncertainty. This is most evident during the global economic crisis. But, a strong state presence in the market is a static risk. Interest rate and exchange rate risk remain in domestic (local) capital markets and offshore financial markets that trade these interest rates and foreign currencies.

Financial market integration is the main force driving globalization (Giddens, 2000; Keohane & Nye, 2001). Financial market integration, in terms portfolio investment in tradable debt and equity securities, accounted for, on average, 40 percent of total international investment transactions, ranging between 9 percent in 1980 and 43 percent in 2001 and 2005. The competitive advantage of firms in global financial markets increased dramatically in the first half of the 1980s, rising from 9 percent of market risk in 1980 to 29 percent by 1985. It is a source of dynamic risk. Market risk in global financial markets is synonymous with risk management. Competitive advantage is subject to volatility. Firms manage the portfolio of their invested assets and the earnings these assets generate in fast-paced global financial markets. Short- and variable-term investments are risk management vehicles for risk-managing portfolio investors. Portfolio and financial derivatives investments are more vulnerable to reversal and therefore are widely regarded, whether rightly or wrongly, as initiators of crises in domestic capital markets.

Figure 2 Market Risk Struct



Competitive advantage = Total portfolio bond and equity investment and financial derivative transactions

Regulated competition = Total FDI transactions

Political competition = Total loans, trade finance, currency and deposit, and official reserves transactions.

Source: *Balance of Payments Statistics*, IMF, 2007.

The trade-off between the firm's competitive advantage and the state's political power in the distribution of market risk continued through most of the 1990s and 2000s. A 38 percent surge of international investment transactions in 1995 was due to the resurgence of the political competitiveness of the state in domestic capital markets and a heightened sense of uncertainty among risk managing investors in global financial markets as the Mexican peso crisis rocked the financial system. Competitive advantage dropped off almost as dramatically

in 1995, as political competition had done at the beginning of the 1980s. Political competition and regulated competition increased relative to the competitive advantage of firms in global financial markets in 1995. Competitive advantage returned as a source of market risk in 1996, a trend that continued until 2005. But in 1997 competitive advantage dropped and political competition surged as sources of market risk at the onset of the Asian financial crisis. Competitive advantage returned and exceeded political competition as a source of market risk in 1998, peaking at 43 percent in 2001. Political competition was the least important source of market risk was between 1998 and 2001. Political competition accounted for 44 percent of market risk between 2002 and 2005 and competitive advantage for about 40 percent.

The shift between the relative importance of political competition and competitive advantage as sources of market risk, while evident after 1997, was tempered by an increase in the relative importance of regulated competition. Regulated competition is a 'cushion' between the extremes of static risk of political competition and dynamic risk associated with competitive advantage. FDI and the regulated competition associated with it reduce and shares risk. While it may be subject to an obsolescing bargain and expropriation risk, it is also a highly desirable form of international investment in recent years as competition for its technology intensiveness has increased. Regulated competition's share of market risk fluctuated in the narrowest range, between in 9 percent in 1982 and 30 percent in 2000. It peaked at the beginning of the period in 1970 and again in 2000. Regulated competition steadily grew from about a 10 percent source of market risk between 1980 and 1982 to 19 percent by 1990. The rise of regulated competition during the 1980s came at the expense of both political competition and competitive advantage. However, there is no significant trade-off between regulated competition and political competition or competitive advantage as a source of market risk. Regulated competition, while declining as a source of market risk between 1991 and 1993, remained a relatively steady, albeit relatively insignificant, 15 percent source of market risk, between 1991 and 1997. Regulated competition took up some of the drop of political competition in 1998 and became a more important source of market risk between 1998 and 2000. This coincided with the introduction of the common European currency, the euro. Regulated competition declined from its 2000 peak to 21 percent in 2001 and 14 percent in 2004 and 2005, which portended the period of increased market volatility that followed.

Conclusion

Market integration has transformed the international system. The preeminence of "economic life" (Bernard & Ravenhill, 1995) has 'de-territorialized' the state and put the market in its place as the primary organizational unit of the international system. The market integrates through dynamic interaction. The pace of market integration increased dramatically after the Cold War. Interest-driven interaction between interdependent actors in issue areas, fields, domains of interests, etc., organizes the international system. The increased pace of market integration, especially the volume of international investment transactions, differentiates the market between types and levels of integration and increases the number of bargaining sites between states and firms. Bargaining between firms in global financial markets, between states and firms in regional production and service markets, and between states in domestic capital markets distributes risk.

Market risk affects the structure of the international system. The relative importance of each side of the “diplomacy triangle” (Stopford and Strange, 1991) – S–S, F–F, S–F – affects international organization. The pooling of and contestation over technology, investment and investment financing by states and firms – their relative bargaining capabilities over capital resources – shape market integration. The temporal nature of international investment also allows us to ‘locate’ markets according to degrees of location-specificity of an invested asset. Interaction analysis allows us to ‘locate’ where economic and politico-security interests converge or diverge in the market integration process. It also allows us to juxtapose the centralization of economic power and the decentralization of political power. The systemic interdependence generated by economic or private interests affects international relations when their internal markets are large enough to affect the behavior of states, the structure of markets in which they operate, and course of market integration.

The market risk structure illustrates increasing systemic interdependence and the ability of firm to shape international organization either through firm-firm interaction or state-firm interaction between 1980 and 2000. During that period, the firm’s assets both tangible and intangible were a source structural power vis-à-vis states and in the markets in which they operate. This long-term trend began to reverse in after 2000.

Economic interdependence reduces conflict when expectations of future interdependence are sufficiently high and creates new sources of conflict when are expectations of future interdependence not high enough. They are high enough when risk is evenly distributed. FDI and regulated competition (i.e., state-firm cooperation) have a ‘linchpin effect’ on the structure of market risk and market integration. An evenly distributed risk structure, as it was in 2000 when FDI peaked as a source of market risk, indicates sustainable market integration but not immunity from external systemic shocks. The shifting distribution of market risk between global financial markets and domestic capital markets points to tension between firm-led and state-led processes of integration beginning in the 1990s. With expectations of future interdependence firmly established, the resilience of the global market system has been repeatedly tested by financial crises.

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