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Submitted 05.14.2014. Approved 15.12.2014
Evaluated by double blind review process. Scientific Editor: Luiz Artur Ledur Brito
DOI: http://dx.doi.org/10.1590/S0034-759020150604

INTERNATIONALIZATION OF STATE-OWNED ENTERPRISES THROUGH FOREIGN DIRECT INVESTMENT

Internacionalização de empresas estatais por meio de investimento direto estrangeiro

Internacionalización de empresas estatales por medio de inversión extranjera directa

ABSTRACT

State-owned enterprises (SOEs) are created to focus on domestic needs, and yet recent evidence points to increasing outward foreign direct investment by SOEs. Existing International Business (IB) theories focus on efficiency-based motives for internationalization; therefore, they do not fully capture SOEs' internalization dynamics, which are driven largely by political factors and social welfare considerations. We integrate public management and IB theories to develop propositions that combine these questions: why SOEs internationalize; what are their motivations; and what are the main managerial outcomes of SOEs' internationalization. Our findings suggest that SOEs display little hesitancy in entering international markets, and that SOE international expansion is not contradictory with the goals of state-ownership if the purpose is to adjust the company to changing institutional environments both in the domestic and international markets. Our propositions about SOE internationalization are based on an in-depth case study of the outward foreign direct investment conducted by Brazil's Petrobras over the past three decades.

KEYWORDS | State-owned enterprises, internationalization, emerging markets, efficiency-based international business theories, socio-political-based public management theory.

RESUMO

Empresas estatais são criadas para se concentrarem em necessidades domésticas, no entanto evidências apontam para o crescimento do investimento estrangeiro direto no exterior por empresas estatais. As teorias existentes no campo de negócios internacionais focalizam motivos para internacionalização com base em eficiência, portanto não captam plenamente as dinâmicas da internacionalização das empresas estatais. Integramos a teoria dos campos de administração pública e negócios internacionais para desenvolver proposições que combinem as seguintes questões: por que empresas estatais se internacionalizam, quais são as motivações dessas empresas e quais as principais consequências gerenciais de sua internacionalização. Nossos achados sugerem que as empresas estatais demonstram pouca hesitação para entrar em mercados internacionais e que sua expansão internacional não é contraditória com os objetivos da propriedade estatal, se o propósito é ajustar a empresa a ambientes institucionais em transformação tanto nos mercados domésticos quanto nos internacionais. Nossas proposições sobre a internacionalização de empresas estatais baseiam-se em um estudo de caso aprofundado do investimento estrangeiro direto no exterior, conduzido pela estatal brasileira Petrobras nas últimas três décadas.

PALAVRAS-CHAVE | *Empresas estatais, internacionalização, mercados emergentes, teorias de negócios internacionais com base em eficiência, teorias de administração pública com base sociopolítica.*

RESUMEN

Las empresas de propiedad del estado (EPE) se crean para satisfacer las necesidades nacionales, sin embargo, pruebas recientes señalan un aumento en la inversión extranjera directa en el exterior de las EPE. Las teorías existentes sobre Negocios Internacionales (NI) mencionan motivos relacionados con la eficiencia para la internacionalización; por lo tanto, no reflejan plenamente la dinámica de internalización de las EPE, que son conducidas en gran medida por factores políticos y consideraciones de bienestar social. Integramos las teorías de gestión pública y de NI para desarrollar proposiciones que respondan a las siguientes preguntas: por qué las empresas estatales se internacionalizan; cuáles son sus motivaciones, y cuáles son los principales resultados de gestión de la internacionalización de las EPE. Nuestros hallazgos sugieren que las EPE muestran pocas dudas en entrar en mercados internacionales, y que su expansión internacional no se contrapone a los objetivos de la propiedad estatal, si la finalidad es ajustar la empresa a entornos institucionales cambiantes, tanto en mercados nacionales e internacionales. Nuestras proposiciones sobre la internacionalización de EPE se basan en un profundo estudio de caso de inversión extranjera directa en el exterior llevada a cabo por la brasileña Petrobras en las últimas tres décadas.

PALABRAS CLAVE | *Empresas de propiedad del Estado, internacionalización, mercados emergentes, teorías de negocios internacionales basados en la eficiencia, teoría socio-político basada en la gestión pública.*

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INTRODUCTION

Since the 1990s, a significant number of state-owned enterprises (SOEs) have internationalized and are today among some of the world's largest multinationals (UNCTAD, 2012; Sauvant & Strauss, 2012). The World Investment Report (2012) indicates that there are currently at least 650 multinational SOEs (MSOEs) with more than 8500 foreign affiliates, about 56% of which are from developing economies and 44% from advanced economies. SOEs are hybrid organizations with both market orientation and socio-political goals (Ramamurti, 1987; Vernon, 1979).

The importance of discussing SOE's internationalization is indicated in the August 2014 special issue of the *Journal of International Business Studies* (JIBS), titled *Governments as owners: globalizing state-owned enterprises*. The JIBS editors emphasize: "The globalization of state-owned multinational companies and the wide variety of approaches taken by the state as a cross-border investor have become an important phenomenon in international business (IB), but it has received scant attention in the literature" (Cuervo-Cazurra, Inkpen Musacchio, & Ramaswamy, 2014, p. 925)".

The fact that SOEs are intensifying investments in international markets through outward foreign direct investment (OFDI) raises some fundamental questions: first, if the goal of state ownership is to focus on developing the domestic market, what is being accomplished through SOEs' OFDI? Although public management theory (e.g., Hood, 1995; Pollitt & Bouckaert, 2011) has traditionally been used to explain the socio-political existence of SOEs, it has not focused on explaining why SOEs internationalize (Choudhury & Khanna, 2014). Second, what are the motivations of SOEs' internationalization? Third, what are the main managerial outcomes of SOEs' internationalization? Efficiency-based IB theories of internationalization such as the Uppsala internationalization model (Johanson & Vahlne, 1977) or Dunning's Eclectic Paradigm (Dunning 2001) have not focused on the motivations of SOE internationalization nor on the managerial outcomes that internationalization can bring to hybrid organizations like the SOEs (Bass & Chakrabarty, 2014).

In this paper, we combine these three questions: why SOEs internationalize? What are their motivations? What are the main managerial outcomes of SOEs' internationalization? We build on the phenomenon of SOE internationalization – specifically through OFDI – by presenting the logic of a multinational SOE as both a legitimate political agent and a market player satisfying shareholders' interests. Based on in-depth longitudinal analysis of a large Brazilian SOE as our descriptive and analytical setting, we aim to enhance our understanding of the unique aspects of governments' pursuit of international markets through their SOEs' OFDI strategies.

In the next section, we summarize three different views on the internationalization of SOEs. We then present our research design, followed by our propositions in subsequent sections. Finally, we discuss the implications of our findings and conclude with ideas for future research.

LITERATURE REVIEW

Multinational state-owned enterprises (MSOEs) are "legally independent firms with direct ownership by the state that have value adding activities outside its home country. These value-added activities can be production facilities or sales subsidiaries, or purchasing subsidiaries or design or R&D centers." (Cuervo-Cazurra et al., 2014, p. 925). Since we use the definition of Cuervo-Cazurra et al. (2014) of multinational state-owned enterprise (MSOE), we will focus on OFDI (i.e., the SOE must have a subsidiary abroad) rather than analyze internationalization through SOEs' export strategies.

We summarize the key assumptions and implications concerning internationalization in existing public management theories (in which the state is the main owner of the firm) and IB theories (in which a private party is the main owner of the firm) in Exhibit 1. Exhibit 1 illustrates that, in the perspective of public management theory, SOEs do not have to internationalize, since they fulfill governments' social mandates. However, in the perspective of IB theory, private-owned companies have to internationalize to stay competitive. Public management theory notes that if SOEs internationalize, they tend to do so in a risk-seeking manner as they expand to other countries with similarly unstable governments – i.e., both politically and institutionally – and rich in natural resources (Ramasamy et al., 2012). Conversely, both the Uppsala model and Dunning's eclectic paradigm perceive private-owned firms as more risk-averse as they tend to internationalize to stable countries for strategic asset seeking purposes (Ramaswamy et al., 2012).

The current lack of integration between public management and IB theories has produced three different views on SOE internationalization focusing on either the SOE or the internationalization aspect of the phenomenon. We will first summarize these views, then suggest a way to integrate both aspects into propositions of SOE internationalization through OFDI.

Exhibit 1. **Assumptions and implications of key public management and international business theories regarding firm internationalization**

Public Management Theory			IB theories of internationalization			
			Uppsala		Dunning's eclectic paradigm	
	Assumption	Implication for internationalization	Assumption	Implication for internationalization	Assumption	Implication for internationalization
Majority ownership of company	State	No need to internationalize	Private	Internationalization necessary to stay competitive, meet shareholder value creation targets	Private	Internationalization necessary to stay competitive, meet shareholder value creation targets
Company behavior	Risk-seekers*	Expansion mostly into risky markets (politically and institutionally)	Risk-averse*	Regional expansion for a while to acquire knowledge, then expand globally	Risk-averse*	Internationalize through OFDI to avoid market imperfections
Reason for companies' international expansion	Pursuit of natural resource or strategic assets*	Expansion mostly into risky markets, both politically and economically	Pursuit of markets*	Expansion into more stable markets, avoiding risky markets	Pursuit of markets*	Expansion into more stable markets, avoiding risky markets
Primary goal of companies' international expansion	Socio-political; profits are welcome, but not primary goal	Internationalization may occur in large, inconsistent steps—less concern with losing money (state will bail SOE out)	Economic requirements; profit maximization	Learning by doing—internationalization occurs in small steps to avoid losing money with liabilities of foreignness	Economic requirements; profit maximization is primary goal	Learning by doing—internationalization occurs in small steps to avoid losing money with liabilities of foreignness
Decision to internationalize	Government-to-government (G2G)*	Gov can help establish political connections with foreign gov to help its SOE	Business-to-business (B2B)	Company increases its international expansion in search of new markets	Business-to-business (B2B)	Company increases its international expansion in search of new markets

*Source: Ramasamy et al. (2012).

View 1: State ownership as a deterrent to SOE internationalization

Until the late 1980s, IB scholars' attention focused on the internationalization of large multinational companies from the United States, Europe, or Japan (Dunning, 2001; Johanson & Valhene, 1977; Williamson, 1975). Their focus has been exclusively on the firm level and has largely ignored the unique aspects of governments as owners (Cuervo-Cazurra et al., 2014). Only a few studies (e.g., Lamont, 1976; Mazzolini, 1980; Ramamurti, 1987; Vernon, 1979) demonstrate internationalization cases of SOEs between World War II and the 1980s. The scarcity of studies on internationalization of SOEs during this period can be explained by the fact that most SOEs were operating basically in their domestic markets.

The field of mainstream literature that has focused on SOEs is public management, reporting on domestic public sector reforms, which, in most countries, took place in the 1990s (Hood, 1995; Pollitt & Bouckaert, 2011). This literature has assumed that SOEs are driven largely by public policies of social welfare, economic development of a particular sector in the home country. However, these studies contain little mention of SOEs international investments (Hood, 1995). The first authors in IB that had studied SOEs did so in the perspective of public management, and have traditionally assumed state ownership to reduce the likelihood that a company will expand abroad (Lamont, 1976; Mazzolini, 1980; Vernon, 1979). Vernon (1979) formalized this perspective, and his arguments have emerged as a predominant explanation of SOEs' internationalization: "[t]he expectation that the state enterprise will favor national sources would apply not only to SOEs engaged in production but also to state entities engaged primarily in trading" (p. 11).

These first studies (Lamont, 1976; Mazzolini, 1980; Vernon, 1979) have three main arguments to explain why SOEs' internationalization is, for reasons other than social mandates, contradictory to the goals of state-ownership.

First, SOEs are typically used as a tool by governments' entrepreneurial drive to create or improve certain industries where private entrepreneurship is not possible or not desirable due to economic or resource constraints in the country (Vernon, 1979). Second, governments often caution against negative effects of SOEs' international investments (OFDI), particularly concerning domestic employment rates (Mazzolini, 1980). Additionally, productive plants abroad are seen as taking the place of exports to foreign markets, therefore negatively impacting the balance of payments (Mazzolini, 1980).Third, governments are primarily concerned with domestic issues and this necessarily influences SOE managers. Because they are appointed by the government and accountable to it, their attitudes reflect the goals and ambitions of politicians, as well as political interests (Mazzolini, 1980). These pioneering studies on SOEs have provided an incomplete explanation for the internationalization of SOEs (Cui & Jiang, 2012).

View 2: Pro-market reforms as incentives to SOE internationalization

The second main explanation for SOE internationalization emerged in the 1980s and 1990s, particularly in the literature on pro-market reforms (Cerny, 1997; Clifton Comín, & Díaz-Fuentes, 2011; Cuervo-Cazurra & Dau, 2009; Dau, 2012). Pro-market reforms are institutional changes made by the state that were first implemented in the United Kingdom by Margaret Thatcher, and then conducted in several other developed and developing countries (Musacchio & Flores-Macias, 2009; North, 1990). Pro-market reforms included the adoption of policies such as price liberalization, trade liberalization, full or partial privatization, liberalization of FDI inflows, and industry deregulation (by abolishing barriers to entry and exit particularly to foreign competition) (Rodrik, 2006).

Pro-market reforms have been seen to enhance SOE internationalization (e.g., Rodrik, 2006). First, pro-market reforms exposed domestic firms to international competition by reducing regulatory constraints and dropping restrictions on imports and foreign investors (Dau, 2012). The increased competition in the local market has established a new institutional environment that permitted, and in some cases "forced", domestic firms to expand their operations abroad (Dau, 2012). While these reforms affected all firms in the domestic market (private or SOE), they affected SOEs even more due to the latter's under-developed market skills and long exposure to government influence (Dau, 2012).

Second, pro-market reforms also have brought a wave of full and partial privatization which changed the configuration of state-ownership (Gupta, 2005). Under the higher expectations of private stockholders, even in cases they are the minority, SOEs are forced to enhance internal management and performance (Gupta, 2005) and respond to the competition by seeking more profitable international markets (Clifton et al., 2011).

Third, pro-market reforms also transformed the political agenda in most countries, which has changed SOEs' internationalization logic (Cerny, 1997): government policies shifted from the development of strategic sectors to development of internationally competitive key sectors; emphasis was placed on inflation control and exchange rate stability; and the focal point of welfare shifted from full employment, redistributive transfer payments, and social service to the promotion of enterprise, innovation and profitability in both private and public sectors (Cerny, 1997). Governments' political agendas have become more concerned with international issues, and SOEs as assets of government institutions (Cui & Jiang, 2012) are becoming much more active in international markets.

Besides the fact that the literature on pro-market reforms has assumed SOEs to have a more active role in international markets after the reforms, this perspective has not presented a theoretical development on international SOEs. Dau (2012) has confirmed that SOEs are more affected by pro-market reforms, but his focus was not on SOE internationalization *per se*.

View 3: Unique aspects of governments as owners in SOEs' internationalization

In addition to the public management (Pollitt & Bouckaert, 2011; Vernon, 1979) and pro-market reform (Dau, 2012) perspectives, recent studies have provided specific explanations about SOE internationalization (Cuervo-Cazurra et al., 2014; Choudhury & Khanna, 2014; Duanmu, 2014; Liang, Ren, & Sun, 2014). There are many situations in which multinational SOEs may behave like private firms in their OFDI and this can be explained by traditional IB theories (Cuervo-Cazurra et al., 2014), but government-ownership makes multinational SOEs unique as a particular type of multinational company (Cuervo-Cazurra et al., 2014). Below we discuss some unique aspects of multinationals SOEs.

First, for SOEs, internationalization may have a political side. In many circumstances, SOEs may internationalize to achieve political objectives that have little to do with the profitability logic. International Business (IB) literature tends to assume that private companies become multinationals to increase their profitability (profit-maximizing logic) as they seek markets, natural resources, strategic assets or efficiency (Dunning, 2001). Although SOEs can make certain international investments (OFDI) with the profitability logic like private multinational enterprises (MNEs), in many cases, the governments that control them can lead them to invest abroad to achieve political purposes rather than profitability or financial performance (Cuervo-Cazurra et al., 2014).

Second, as SOEs decide to internationalize, their location choice also has a political logic, and OFDI may not be driven by profitability as Dunning's theory has predicted (Dunning, 2001). In many cases, SOEs choose a country to invest in with the purpose of achieving goals of their home governments' foreign policy or to expand their zone of influence among international targets, rather than being guided by the competitive benefits of a particular target country (Ramasamy, Yeung, & Laforet et al., 2012). As a result, SOEs can enter countries considered risky or unattractive to private companies (Ramasamy et al., 2012; Cuervo-Cazurra et al., 2014). For example, some of the Chinese SOEs that are becoming multinationals in the infrastructure and mining sectors have targeted African countries "as a means of increasing Chinese government influence there and support relationships between the Chinese and local governments" (Cuervo-Cazurra et al., 2014, p. 930).

Third, SOEs have a different risk tolerance than private companies (Cuervo-Cazurra et al., 2014). Typically, because of government ownership, SOEs have larger budgets and resources, which enables them to take more risks (Ramasamy et al., 2012). Additionally, governments have control over laws and regulations that enable them to enforce contracts and reduce risks for their SOEs' international investments. As a result, compared to private companies, SOEs are both more likely and more willing to make a risky OFDI, which is typically performed through acquisitions and greenfield ventures (Ramasamy et al., 2012) in countries with weaker rule of law or higher expropriation risk (i.e., countries with weaker institutional environments compared to the home country). SOEs are more risk-takers in their OFDIs because their home governments can back their OFDI operations (through government direct financial support or low-cost government capital) and support them in case of financial difficulties. Additionally, SOEs enjoy the political protection provided by their home government and may face lower expropriation risks in their OFDIs, particularly when those governments can exert some influence over weaker governments (Knutsen, Rygh, & Hveem, 2011; Ramasamy et al., 2012).

The IB literature on multinational SOEs, more specifically on why SOE internationalize, what are their motivations to go abroad, and the managerial consequences of the SOEs' internationalization, is quite recent (Choudhury & Khanna, 2014; Duanmu, 2014; Liang et. al, 2014) and a number of issues regarding these companies remain understudied (Cuervo-Cazurra et al., 2014). Additionally, a limited number of previous studies have examined state ownership and internationalization decisions, and most of them focused on OFDIs by Chinese SOEs (Cui & Jiang, 2012; Ramasamy et al., 2012; Li, Sun, & Liu, 2006). Although, in economic terms, China has become increasingly market-oriented, politically speaking, it is still a single-party republic ruled by the Communist Party. Therefore, one cannot assume the Chinese government's relationship with their SOEs to be generalizable to that of other developing countries.

RESEARCH DESIGN

We followed Eisenhardt (1989) and Yin (1994) in our decision to adopt a case study approach. Given the complexity and under-explored condition of SOEs' internationalization, our goal in this study was exploratory in nature and based on grounded theory. We followed prior guidance for building grounded theory models and linking observations and analysis with theoretical insights from related fields (Glaser & Straus, 1967). Finally, single case design is suitable here as we are building propositions that can serve as a first step (Ghauri, 2004) to a later, more comprehensive study for testing and building a framework to explain the logic of SOEs' internationalization through OFDI. We develop our propositions based on in-depth longitudinal analyses of a large SOE in a global industry: Brazil's oil giant Petrobras. The case is revealing, providing useful insights (Ghauri, 2004; Yin 1994) in SOEs' internationalization, an area that has dominantly focused on Chinese SOEs (e.g., Cui & Jiang, 2012; Luo & Tung, 2007; Ramasamy et al., 2012).

In addition to going deeper into the analysis of a single multinational SOE, we provide opportunities for comparison by giving examples based on previous case studies of internationalization through OFDI by SOEs from different countries. Table 1 provides an overview of the largest multinational SOEs in international markets and the published case studies on these companies. It is a limited list comprising SOEs from both developed and developing countries, and is shown below. There is no specific ranking for the world's largest SOEs; information is fragmented over rankings such as Fortune Global 500 or Forbes Global 2000 (Cuervo-Cazurra et al., 2014).

Table 1. **Largest multinationals SOEs in 2012 – International rankings and foreign assets**

	Companies	Industry	Home economy	% Government control	Fortune 500	Forbes 2000	TNI*	Total assets ($ Millions)	% of foreign assets	Total revenue ($ millions)	Foreign revenues (% of total sales)	Case studies
1	Électricité de France	Electricity, gas and water	France	84.51	-	-	34,4	321,431	51	86,311	39	Saussier (2000).
2	Vattenfall AB	Electricity, gas and water	Sweden	100	398	-	67,9	80,694	67	29,632	76	Andersson & Latef (2010)
3	Statoil AS	O&G	Norway	67	40	51	30	109,728	46	87,144	22	Tordo et al., 2011
4	CITIC	Diversified	China	100	194	754	17,1	315,433	14	30,605	36	
5	Petronas	O&G	Malaysia	100	68	1062	39,2	145,099	27	76,822	45	Tordo et al., 2011
6	Japan Tobacco Inc.	Food, beverages and tobacco	Japan	50	427	209	57,9	43,108	73	72,273	43	Feldman (2005)
7	Singapore Telecommunications	Telecom	Singapore	54.46	-	-		27,151	83	11,814	64	Ang & Ding (2006)
8	Qatar Telecom (Ooredoo)	Telecom	Qatar	55	-		82,9	23,335	79	6600	77	
9	Petrobras	O&G	Brazil	66	23	10	7,9	200,27	7	115,892	25	Musacchio et. al (2009); Tordo et al. (2011)
10	Petróleos de Venezuela SA (PDVSA)	O&G	Venezuela	100	36	-	18,2	149,601	8	74,996	43	Tordo et al. (2011)
11	China National Petroleum (CNPC)	O&G	China	100	6	-	2,7	325,327	4	178,343	3	Tordo et al. (2011)
12	Oil and Natural Gas Corporation	O&G	India	74.14	357	-	15,4	37,223	28	21,445	14	Tordo et al. (2011)
13	Sinochem Group	O&G	China	100	113	-	43,3	25,132	32	35,577	77	Tordo et al. (2011)
14	China National Offshore Oil Corp.	Oil expl./ ref./distr.	China	100	101	-	18,6	75,913	9	30,68	16	Li et. al (2006); Tordo et al. (2011)
15	Gazprom	O&G	Russia	38	15	-	24	396, 454	8	153, 863	68	Ramaswamy (2013); Heinrich (2003)

Sources: Adapted from Cuervo-Cazurra et al. (2014); Sauvant and Strauss (2012) and Musacchio and Lazzarini (2014)

WIR 2012, Global Fortune 500 list, 2012; Forbes Global 2000 Leading Companies, 2012.

*TNI, WIR 2012: Transnationality Index: average of: Foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

SAMPLE SELECTION

Three key criteria guided our case study selection: first, we selected an industry with SOEs that compete internationally. In the global oil industry, SOEs currently control approximately 90% of the world's oil reserves (Tordo, Tracy, & Arfaa, 2011, p. 11) and 75% of the world's oil production (Tordo et al., 2011, p. 11). The *Petroleum Intelligence Weekly* ranks 18 SOEs among the top 25 oil and gas reserves holders and producers (PIW, 2010). Second, we sought to select an internationalizing SOE from an emerging market that has undergone significant pro-market reforms. Brazil met this requirement. Additionally, Brazil is the South America's largest country, with the world's 6th largest GDP (World Bank, 2013), and it ranks 9th in world oil production (Tordo et al., 2011). Third, within Brazil's oil industry, we focused on Petroleo Brasileiro S. A. (Petrobras). Petrobras was founded in 1953 as an SOE. Sixty years later, the Brazilian government is still Petrobras' largest shareholder as it controls 56% of the company's voting rights and 32% of the company's shareholder rights (Petrobras Annual Report, 2013). Additionally, the company ranked 23rd in the 2012 Fortune 500 list (Fortune, 2012), 10th in *Forbes 2000s* (Forbes, 2012), and 19th largest emerging economy MNE (UNCTAD, 2012).

Data sources

Following grounded theory recommendations, we triangulated data from three different sources (Eisenhardt, 1989). First, one of the authors conducted in-person semi-structured interviews in Portuguese at the company's headquarters in Rio de Janeiro, Brazil. Complementary interviews were conducted by phone. Interviewees were chosen based on their position in the company, their involvement in Petrobras' internationalization, and their knowledge of the government's involvement in Petrobras' internationalization (Table 2). Second, we supplemented the interviews with internal documents given to us during the interviews. Third, we used secondary data sources, such as annual reports from Petrobras, the Brazilian National Audit Office, the Department of Coordination and Governance of Brazilian State-Owned Enterprises, and news stories about Petrobras on both Brazilian and international media.

Table 2. **Interviewees and their positions at Petrobras**

Position at Petrobras	Number of interviews
Head of technical support for international affairs	1
Head of the Americas, Africa and Eurasia Area	1
International integration program manager (International business area responsible for SAP implementation at overseas subsidiaries)	2
International corporate strategy area economist (has worked at Petrobras for 20 years in various positions and various locations outside Brazil) - Economist	2
International strategy & Procurement manager	1
International strategy expatriate manager	1
International affairs executive management assistant	1
International corporate strategy manager	1

PETROBRAS' OUTWARD FOREIGN DIRECT INVESTMENT STRATEGY

Petrobras' internationalization through OFDI followed closely the three phases of Brazil's economic transition. We summarize these three phases of Petrobras' OFDI strategy in Table 2 and elaborate each phase in further detail in the following sections. Exhibit 2 shows that Petrobras pursued three key strategies to expand its geographic scope during this post-deregulation phase. First, 81.25% of its measures to engage in global expansion (i.e., non-home region, Banalieva & Dhanaraj, 2013) occurred after the oil industry's deregulation in 1997. Second, 56.2% of its global expansion measures across the three phases were directed towards developed, high-income countries. Third, in 89% of the cases over the three phases, Petrobras strategically pursued developed, high-income countries in its global expansion.

Exhibit 2. **The internationalization strategy of Petrobras prior to and during the structural adjustment phases in Brazil's economic development***

Phase I: Experimental internationalization prior to market liberalization in 1988 - Military regime, State intervention in economy						
OFDI Motives			**Resource-seeking**	**Strategic asset-seeking**		**Market- seeking**
Country of entry	**Geographic scope**	**Year of entry**	**Oil and Gas exploration, production**	**Energy and gas**	**Refining/ Petrochemicals**	**Retailing/ Distribution**
Colombia	Regional	1972	✓			✓
Libya	Global	1974	✓			
Iraq	Global	1978	✓			
Angola	Global	1979	✓			
U.S.A.**	Regional	1987	✓		✓	
Phase II: Defensive Internationalization immediately after market liberalization: 1988-1997 - Democratic government, pro-market reforms, oil sector still regulated by the State						
OFDI Motives			**Resource-seeking**	**Strategic asset-seeking**		**Market- seeking**
Country of entry	**Geographic scope**	**Year of entry**	**Oil and Gas exploration, production**	**Energy and gas**	**Refining/ Petrochemicals**	**Retailing/ Distribution**
Argentina	Regional	1993	✓	✓	✓	✓
Bolivia	Regional	1995	✓	✓		
Ecuador	Regional	1996	✓			
Phase III: Strategic Internationalization After the Oil Sector Deregulation in 1997 - Democratic Government, Pro-Market Reforms, Oil Sector Deregulated						
OFDI Motives			**Resource-seeking**	**Strategic asset-seeking**		**Market- seeking**
Country of entry	**Geographic scope**	**Year of entry**	**Oil and Gas exploration, production**	**Energy and gas**	**Refining/ Petrochemicals**	**Retailing/ Distribution**
Nigeria	Global	1998	✓			
Venezuela	Regional	2002	✓			
Peru	Regional	2002	✓			
Mexico	Regional	2003	✓			
Uruguay	Regional	2004	✓	✓		✓
China	Global	2004				
Tanzania	Global	2004	✓			
Chile	Regional	2005				✓
Eq. Guinea	Global	2005	✓			
Turkey	Global	2006	✓			
Paraguay	Regional	2006				✓
Singapore**	Global	2007				
India	Global	2007	✓			
Portugal**	Global	2007	✓			
Netherlands**	Global	2009				✓
Curacao**	Regional	2010				✓
England**	Global	2010				
Japan**	Global	2000			✓	
Australia**	Global	2010	✓			
N. Zealand**	Global	2010	✓			

*Source: Company interviews and Petrobras, 2013. **High-income economies (World Bank, 2013). Regional (i.e., within home region) and global (i.e., outside home region) geographic scope - countries defined based on the United Nations Country Classification (2013).

Phase I: Petrobras' experimental internationalization prior to market liberalization in 1988

After the first oil crisis in the early 1970s, Petrobras embraced an international strategy of oil exploration and production operations to minimize Brazil's dependence on foreign supply sources. During this period, Petrobras engaged mainly in resource-seeking OFDI (Exhibit 2). Petrobras searched for oil resources abroad largely in politically riskier countries with which the Brazilian government maintained friendly relations. Thus, Petrobras took big leaps and internationalized into the Middle East, North Africa, and Colombia, concentrating on exploration and production activities.

In 1976, oil reserves in deep water were discovered in the Campos Basin , in the state of Rio de Janeiro, Brazil. From then on, Petrobras progressively developed its own deep-water exploration technology. Its R&D center (Centro de Pesquisas e Desenvolvimento - CENPES) was established in Rio de Janeiro in 1966 and has fostered research, innovation and development in deep-water oil exploration technologies (Dantas & Bell, 2009).

Phase II: Petrobras' defensive internationalization immediately after market liberalization: 1988-1997

The start of pro-market reforms in Brazil marked the beginning of a new OFDI motif for Petrobras -strategic asset-seeking, whereby the company engaged in multiple acquisitions and partnerships with foreign players in the energy and gas and refining/petrochemicals sectors (Exhibit 2). Thus, during this period, Petrobras followed a defensive internationalization strategy. The main goal of the federal government was to protect the company from the domestic economic crisis after economic liberalization, which involved political instability and fears of reform reversals.

Petrobras started an intense struggle for autonomy from the Brazilian government by intensifying the policy of self-sufficiency in oil production and increasing its international expansion (Campos, Tolmasquim, & Alveal, 2006; Musacchio, Goldberg, & Pinho, 2009). However, as a direct result of the economic liberalization, some of Petrobras' downstream subsidiaries, particularly in petrochemicals, were privatized in the early 90s. The company shifted away from the typical strategy of the industry's major players, particularly super-majors such as Exxon-Mobil, Shell, BP-Amoco-Arco, Elf-Total-Fina, and Chevron-Texaco. These super-majors, besides maintaining vertically integrated structures, also had a diversified portfolio, as they pursued innovation and higher value added products such as fine chemicals.

In the early 1990s, besides the struggle with partial privatization, Petrobras also changed from being a technology user to a leading technology innovator (Dantas & Bell, 2009).

Phase III: Petrobras' strategic internationalization after oil sector deregulation in 1997

In the late 1990s, both the economic and political scenes stabilized and the Brazilian government embraced a series of institutional reforms in the oil sector. In 1997, the Oil Law was enacted, ending Petrobras' monopoly in Brazil and opening the oil industry to foreign rivals. Consequently, multinationals such as Shell, Exxon-Mobil, Texaco and BP started moving into Brazil, forcing Petrobras to implement internal changes and international expansion to stay competitive (Exhibit 2).

For Petrobras, the early 2000s were marked by a series of acquisitions that continued expanding the company's geographic scope into new markets, particularly Argentina, thus consolidating the company's strategy of exploiting resource synergies in the Southern Cone. These acquisitions ensured a diversification beyond the resource-seeking motives for OFDIs, thus including motives related with the pursuit of strategic assets in areas such as refining, gas, and energy, and new markets in areas such as distribution and marketing. In 2002, when Petrobras acquired the Argentine group Perez Companc (Pecom), its downstream assets abroad increased considerably, as did its proven reserves.

By 2012, Petrobras was active in 27 countries. Petrobras expanded its operations with the purpose of being among the world's top five integrated energy companies by 2020 (Annual Report, 2013).

PROPOSITIONS ON THE INTERNATIONALIZATION OF SOES

The central premise of our propositions is that, over time, SOEs pursue multiple goals in international markets, depending on their domestic institutional environments. An SOEs' ability to achieve its international goals is moderated by its ability to have management autonomy from the government. Therefore, we propose that one of the key drivers of an SOE internationalization process is domestic pro-market reforms. SOE internationalization motivations depend on the risk level of the entry country and on institutional transformations in the SOE's home country. We also suggest that the key managerial consequences of SOE internationalization are the adoption of a new managerial focus on more efficient workforce and more innovative products. Below we advance four propositions about each of these relations.

Pro-market reforms as a driver of SOE internationalization

As assets of their governments, SOEs have directly responded to the institutional changes in their domestic economies as a result of pro-market reforms occurring first at national-level (Cuervo-Cazurra & Dau, 2009; Dau, 2012) and then at industry level. At national level, as pro-market reforms expanded, governments streamlined their economic agencies and functions by formulating policies that facilitate competition among market players (Cerny, 1997; Li, Sum, & Liu, 2006). Internationalization was one way to stabilize SOE revenue streams and reduce over-exposure to domestic economic liberalization (Clifton et. al., 2011; Dau, 2012; Witt & Lewin, 2007). As a result, in planning resource allocation, SOEs' managers have to be more concerned about market forces and customer satisfaction than state-led social goals such as full employment, for example (Cuervo-Cazurra & Dau, 2009).

At national level, after 1990, the Brazilian government also kept increasing the access of foreign competitors to the domestic market. As a result, SOEs and the government itself were forced to adopt internationalization as part of their new market-based strategic planning (Fleury & Fleury, 2011). The "misalignment between firms' needs and home country institutional environments" (Witt & Lewin, 2007, p. 579) led SOEs to seek an escape from the highly turbulent domestic market and government resource constrains, pursuing new markets overseas (Witt & Lewin, 2007).

Because of domestic pro-market reforms and the opening of the domestic market to foreign competition, internationalizing SOEs have learned to pay closer attention to foreign rivals and how to compete with them. For instance, in the case of Petrobras, "[a]ccomplishing our international acquisitions taught us to pay careful attention to the market and recognize the opportunities out there. (...) We have to fight other competitors abroad, and even in our backyard" [2]. In addition to our interviews, it is worth quoting these remarks by a former CEO: "I took over as a CEO in 2005, when we were coming out of turbulent transitional period (...) and a market fully open to outside competitors. Petrobras was facing new competitive pressures, new stakeholders, and a new emphasis on profits and growth. And we are doing a good job in the market. During the past 10 years, we've doubled oil production, increased reserves by over 75%, and expanded operations into 27 countries (Jose Sergio Gabrielli de Azevedo – CEO of Petrobras 2005-2010) (Gabrielli, 2009: 03). Additionally, as reported by Petrobras, "When our petrochemical subsidiaries were privatized (in the early 1990s), for example, we became essentially centered on the oil chain, in a strategy that was the opposite of that of the industry's super-majors (...). To be competitive, we needed a diversified portfolio, to pursue innovation and higher value added products, (...) and going out there to acquire companies is the fastest way to be able to compete in the global oil market (...)" [2].

At industry level, the Brazilian state-run production system underwent deep restructuring with both fully and partial privatization as prescribed by the National Privatization Plan (Fleury & Fleury, 2011). While keeping the country's main SOE (Petrobras) under state control, the Brazilian government allowed the entry of foreign competition in the oil sector, and created the National Petroleum Agency to regulate and monitor the oil industry's upstream activities. The Agency has been conducting yearly rounds to lease acreage for petroleum exploration rights under a concession regime (Rodriguez & Suslick, 2008). As Petrobras reported in our interviews: "After the government broke the monopoly and opened the oil sector to international competition, we have not lost competitiveness. We learned from competition (...) After 1998, the level of investment in E&P and new technologies is actually high. And it is higher than the peak recorded just after the second oil shock, when we started producing in the Campos Basin" [4].

Indian state-owned pharmaceutical companies provide an appropriate comparison with Brazil's SOEs on how pro-market reforms at both national and industry level can increase SOEs' internationalization. In a very recent research, Choudhury and Khanna (2014) explored 42 pharmaceutical SOEs in the Indian context. At national level, India's 1991 economic crisis led to an intense process of pro-market reforms; and at industry level, India's domestic patent system was reformed starting in 1999, under pressure from the International Monetary Fund (IMF) and the WTO (World Trade Organization). The 1991 economic crisis caused resource constraints to India's SOEs. As a consequence, Indian pharmaceutical SOEs tried to achieve economic independence by licensing foreign patents to foreign multinationals (MNEs). The revenues these pharmaceuticals had from MNEs increased from 3 to 15% in relation to their government budgetary support. Over time, these companies' patent mix shifted towards a patent portfolio based on the United States Patent and Trademark Office (USPTO), and this strategy of leveraging global patents helped the companies launch intense internationalization involving R&D partnerships with pharmaceutical MNEs.

In sum, our case study on Petrobras and the above examples of other SOEs lead us to propose that SOEs' motivation for internationalization evolved as a response to a variable combination of pro-market reforms, and resulted in a series of international operations over time that differed in relation to their previous domestic orientation. Thus, we propose:

> Proposition 1: Greater degree of domestic pro-market reforms increases SOE internationalization.

In a recent survey on Chinese OFDI of SOEs and private firms, Ramasamy et al. (2012) indicated that the riskier an entry country is, the greater the likelihood that a Chinese SOE will be attracted to the its natural resources; as to low-risk countries, Chinese SOEs are more likely to approach them for technology or strategic purposes. Chinese private firms were portrayed as relatively more risk-averse, and their OFDIs were more often motivated by market-seeking strategies. In other words, government ownership impacts risk willingness in OFDIs, and the motivation for an OFDI will depend of the entry country's risk level (Ramasamy et al., 2012). Additionally, SOEs' internationalization is typically conducted through acquisitions or greenfield ventures (Ramasamy et al., 2012).

SOEs can handle OFDI in countries rich in natural resources, yet with poor institutions, high corruption, inequality, and absence rates, or poor legal guarantee to property rights. On the other hand, political stability, pro-business institutions, and strong intellectual property laws can significantly influence innovation within a country; SOE will invest in such more stable countries in pursuit of technology and more strategic assets (Ramasamy et al., 2012).

In its initial internationalization, Petrobras' strategy comprised more opportunistic, risk-taking OFDIs in countries like Angola, Libya, and Iraq, where it sought resources to bring home (Exhibit 2). During the 1980s and after the introduction of pro-market reforms, Petrobras gradually shifted its focus to more politically stable countries, in search of strategic assets.

In order to better understand whether SOEs were both risk-taking and risk-averse in their OFDIs, we asked Petrobras' head of the board for Americas, Africa and Eurasia what were the motivations for the company's OFDIs: "There were lots of motivations that explain our operations abroad, for example… diversifying our portfolio, reducing our cost of capital, generating cash flow in stable currency, contributing to the growth and profitability of Petrobras, bringing resources to the Brazilian industry, to increasing Brazilian influence, enhancing Petrobras brand. […] "In the beginning, we were after oil reserves. Brazil was growing 10 or 15% in 1970s and oil demand was high. [...]. In the late 1990s, we changed an attitude of opportunism in international markets for one of systematic, strategic international operations. In search of value creation, and taking advantage of resource synergies, most of our businesses are now in the Southern Cone. On the west coast of Africa, Gulf of Mexico, and other parts of the world where we seek oil, we use our core competencies in oil exploration in deep water". [2]

In sum, we propose that SOEs can be both risk-taking and risk-averse players at various stages of their internationalization, and that their motivations to conduct OFDIs will depend on the entry country's risk level (Ramasamy et al., 2012). SOEs view political risks differently than private firms. SOEs tend to rely more on intergovernmental negotiations as the basis of their decisions. Uncertainties like expropriation and contract failures may be less likely to occur when investments are based on negotiations between two governments (Ramasamy et al., 2012; Cuervo-Cazurra et al., 2014). As to OFDIs in more stable countries, the SOE can be risk-averse as it enjoys stronger pro-business institutions while seeking more sophisticated assets. We hypothesize that:

> Proposition 2: In high-risk countries, SOEs' internationalization tends to be motivated by the pursuit of natural resources.
>
> Proposition 3: In low-risk countries, SOEs' internationalization tends to be motivated by the pursuit of strategic asset.

OUTCOMES OF SOES' INTERNATIONALIZATION

We propose that the aforementioned driving factors and motivations enhance SOEs' internationalization, leading, in turn, to two core outcomes: (1) the adoption of a new managerial focus on more efficient workforce; and (2) more innovative products.

New managerial focus on more efficient workforce and more innovative products

Most countries that underwent pro-market reforms also experienced intense reforms in the public management system, which promoted greater efficiency and improved service quality, thus changing bureaucratic structures and slow managerial processes (Pollitt & Bouckaert, 2011). SOEs have forms of management and organization that are market-oriented and similar to private companies (Narver & Slater, 1990). The internationalization occurring after pro-market reforms has led SOEs to emphasize their market orientation, strengthening their focus on customers and competitors, and on the integration of organizational functions (Walker, Brewer, Boyne, & Avellaneda, 2011; Pollitt & Bouckaert, 2011). Thus it is our view that the adoption of a new managerial focus on more efficient workforce and more innovative products are consequences of SOEs' internationalization (Walker et. al, 2011).

First, we suggest that greater internationalization teaches SOEs' managers to focus on recruiting and maintaining a more efficient workforce. Therefore, such an internationalization teaches SOEs' managers to realize that their workforce has to be competent, specialized, attentive to the customers' needs, and not redundant, in order to compete successfully in international markets. For instance, Petrobras progressively increased its aim to reduce redundancy as it entered new, foreign markets. "Extensive training and re-training programs have been organized to help employees adapt to the challenges of new work demands after we went abroad" [3]. Internationalization also brought newer, more efficient hiring practices into the company. Since the mid-1990s, new hires are short-term, renewable contracts, rather than life-long positions. Foreign workers are also hired in countries where Petrobras has operations and typically follows private property law, particularly in the cases where it has acquired a private-owned company. "Sometimes, it is less bureaucratic to hire people abroad than home" [3]. "Petrobras brings expats from their international subsidiaries to the headquarters as a frequent policy of knowledge management in specialized human resource" [1]

As a comparison to the Petrobras case, Vattenfall AB (Andersson & Latef, 2010), a Swedish energy SOE, is a clear example that greater SOE internationalization promotes managerial changes in terms of getting a more efficient workforce. Vattenfall started its international expansion in 1996 and since then the company has rationalized its organizational structure to increase efficiency, with more autonomy to the CEO and board of directors, and new, more efficient recruiting practices, particularly through a more technical, meritocratic logic over political appointment (Andersson & Latef, 2010, p. 23).

Second, we suggest that greater internationalization teaches SOE managers to focus on better, more innovative products to meet growing consumer expectation in foreign markets in terms of customer orientation, competitor orientation, and inter-functional coordination (Narver & Slater, 1990). Exposure to international markets and customer demands teaches internationalizing SOEs how to be internationally innovative. We define international innovativeness as the capacity to develop and introduce new processes, products, services, or ideas into international markets (Hurley & Hult, 1998). Because internationalizing SOEs' decisions may rely heavily on local sources of information, and innovation may rely on internal resources, the role of the internationalization process – and the exposure it entails to dynamic international markets – appears to be crucial for a company, particularly an SOE introducing innovation into foreign markets (Girma, Gong, & Görg, 2008). In Petrobras' case, the opening of new markets and the intensification of international acquisitions have brought to the company new goods and methods of production, R&D, and development of knowledge networks (Dantas & Bell, 2009).

In the 1970s "[...] we decided to develop our own technology and exceeded 500-meter depths around 1990, when the company won the Offshore Technology Conference Prize" [5]. By 1999, Petrobras was able to reach a depth of 1,853 meters, still in the Campos Basin. Petrobras' latest discoveries in the pre-salt layer have all occurred in ultra-deep waters, more than five thousand meters below sea level, and under a 2,000-meter salt layer. The company is still developing new technologies to explore oil in ultra-deep waters, and these technological developments resulted in 817 international patents (Dantas & Bell, 2009). Important international partnerships were also made, which brought international consolidation. "In terms of internal technological capabilities, Petrobras shifted dramatically from an imitative technology-user to a leading player at the international innovation frontier. By the mid-1990s, Petrobras was playing a leading role in the international industry in creating and applying totally novel technologies in production and drilling water depths" (Dantas & Bell, 2009, p. 831). The company is now "the largest investor in R&D among the oil majors and a recognized leader in deeper and ultra-deeper water exploration and production" (Tordo et al., 2011, p. 60). The series of international acquisitions in the early 2000's ensured diversification to Petrobras portfolio and new technologies were incorporated, particularly in mature oil fields (Argentina) and distribution and services. "We have to be closer to the customer, particularly in distribution and services [...] in Argentina, for example, gas stations are different than what we have here in Brazil, and we had to understand that [the international customer] to be able to offer novel products and services" [2].

Statoil is a Norwegian multinational oil SOE that has learned innovation from its internationalization process. It is a fully integrated oil company with operations in thirty-six countries. The SOE have played an important role in the development of local content.

Overall, these arguments suggest that greater SOE internationalization leads to greater modernizing efforts in SOE management approaches regarding labor and product. Thus, we present the proposition below.

> Proposition 4: Greater SOE internationalization promotes a new managerial focus on more efficient labor and more innovative products.

DISCUSSION AND CONCLUSIONS

Our research extends current theories of firm internationalization in two key ways. We integrate public management and IB theories to develop propositions that combine the questions of why SOEs internationalize and what are the motivations and the managerial consequences of SOEs' internationalization.

In our attempt to answer why SOEs internationalize, we observed three distinct phases in SOE's internationalization through OFDI: experimental, defensive, and strategic. We further argued that these three phases of internationalization are closely aligned and co-evolve (Cantwell, Dunning, & Lundan, 2010; Suhomlinova, 2006) with the phases of institutional transition in emerging markets: pre-liberalization, after liberalization (but before industry deregulation), and after industry deregulation. As pro-market reforms were introduced, the state began an active withdrawal from the economy, and local companies, including SOEs, were exposed to international competition and government economic constrains. As to SOEs in particular, they may seek international expansion according to the institutional transformations in the home country and to achieve economic independence from the government (Choudhury & Khanna, 2014), as we saw on phase two of Petrobras' internationalization. Thus, in line with the theoretical contributions of Cantwell et. al, (2010) on the co-evolution of MNEs and the institutional environment, we complemented and extended the Uppsala perspective of internationalization (Johanson & Vahlne, 1977). The Uppsala model (Johanson & Vahlne, 1977) emphasizes that the phases in firms' internationalization are a consequence of their learning capabilities as opposed to external, government-induced institutional transformations. Similarly, we complemented and extended Dunning's Eclectic Paradigm (Dunning, 2001), which pays less attention to the separate internationalization phases that firms undergo or how they co-evolve with transitions in the external environment. Lastly, we also extended public management theory according to which SOEs do not have to internationalize (e.g., Hood, 1995; Pollitt & Bouckaert, 2011; Vernon, 1979). Instead, we conceptualized and provided a concrete example of a leading SOE from an emerging market operating in a global industry.

Second, with regard to the motivations (Dunning 2001) for SOEs' internationalization, we extended public management and IB theories of internationalization by highlighting that SOEs are assumed to be either risk-seeking (public management theory, Table 1) or risk-averse (IB theories, Table 1) agents depending on the entry country's risk level (Ramasamy et al., 2012) and on institutional transformations in their home countries. For instance, we proposed that Phase I (experimental OFDI) involves more opportunistic, risk-seeking foreign expansion in search of resources that the government can bring home. In Petrobras' case, the risk-seeking behavior is manifested both in terms of the political regime (dictatorship vs. democracy) in the countries the SOE expanded into and the geographic location (regional or global) of these countries. In terms of political orientation, most of the countries the SOE expanded into during this initial phase of internationalization were other undemocratic regimes, except for the U.S. (Table 2). In terms of geographic location, half of these countries were lower-income risky markets (Angola, Libya, and Iraq – see Table 2) outside the home region. In Petrobras' case, the ongoing pro-market reforms domestically propelled the SOE to expand into other lower-income countries within its home region. This allowed the company to reap the benefits of internationalization and expand market share, however, at a lower cost than if it were to expand globally (Banalieva & Dhanaraj, 2013). We also proposed that SOEs shifted their behavior towards more risky, international, geographically distant projects on Phase III, i.e., during their strategic OFDI. Here, risk-seeking behavior as a result of industry deregulation at home propel SOEs to look to expanding into higher-income countries globally (Table 2).

With regard to the question of "what are the managerial consequences of SOEs internationalization", we propose that greater SOE internationalization leads to greater efforts to modernize SOE managers' approaches concerning their managerial workforce and product innovation. SOE managers operating under economic liberalization in general, and industry deregulation in particular, have to more actively pursue foreign market learning opportunities that can help these managers adapt their focus to the new market reality. For instance, SOE managers can appoint a board of directors that will encourage internationalization and intensify product innovation.

Limitations and future research

Our study is subject to three key caveats, which provide interesting venues for future research. First, while there is a plethora of research on the institutional environment in China (e.g. Cui & Jiang, 2012; Luo & Tung, 2007; Luo, Xue, & Han, 2010; Ramasamy et al., 2012), we analyzed instead the pro-market reforms development in a key but under-studied emerging market, Brazil. We encourage future research to test the generalizability of our propositions on multiple industries and SOEs from multiple emerging markets. It would also be interesting for future research to expand our propositions into a framework and differentiate between internationalization strategies of SOEs based in single-party communist countries like China vs. SOEs based in multi-party democratic countries like Brazil, Bulgaria, Nigeria, South Africa, etc. Although each of these countries underwent economic pro-market reforms, they differ in their political transformations. These differences in political transitions may alter the length and intensity of the different phases of SOEs' internationalization, as well as the focus of the SOE on its different types of managerial outcomes.

Second, we discovered that, in the context of SOEs' internationalization to expand its geographic scope, industry-level deregulation might play a bigger role than protectionism prior pro-market reforms: (1) globally in low-income countries seeking resources; and (2) into specifically high-income developed nations globally. These are interesting results because prior research on the regional/global strategies of firms has paid far less attention to explicitly differentiate between lower-income vs. higher-income countries in the regional and global segments. In fact, we saw that when Petrobras decided to enter the global markets, it entered high-income developed countries in 89% of cases and mostly during its Phase III of strategic internationalization strategy. Thus, we encourage future research to expand ours by analyzing in greater detail the regional and global geographic scope and implications for performance (Banalieva & Dhanaraj, 2013) in the context SOEs.

Third, more research is needed exploring the political side of SOEs' internationalization. In many circumstances, SOEs may internationalize to achieve political objectives of their governments, sometimes corrupted political objectives, which have little to do with profitability or financial performance (Cuervo-Cazurra et al., 2014). Very recently, Petrobras managers were accused of corruption on the acquisition of a refinery in Pasadena. "It's Corruption 101: You get control of a state enterprise and then channel resources from it to the parties in your coalition," said Sérgio Lazzarini, who has written widely on Brazil's state capitalism (Romero, 2014). Secondary data on media investigation would be more appropriate for this kind of research, because SOEs' managers would not be willing to talk about these entrusted purposes of SOE internationalization.

REFERENCES

Andersson, M., Latef, S. (2011). International Expansion: A case study of how a state-owned enterprise expands internationally. Stockholm School of Economics - Institute of International Business (IIB). Master's Thesis 2010. Retrieved from http://arc.hhs.se/download.aspx?MediumId=1022

Ang, J. S., & Ding, D. K. (2006). Government ownership and the performance of government-linked companies: The case of Singapore. *Journal of Multinational Financial Management, 16*(1), 64-88. doi:10.1016/j.mulfin.2005.04.010

Banalieva, E. R., & Dhanaraj, C. (2013). Home-regional orientation in international expansion strategies. *Journal of International Business Studies, 44*(2), 89-116. doi:10.1057/jibs.2012.33

Bass, A. E., & Chakrabarty, S. (2014). Resource security: Competition for global resources, strategic intent, and governments as owners. *Journal of International Business Studies, 45*(8), 961-979. doi:10.1057/jibs.2014.28

Campos, F., Tolmasquim, T., & Alveal, C. (2006). Restructuring the oil segment in South America: Public policy, private capital and energy integration. *Oil & Gas Science and Technology-Revue de l'IFP, 61*(3), 415-431. doi:10.2516/ogst:2006042a

Cantwell, J., Dunning, J. H., & Lundan, S. M. (2010). An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment. *Journal of International Business Studies, 41*(4), 567-586. doi:10.1057/jibs.2009.95

Cerny, P. G. (1997). Paradoxes of the competition state: The dynamics of political globalization. *Government and opposition, 32*(2), 251-274. doi:10.1111/j.1477-7053.1997.tb00161.x

Choudhury, P., & Khanna, T. (2014). Toward resource independence - Why state-owned entities become multinationals: An empirical study of India's public R&D laboratories. *Journal of International Business Studies, 45*(8), 943-960. doi:10.1057/jibs.2014.20

Clifton, J., Comín, F., & Díaz-Fuentes, D. (2011). From national monopoly to multinational corporation: How regulation shaped the road towards telecommunications internationalisation. *Business History, 53*(5), 761-781. doi:10.1080/00076791.2011.599588

Cuervo-Cazurra, A., Inkpen, A., Musacchio, A., & Ramaswamy, K. (2014). Governments as owners: State-owned multinational companies. *Journal of International Business Studies, 45*(8), 919-942. doi:10.1057/jibs.2014.43

Cuervo-Cazurra, A., & Dau, L. (2009). Promarket reforms and firm profitability in developing countries. *Academy of Management Journal, 52*(6), 1348–1368. doi:10.5465/amj.2009.47085192

Cui, L., & Jiang, F. M. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. *Journal of International Business Studies, 43*(3), 264–284. doi:10.1057/jibs.2012.1

Dau, L. (2012). Pro-market reforms and developing country multinational corporations. *Global Strategy Journal, 2*(3), 262-276. doi: 10.1111/j.2042-5805.2012.01033.x

Dantas, E., & Bell, M. (2009). Latecomer firms and the emergence and development of knowledge networks: The case of Petrobras in Brazil. *Research Policy, 38*(5), 829-844. doi:10.1016/j.respol.2009.01.007

Duanmu, J. L. (2014). State-owned MNCs and host country expropriation risk: The role of home state soft power and economic gunboat diplomacy. *Journal of International Business Studies, 45*(8), 1044-1060. doi:10.1057/jibs.2014.16

Dunning, J. H. (2001). The eclectic (OLI) paradigm on international production: Past, present and future. *International Journal of the Economics of Business, 8*(2), 173-190. doi:10.1080/13571510110051441

Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management Review, 14*(4), 532-550.

Feldman, E. A. (2006). The culture of legal change: A case study of tobacco control in twenty-first century Japan. *Michigan Journal of International Law, 27*, 743-821.

Fleury, A. & Fleury, M. (2011). *Brazilian Multinationals: Competences for Internationalization*. Cambridge University Press.

Forbes (2012). *Ranking: The Forbes Global 2000*. Retrieved from http://www.forbes.com/global2000/list/.

Fortune. (2012). *Global 500*. Retrieved from http://money.cnn.com/magazines/fortune/global500.

Ghauri, P. (2004). Designing and conducting case studies in international business research. In R. Piekkari & C. Welch (Eds), *Handbook of qualitative research methods for international business*, pp. 109-124.

Girma, S., Gong, Y., & Görg, H. (2008). *Can you teach old dragons new tricks? FDI and innovation activity in Chinese state-owned enterprises*. Rochester, Rochester: Retrieved from http://search.proquest.com/docview/1095261157?accountid=7398

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine de Gruyter.

Gupta, N. (2005). Partial privatization and firm performance. *The Journal of Finance, 60*(2), 987-1015. doi:10.1111/j.1540-6261.2005.00753.x

Heinrich, A. (2003). Internationalisation of Russia's Gazprom. *Journal for East European Management Studies, 8*(1), 46-66.

Hood, C. (1995). Contemporary public management: A new global paradigm?. *Public Policy and Administration, 10*(2), 104-117. doi:10.1177/095207679501000208

Hurley, R. F., & Hult, G. T. (1998). Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing, 62*(3), 42-54. doi:10.2307/1251742

Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm – a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies, 8*(1), 23-32. doi:10.1057/palgrave.jibs.8490676

Knutsen, C. H., Rygh, A., & Hveem, H. (2011). Does state ownership matter? Institutions' effect on foreign direct investment revisited. *Business and Politics, 13*(1), 1-33. doi:10.2202/1469-3569.1314

Lamont, D. (1976). *Foreign State-owned Enterprises*: Threat to American business. Basic Books, New York.

Liang, H., Ren, B., & Sun, S. L. (2014). An anatomy of state control in the globalization of state-owned enterprises. *Journal of International Business Studies*. Advance online publication. doi:10.1057/jibs.2014.35.

Li, Y., Sun, Y., & Liu, Y. (2006). An empirical study of SOEs' market orientation in transitional China. *Asia Pacific Journal of Management, 23*(1), 93-113. doi:10.1007/s10490-006-6117-9

Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies. 38*(4), 481- 498. doi:10.1057/palgrave.jibs.8400275

Luo, Y., Xue, Q., & Han, B. (2010). How emerging market governments promote outward FDI: Experience from China. *Journal of World Business, 45*(1), 68-79. doi:10.1016/j.jwb.2009.04.003

Mazzolini, R. (1980). The international strategy of state-owned firms: An organizational process and politics perspective. *Strategic Management Journal, 1*(2), 101-118. doi:10.1002/smj.4250010202

Musacchio, A., Goldberg, L. G., & Pinho, R. R. (2009). Petrobras in Ecuador. *Harvard Business Review*. Retrieved from https://hbr.org/

Musacchio, A. & Flores-Macias, F. (2009). The return of state-owned enterprises: Should we be afraid? *Harvard International Review*. Retrieved from http://www.hbs.edu/

Musacchio, A., & Lazzarini, S. G. (2014). *Reinventing state capitalism: Leviathan in business, Brazil and beyond*. Cambridge, MA: Harvard University Press.

Romero, S. (2014, October 10). Scandal over Brazilian oil company adds turmoil to the Presidential race. *New York Times*,. Retrieved from http://www.nytimes.com/

Narver, J., & Slater, S. (1990). The effect of a market orientation on business profitability. *Journal of Marketing, 54*(4), 20-35.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge university press.

Petrobras. (2013). 2012-2013 Annual Report. Retrieved from http://www.petrobras.com.br.

Pollitt, C., & Bouckaert, G. (2011). *Public Management Reform: A comparative analysis-new public management, governance, and the Neo-Weberian state*. Oxford University Press.

Ramamurti, R. (1987). State-owned enterprises in high technology industries: Studies in India and Brazil. *Journal of International Business Studies, 19*(3): 512-517. doi:10.1057/jibs.1988.47

Ramaswamy, K. (2013). Gazprom: The ebb and flow of state patronage. Thunderbird Case Series A09-13-0004. Retrieved from http://caseseries.thunderbird.edu/

Ramasamy, B., Yeung, M. & Laforet, S. (2012). China's outward foreign direct investment: Location choice and firm ownership. *Journal of World Business, 47*(1), 17-25. doi:10.1016/j.jwb.2010.10.016

Rodrik, D. (2006). Goodbye Washington consensus, hello Washington confusion? A review of the World Bank's economic growth in the 1990s: Learning from a decade of reform. *Journal of Economic literature, 44*(4), 973-987. doi:10.1257/jel.44.4.973

Rodriguez, M. R., & Suslick, S. B. (2008). An overview of Brazilian petroleum exploration lease auctions. *Revista Terrae*. Retrieved from http://www.ige.unicamp.br/terrae/V6/T_V6_A2.html

Sauvant, K. P., & Strauss, J. (2012, April 2). State-controlled entities control nearly US$ 2 trillion in foreign assets. Perspectives on topical foreign direct investment issues by the Vale Columbia Center on Sustainable International Investment. Retrieved from http://www.vcc.columbia.edu.

Saussier, S. (2000). Transaction costs and contractual incompleteness: The case of Électricité de France. *Journal of Economic Behavior & Organization, 42*(2), 189-206. doi:10.1016/S0167-2681(00)00085-8

Suhomlinova, O. (2006). Toward a model of organizational co-evolution in transition economies. *Journal of Management Studies, 43*(7), 1537-1558. doi:10.1111/j.1467-6486.2006.00643.x

Tordo, S., Tracy, B. S., & Arfaa, N. (2011). National oil companies and value creation. *World Bank working paper* n 218.

Unctad (2012). World investment report 2012: Towards a new generation of investment policies. New York: United Nations. Retrieved from http://unctad.org/en/Pages/DIAE/ World%20Investment%20 Report/Annex-Tables.aspx

Vernon R. (1979). The international aspects of state-owned enterprises. *Journal of International Business Studies, 10*(3), 7-15.

Walker, R. M., Brewer, G. A., Boyne, G. A., & Avellaneda, C. N. (2011). Market orientation and public service performance: New public management gone mad?. *Public Administration Review, 71*(5), 707-717. doi:10.1111/j.1540-6210.2011.02410.x

Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York: The Free Press.

Witt, M. A., & Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies, 38*(4), 579-594. doi:10.1057/palgrave.jibs.8400285

World Bank. (2013). *Country and Lending Groups*. Retrieved from http://data.worldbank.org/about/country-classifications/country-and-lending-groups#High_income

Yin, R. (1994). *Case study research: Design and methods* . Beverly Hills.

Yu, M. (2013). State ownership and firm performance: Empirical evidence from Chinese listed companies. *China Journal of Accounting Research, 6*(2), 75-87. doi:10.1016/j.cjar.2013.03.003Y