

The Macrotheme Review

A multidisciplinary journal of global macro trends

The Role of Leadership in Formulating Regional Energy Cooperation Schemes: Gas Cooperations in South America and Southeast Asia Compared

FARIZAL MOHD RAZALLI

Sciences Po, Paris

farizal.binnohdrazalli@sciences-po.org

Abstract

This article compares two natural gas cooperation schemes; the controversial gas pipeline project El Gran Gasoducto del Sur (GASUR) and the Trans-ASEAN Gas Pipeline (TAGP). While GASUR failed in its formulation stage, TAGP continuously struggles to come to its final formulation. This article is theoretically intrigued by the nexus between leadership and energy regime (gas cooperations) formation. It critically explores the regime theories to construct an interpretive leadership framework to explain the different fate confronting the two cooperation schemes. The analysis shows that both GASUR and TAGP features a strong state-led leadership style. However, there are observed variances to this leadership style. Such observed variances can be further explained by the context in which regional gas cooperations take place. The analysis of the context reveals three conditions namely regional politics, domestic gas markets, and gas supply. These conditions work either to constrain or facilitate the formation of the studied gas cooperations. While both regional politics and gas supply work differently in the two regions, domestic markets have a similar constraining effect on the formation of both GASUR and TAGP.

Keywords: regional energy cooperation, regional leadership, and energy politics

1.0 Introduction

The trend in forming energy cooperations is indeed growing. These cooperations can be both formal and informal and take various forms namely bilateral and multilateral energy trade, institutional energy arrangements, energy forums and energy treaties just to name a few. South America and Southeast Asia are but two of the world's regions that see numerous formulations of energy cooperations especially in natural gas. While it underscores the region's effort at transiting itself to a lower-carbon economy, it also highlights the complex realities confronting the region.

By virtue of the project, El Gran Gasoducto del Sur (GASUR) should be lauded as the best approach to realizing a low-carbon energy economy. Exploiting one of Latin America's most abundant natural resources and redistributing it across the region should facilitate efforts in

poverty eradication. Given its scale and magnitude, the project should instantly attract bullish investors who love engaging themselves in risky projects for even higher returns. Yet, notwithstanding the aforementioned and strong demonstrated political leadership, El Gran Gasoducto del Sur failed to come to its formulation. While the Trans-ASEAN Gas Pipeline (TAGP) in Southeast Asia was framed within the regional Association of Southeast Asian Nations (ASEAN) framework, ASEAN's role is more of a coordinator than a leader. Private actors seem to drive the initiative giving us a reason to believe that the realization of the TAGP will be more efficient. Yet the TAGP initiative is still in its formation stage despite being conceptualized more than a decade ago (Sovacool, 2010:789-790).

This article argues that leadership factor is critical in explaining the aforementioned issues. Leadership can facilitate, complicate, and fail the formation of regional energy cooperations. Nonetheless to date, to my knowledge based on the current literature, there is no work that specifically analyzes the role of leadership in the formation of regional energy cooperations. This provides this article with the opportunity to pioneer an analytical work in this area. At the same time, it gives significant challenges to develop an analytical framework that adequately explains the complexity of leadership as a variable to help explicate the formation of regional energy cooperations. Little is known about the style and conditions under which leadership functions to undertake such a drive for establishing a reliable regional energy cooperations. This article postulates the following hypothesis: given the state's traditional domineering role in the gas sector in both South America and Southeast Asia, both regions will likely feature a strong state-led leadership style. Nonetheless, the different regional contexts produce conditions that work differently in affecting the provision of leadership, which eventually leads to different outcome in the formation of gas cooperations. This article now turns to the theoretical framework that will guide the analysis.

2.0 Constructing the theoretical framework

This article is primarily interested in the role of leadership in forming the two regional gas cooperations, GASUR in South America and TAGP in Southeast Asia. In so doing, this article embarks on two highly interrelated methodological questions. First, for us to be able to explicate the role of leadership, we need to prove that leadership is an observable phenomenon. This requires us to define and conceptualize the notion leadership to identify tangible and concrete elements of leadership that can be observed and measured. Second, in investigating the relationship between leadership and cooperations, it is imperative to explore the nexus between the two by means of theorizing cooperations as IR phenomena. Upon successfully exploring the nexus between leadership and cooperations, this section will construct a theoretical framework which will help us analyze our case studies and eventually put them to comparison.

2.1 Conceptualizing 'leadership'

Leadership is both lucid and porous as a word. Lucid because by a quick glance of the word one immediately thinks of a leader who leads or is in a position to lead others. The Oxford dictionary while distinguishing between actor and action echoes a more refined definition where leadership is defined as an action of leading a group of people or an organization, or the ability to this. The definition of the word then is closely linked to the root word leader. However, this is where the word becomes porous as a concept. While the notion leader remains at the core, leadership is not

simply an extended linguistic function of the word leader to explain the action of leading (Nye, 2008:16-21). Leadership, in its entirety, denotes more than merely personal traits popularly held by the theory of great men (Bird, 1940; Stogdill, 1948, 1974; Bass, 1960) and behaviors (Lewin, Lippitt & White, 1939) of leaders to include situational factors that condition leadership (Fiedler, 1967; House, 1971; Vroom-Yetton, 1973; Hersey, Blanchard & Johnson, 1977) and outcome of leadership (Burns, 1978; Berne, 1961). More recently studies on leadership draw attention to the oft missing dimension followers (Kellerman, 2008; Nye, 2008) where the role of followers in affecting leadership is elucidated.

Given the nature of gas cooperations, this article deals particularly with political leadership. For the purpose of our analysis, I define leadership as a process that involves three major components: actors, strategies, context. Although these three components will be further discussed in the rest of this section, the following brief explanations of the them will suffice for the moment. Actors represent leader and followers who bring along with them different interests. Leader will work and help followers to identify and formulate a common purpose or goal. Such interactions between leader and followers will result in their pursuing a set of strategies that can be classified as a particular form of leadership. Leaders direct and help followers to pursue these strategies to achieve the well-defined commonly shared purpose set and agreed earlier. This whole process of interactions between leaders and followers however happens within a particular context (environment) which present many conditions; nonetheless it is those conditions that are the most relevant with the leadership activity (issue-area) that will effectively constrain the leadership process hence its outcome (Nye, 2008:21).

Leadership is ubiquitous (Nye 2008, p. 3). It occurs throughout the life of the activity that pursues a common purpose (project or initiative) it is applied to, rather than merely at a particular point of the activity. Leadership is not a one-time off event in a political process (regional energy cooperation). Nor is leadership a one-way process that exclusively favors one actor over the other. Leadership is an interactive process between all the stakeholders involved that runs continuously throughout the given task or activity. Treating leadership as a process rather than an end product precludes normalizing leadership in a way that one has to live with either good or bad leadership (Kellerman, 2004:11). Of methodological importance to the article, by operationalizing leadership in this way, it helps the analysis to investigate difficult and failed cooperation schemes. Being ubiquitous, it should hardly go unnoticed regardless of the outcome of the studied cooperations (failed or complicated or successful).

2.2 Conceptualizing 'international cooperations'

To better understand international cooperations is to understand how they come into existence in the first place. Nothing is more apt than to seek for a particular analytical explanation that is a theory that could frame international cooperations as phenomena in international politics. This article argues that theories of international regimes (or regime theory) provide an excellent start to such inquiry.

International regimes remain one of the most studied object in IR, perhaps overly studied that it yields various critiques from both proponents and opponents alike. It started some 30 years ago when a group of scholars began to initiate a research program to analyze international regimes as a growing phenomenon in international politics. A commendable effort under the direction of

Stephen Krasner, who also eventually counts as one of the primary advocates of regime theory, regime analysis has become intertwined with the rise of international political economy and international environmental governance as vibrant fields of study that provides intellectual capital for the growing research interest in these fields (Young, 2012).

This brings us to revisit some of the classical works on regimes in international relations. Hence we begin by dismantling the concept of regime through the following classic definition: Regimes are sets of implicit and explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given [issue] area of international relations. Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice (Krasner, 1982, p. 186).

Krasner's referenced definition of regimes brings to the center stage four important characteristics of regimes namely principles and norms, rules, and decision-making procedures. Those characteristics were also equally echoed by several other scholars namely Keohane & Nye (1977) and Haas (1980). The former contends regimes as sets of procedures, rules, or institutions for certain kinds of activity (Keohane & Nye 1977; Keohane 1989:17). The latter, on the other hand, adds an emphasis on the coherent nature of such procedures, rules, and norms (Haas, 1980:553). Meanwhile, Young (1982:277) understands regimes as social institutions governing actions in specifiable activities of which the resulting recognized patterns of behavior drive converging expectations. It is this conjunction of convergent expectations that ordinarily produces conventionalized behavior (Young, 1982:278).

The foregoing discussion of some key definitions of regimes do indeed describe international cooperations (Haggard & Simmons, 1987:495). As mentioned earlier in this article, international cooperations can manifest themselves in either institutions or organizations or both, bilaterally or multilaterally (Young, 1989). But forms are not the only qualifying feature of regimes. Krasner (1982) warns that regimes must be understood as something more than temporary arrangements that change with every shift in power or interests. Cooperations need to also qualify in terms of substance- their governing structures and purposes. They need to be governed by certain set of rules and procedures based upon specific norms and principles agreed upon by members to the cooperations.

This article then defines international cooperations as phenomena where rules, norms, and procedures are being developed to facilitate actors' expectations to converge around the cooperations' objective. Note that I use the phrase 'being developed' to emphasize the potential role of leadership in forming cooperations. I argue that while leadership is not sufficient to cause a successful formation of cooperations, it is important to facilitate (even to accelerate) the process of establishing the necessary governing structure and working mechanisms of a cooperation scheme to solve an identified collective action problem. This working definition of regimes has the following two advantages for the analysis. Since this analysis is trying to show the role of leadership during the formation of gas cooperations, it is logical to assume that a governing structure and working mechanisms of the cooperations are being developed or will be definitely developed. This way it allows us to see leadership in action and answer our research questions of how leadership is being provided during such formation stage. The other advantage relates to this

analysis subscribing to the view that regimes exist in all areas of international relations (Hopkins & Puchala, 1982). A clear line of what counts as regimes and what does not must then be established so as not to fall into the trap of one-size-fits-all problem. The article uses the rules and procedures as the criteria for determining cooperations as regimes. This scope of the analysis then effectively precludes all other cooperations that are not rule-based.

2.3 Tracing leadership in regime theory

Theories of international regimes can be broadly categorized into three approaches namely power-based, interest-based, and knowledge-based. The following three sections will try to establish the nexus between leadership and regimes from these three different approaches.

I. Power-based and leadership

Kindleberger (1974), in his infamous book *The World in Depression, 1929 - 1939* developed the hegemonic stability theory (HST) where he argued that the economic chaos in between the two world wars which responsibly led to the Great Depression in the 1930s was due to the absence of a “benevolent despot” to guarantee the provision of certain institutional public goods. Writing from IR perspective, Keohane (1984) postulated that the more this ‘benevolent despot’ dominates the world political economy, the more cooperative will interstate relations be. A benign hegemonic power is willing to provide the international public good because the benefit it gains from providing such a public good supersedes the cost of providing the good (Snidal, 1985). This, according to Olson (1965), creates a ‘privileged’ group of states whose needs are guaranteed by a single hegemonic power. Thanks to the benign hegemon, it is a win-win situation for everybody. Gilpin (1975) and Krasner (1976), however, warned against sensationalizing the effect of a benign hegemonic power. The fact that this hegemonic actor is the domineering party in the arrangement, it is rather naive not to think that all coordinated policies of the arrangement are a function of the hegemon’s interest. It is not about the absolute gains but rather the relative gains which in the end one winner (the hegemon) takes it all from the other states.

While HST has clearly brought leadership into the analysis of regime formation (and regime change), it conveniently assumes leadership factor within the relationship between power and interest and regime formation. Leadership is being effectively exercised only when a hegemon embarks, given the power resources accompanied by its interest to provide benefits for all, on forming a regime of which it is determined to defend within the anarchic international system. In reality, however, cooperation through collective action among states is always possible even without a hegemon (Axelrod, 1984; Lake, 1993; Kahler, 1992).

HST is then, fundamentally speaking, another realist’s tool of glorifying power and interest as the only valid causal variables in international politics. Even when it may seem that it is explaining leadership as a variable, it does so by defining leadership as an exclusive function of power. In short, leadership has little analytical significance due to its dependence upon power and interest. To better explain leadership’s analytical significance, I argue, one has to depart from discussing leadership exclusively within the power discourse.

II. Interest-based and leadership

Still focusing on the state actor, interest-based regime theorists account for leadership factor through the rationality of leaders. Such rationality is based on leaders' ability to use his utility function to maximize their state's welfare. The emphasis is on state's leaders often means to refer to heads of government or the highest ranking officer in the authority for decision-making. These leaders carefully calculate cost and benefits in deciding to cooperate or to defect (Axelrod, 1967). Should states decide that it is in their interest to form cooperation, such a cooperation will likely to come into existence as states mutually agree to do so. Because of this, Keohane (1988:381), one of the leading proponents of this approach, argues that rationalist theory has the explanatory power to explore the conditions under which cooperation takes place, and to explicate the reasons for states to form international institutions.

One feature that could suggest a trace of leader-follower relationship is at the domestic level. Since interest-based approach primes on domestic influence on governments (state), decision-makers are constantly under pressures to local changes resulting from technological innovations or economic development or citizens' demands for domestic structural modifications and improvements (Taylor, 1978:119). Together, these pressures affect the way leaders formulate their policy preferences hence evolving dynamics in state's behavior toward institutional cooperations. Nevertheless, despite these numerous domestic pressures, there is simply a high possibility for leaders to be selective in addressing demands that least affect their own interests. Because the final authority rests upon the state, it is difficult to assess to what extent will these domestic pressures affect the state's preference for cooperation.

In general, interest-based approach offers very limited account of leadership process in regime formation. Having said that, this approach does contribute to our understanding of the role of rationality in leadership. Common interest alone may not prove sufficient for cooperation to occur especially when such cooperation is working toward providing public goods. It is far more important to examine the extent to which individual interest see it fit and justified to pursue such common interest shared by a group (Olson, 1965). This has tremendous implications on the role of leadership. A set of sound strategies may have to be employed to ensure members to the cooperation stay true to the common goal and reduce the incentives to allow competing individual's interest to upset the cooperation. Maintaining high motivations for cooperation may help reduce the constraints and conditions that might otherwise impede or even complicate cooperations.

III. Knowledge-base and leadership

Theorists of this approach insist on studying individuals' cognitive factors to explain regime formation. It follows then this theoretical approach emphasizes the roles of ideas, knowledge and beliefs as its causal variables to affect regime formation. Outcome and patterned behavior are the results of the process of learning and perception (Jonsson, 1987; Puchala & Hopkins, 1982; Goldstein & Freeman, 1990). One, however, finds little emphasis given to the process of leadership, perhaps subsumed in the cognitive complexity of human's psychology, that measures complex mental structures in a person, with implications on leadership-oriented skills like identifying others' states and inferring their dispositions, organizing impressions of others, and taking the perspective of others (Burlison, 1994; Hale & Delia, 1976; O'keefe, 1984). Having

said that however, the approach's focus on individuals as multiple actors representing different domains namely scientists, political advisors, and multinational directors, to name a few, could shed some light on 'inclusive' leadership that distances itself from state-centric leadership that exclusively favors state actors to the exclusion of other non-state actors. This could further help us to infer that the leader-follower relationship is one that is based on co-existence as each and every individual has a unique role to play and skills to offer in the leadership process. Young's pioneering work on political leadership in regime formation provides us with a good start to appreciate the approach's offering on leadership in regime formation.

Young (1991:286) wrote, "Unlike individuals who become leaders in international affairs, hegemons are relatively scarce in individual issue-areas, much less in international society as a whole." Being one of the staunchest proponents of socially conventionalized international behavior, Young sees little sense to restrict the analysis of political leadership in the international system to power or in Keohane's term "preponderance of material resources" (Young, 1991:286). Young's work yields three distinctive types of leadership namely intellectual leadership, entrepreneurial leadership, and structural leadership (Young, 1991:287). By assigning these types to different individual actors involved in the regime formation, Young has actually qualified the objectivity of leadership as an analytical variable in conditioning the rate at which regime formation takes place. Nonetheless, while Young (1991) speaks of leadership types, this article speaks of leadership styles. Our main concern here is to identify the leadership style in forming gas regimes. Should a dominant style be discovered, this article is interested in explaining the potential variances and to compare them across regions.

Thus far, I have tried to ground two key concepts in this analysis to some concrete theoretical paradigms. By this point, this analysis is well prepared to construct a theoretical framework to help analyze the case studies. The next section will presents the discussion of this theoretical framework.

2.4 The framework of analysis- triangulating the approaches

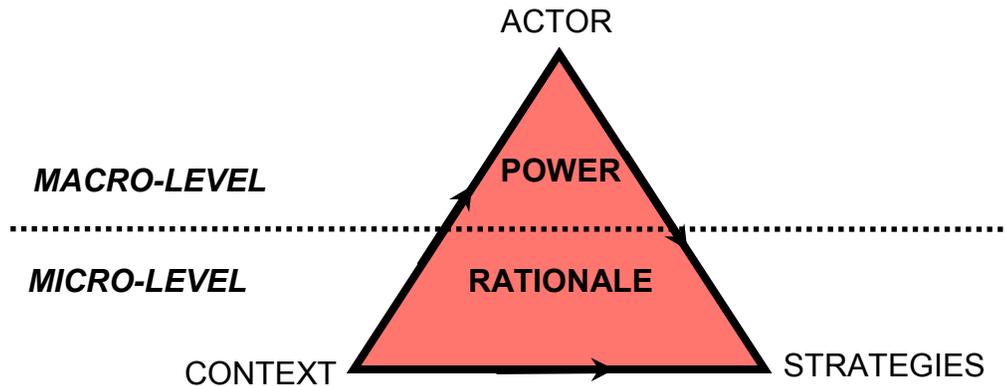
Having conceptualized both leadership and international cooperations and framed them within the theories of international regimes, this section will attempt at developing a framework of analysis that draws upon these theoretical approaches. It is clear from the previous discussion that each of the three theoretical approaches does indeed contribute to explaining the role of leadership, although to varying degrees. However such insight from the literature on the presence of leadership across these approaches runs consistently with my conceptualization of leadership presented earlier. Leadership is omnipresent and it cuts across theoretical boundaries. Hence, it follows that a sound framework of analysis to explain the role of leadership in international cooperations must as far as possible recognize the contributions from all three approaches. The question however is not whether or not to integrate these elements but which elements are to be integrated into the framework of analysis (Keohane & Nye, 1977; Young, 1989; Jonsson, 1987; Rowlands, 1992; Aggarwal, 1986).

As Rowlands (1992) observed, many authors who chose to combine the different theoretical paradigms did so on the pretext that each of the theoretical paradigms work under different conditions. In other words, these authors' main interest in developing a multi-theoretical framework is to use different theoretical paradigms in different contexts as the need arises. On

the contrary, an integrated framework of analysis draws upon selective elements from different theoretical paradigms to arrive at a newly developed framework of analysis independent of those theoretical paradigms (Peterson, 1988; Rittberger & Zurn, 1991). This analysis subscribes to an integrated rather than a multiple framework of analysis.

The framework (figure 1) involves what I call a leadership triangle. It draws upon my conceptualization of leadership from which I derive three elements namely actors, strategies, and context. These three elements constitute the three angles of the triangle. The relationships between these three elements are represented by the arrows. While the right-hand side of the triangle describes a causal relationship, the other two sides describe a contingent relationship. It follows then actors cause strategies while context constrains both actors and strategies. The leadership triangle occurs at both macro (externally) and micro level (domestically). Having explained the form, I will now explain the substance of the framework. This is where the framework integrates elements from the three theoretical approaches of the regime theory discussed earlier.

Figure 1: leadership triangle



Power is indeed an obvious suspect drawn from the power-based approach. A leadership without the power element will only render it helpless if not at all meaningless (Nye, 2008). Though power in this leadership triangle refers to both hard and soft power. Another obvious suspect drawn from the interest-based approach, rationale, serves as another important ingredient to the triangle. It gives the leadership process the sense of objectivity. Together power and rationale help provide the framework with the necessary means to explicate the complex leadership processes in the selected case studies. Meanwhile, the knowledge-based approach is key to

broadening the framework's understanding of actors. The framework recognizes both state and non-state actors and the need to include them to better analyze leadership processes.

The links established between the framework and the theoretical approaches means that no further effort will be made to locate the subsequent analysis within any specific theoretical heritage. In carrying out the analysis, one assumption is made: in all the case studies, it is assumed that states are prepared to cooperate in a given issue-area or in short instances for cooperation is ripe. States, however, are concerned about the means and the actual benefits from the cooperation. I will now turn to each of the case studies.

3.0 Case study 1: Gasoducto del Sur (GASUR)

Natural gas is no stranger in South American politics. The presence of Bolivia and Venezuela, with combined natural gas reserve amounting to 202.6 tcf (as of 2010), guarantees the huge potential supply to meet the region's ever-increasing demand for this fuel. As this fuel becomes more entrenched into regional politics, regional leaders look for every possible means to make this fuel available accessible to the regional consumers.

If post-Cold War 1990s had evoked regionalism process across the globe in ways never seen before, the new-ideological millennium engulfing the South American politics where the leftists came into power across the region had renewed significantly the integration project. In what Dabène coined the fourth wave of regionalism, Latin America (including South America) is now focusing rigorously on the non-trade-driven regionalism namely the infrastructural integration through building roads and improving transportation system as well as resource and mining integration (Dabène, 2012). Energy then figures itself as one of those agendas on Presidents' table across the region.

GASUR came into existence partly as a result of this renewed regionalism. First mooted by the Venezuelan President, Hugo Chávez, the proposed gas pipeline quickly gained support from the then Brazilian and Argentinean Presidents respectively. As the name suggests, it is thus far the most ambitious energy interconnections project ever proposed in the region.

3.1 GASUR: Divulging facts and figures

With the initial estimation cost of US\$17 billion, this pipeline was expected to reach US\$20 billion (equivalent to Argentina's savings from debt cancellation). Even to this date, this is still world's most expensive gas pipeline project ever proposed. It was expected that construction works would be between 5 to 7 years.

El Gran Gasoducto del Sur proposed a mega gas pipeline project connecting Puerto Ordaz in southern Venezuela to Buenos Aires in Argentina. This 8,000-km long pipeline passed through Brazil via several of its cities across the country. Generally the undefined exact route of the pipeline can be broken into three main phases. The first phase, accounting for 2950 km, concerns with the connection between Puerto Ordaz, Venezuela and Marabá, Brazil. Technical specifications suggest that this stretch would use a 66-inches diameter with 13 compressor stations of 25,000 hp each (Wertheim, 2006).

Figure 2: Original route plan of the mega natural gas pipeline



Marabá is the key transit route during the second phase where it will continue eastward to Fortaleza, for a distance of 1,387 km, which will then connect to the local existing pipelines extending along the coastline including the GASENE pipeline at Campos. The pipeline's diameter would be staggeringly reduced from 36-inches to 34-inches to 32-inches. Five compression stations of 15,000 hp would be installed. The second phase from Marabá will also include the pipeline extending down south to São Paulo over 1,977 km long. The pipeline's diameter for this stretch increased to 54-inches. With eight compression stations of 20,000 hp, this stretch from Marabá to São Paulo would distribute 42 million cu m/day to São Paulo's economy. The third phase, on the other hand, connects São Paulo along some 1875 km to Buenos Aires, Argentina. This stretch's 38-inches diameter pipeline would require eight compression stations of 15,000 hp. In terms of deliverability capacity, El Gran Gasoducto del Sur is expected to deliver 100 - 150 million cu m/day to Brazil while 50 million cu m/day would arrive in Argentina.

El Gran Gasoducto del Sur envisages connecting the entire South America where the mega-pipeline will interlink with the existing pipelines running through the continents. According to some estimates then, by 2026 the network of pipelines would tap into all South America's key gas reserves namely in Venezuela (about 150 tcf), in Bolivia (28.7 tcf), in Argentina (23.4 tcf), in Brazil (9 tcf), and in Peru (6.8 tcf) (Wertheim, 2006). It is then not surprising that in April 2006, Bolivia was robed into the mega project together with the other two remaining Mercosur members Uruguay and Paraguay. The inclusion of Bolivia was imperative to tap the country's most promising natural gas province of Tarija which holds some 40% of the country's total

proven and probable reserves. In fact, Tarija province has also been responsible for the Bolivian gas export to Brazil since 1999 (El, 2000).

3.2 GASUR's failure

By July 2007, Sergio Gabrielli, the chairman of Petrobras announced officially the company's withdrawal from the mega gas pipeline project. Although technical studies were expected to have been continued until December, ongoing feasibility study on the economic viability of the project revealed clear disadvantages for Petrobras to continue with its commitment. Argentina never did officially withdraw from it while Caracas of course only admitted that it might not be materialized at this point without ruling out future possibilities. A quick look at the realized and proposed gas pipeline projects across South America confirms that El Gran Gasoducto del Sur still features itself as one of the proposed pipelines pending for construction in the region.

Arguing for the failure of GASUR along the line of technical and financial inviability only tells part of the story. While Petrobras's withdrawal did indeed stall the project, the actual constraint that drove it was the political actors rather than the nature of the project. The varying domestic gas market conditions were equally the culprits that hampered the potential of establishing sound partnerships. Uncertainties in the exact supply of gas for the project, a much assumed factor, also strongly fueled the catastrophic fate of GASUR. I will now turn to second case study- the TAGP.

4.0 Case Study 2: Trans-ASEAN Gas Pipeline (TAGP)

The history of energy cooperation in Southeast started in 1970. After the oil shock of 1973, which saw the oil embargo imposed by Arab producers, ASEAN established the ASEAN Council on Petroleum (ASCOPE) in 1975, which would be in charge of regional energy issues. ASCOPE comprises of national oil companies from all the ASEAN members and remains to date one of the two private-driven institutions within ASEAN, the other being the Head of ASEAN Power Utilities/Authorities Council (HAPUA). At the time, Indonesia was responsible for proposing the formation of ASCOPE. The role of Indonesia as well as her interest clearly reflected both the strong growth of its oil industry and its huge potential reserves of natural gas. ASCOPE was tasked to prepare the working framework of the sharing of oil and gas. This then led to the first meeting of economic ministers on energy cooperation five years later in Bali, where they discussed real energy cooperation between the member countries and between the organization and the world.

As for the gas sector, in 1986, during the 19th ASEAN Ministerial Meeting in Manila, the region spoke of an opportunity to further integrate the region through a network of gas. The meeting ended with the signing of the agreement called Petroleum Security Agreement (PSA). This agreement had paved the way for regional energy integration in South East Asia. The first concept of energy integration in the region was born in 1990 when the Trans-ASEAN Gas Pipeline (TAGP) plan was revealed during the ninth meeting of economic ministers on energy cooperation. The TAGP plan, however, was only materialized in 1997 as one of the two major initiatives that formed the Trans-ASEAN Energy Network, the other being ASEAN Power Grid which aims to integrate the regional electricity (. These initiatives formed part of the Vision 2020 adopted by the ASEAN leaders. The second ASEAN informal summit in 1997 accorded ASCOPE with an exclusive role of driving the TAGP. The latter was asked to prepare a

feasibility study to concretize the TAGP in which potential completion was expected in 2004. It was the work of ASCOPE that led to the signing of the Memorandum of Understanding in 2002 in Bali by all the energy ministers of ASEAN (ASEAN, 2002).

4.1 TAGP: Divulging facts and figures

The concept of TAGP is based on the idea of collective gas integration. Contrary to some critics, the TAGP is not an infrastructure project that seeks to develop a single pipeline running across the region. Instead, it is based on interconnecting gas pipelines in the region and developing new pipeline connections to connect new natural gas sources with regional demand centers. Once formulated, the TAGP will serve as a large regional natural gas network. The realization of the TAGP then foresees strategic partnerships between the member countries as essential to create a network of natural gas pipelines hence the regional gas market.

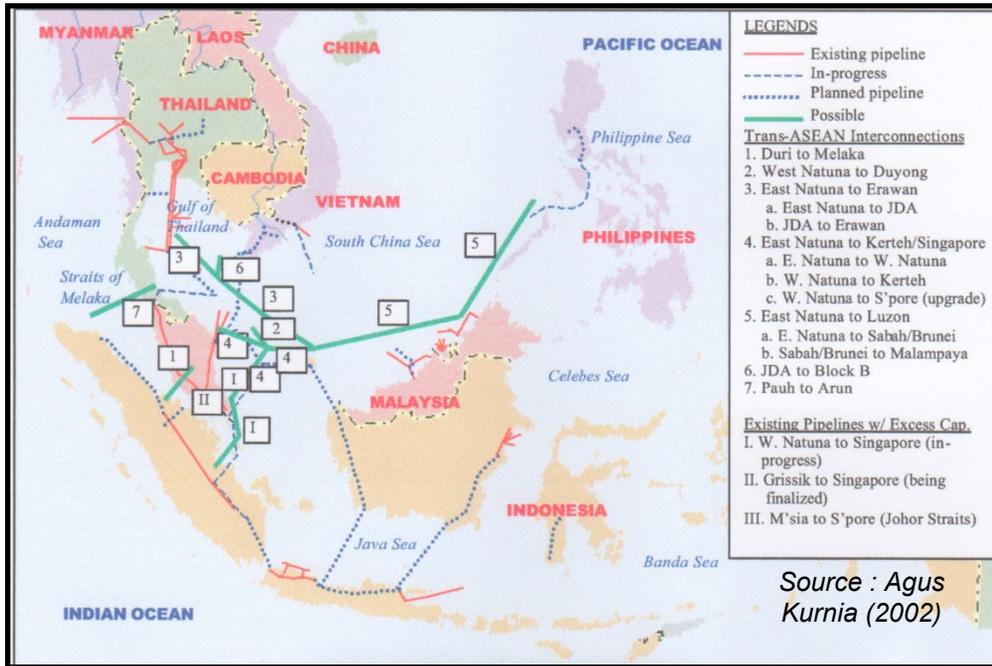
The TAGP relies upon interconnecting national gas pipeline network via cross-border pipelines. Member countries of the region at the time, however, had different experiences with respect to pipelines. This can be explained by the intensity of natural gas utilization in various countries in the region. Among them, Laos, the Philippines and Cambodia had no national pipeline network. On the other hand, Myanmar had only two exporting pipelines which it uses to export its gas to Thailand. Figure 3 shows the existing national pipelines network at the time of the conceptualization of the TAGP in 2002:

Figure 3: Existing pipelines of South-East Asia in 2002



The idea is to interconnect these national networks by building cross-border interconnections throughout the region. The following figure 4 describes in detail the proposed interconnections of TAGP.

Figure 4. Cross-border pipelines proposed the TAGP



As of today, 10 cross-border pipelines have been completed which amounted to some US\$14.2 billion. There is however six more interconnections to be built. Given the magnitude of these cross-border interconnections, the question remains, is there sufficient gas to justify the constructions of these massive interconnections. According to Figure 4, one may observe that the two main sources of gas come from Indonesia and Malaysia. Indonesia, through its two gas fields located off the Natuna Islands, has 1.43 trillion cubic meters (tcm) of proven reserves. On the other hand, combined proven reserves (and probable) of Sabah and the Malaysia - Thailand Joint Development Area (JDA) are valued at 0.55 tcm. The other major supplier is Myanmar. Its reserves were reportedly on an upward trend from 0.3 tcm in 2000 to 0.5 tcm in 2006. The trend however reversed downward to fall to 0.2 tcm in 2011. On the contrary, Vietnam has seen a steady increase in its natural gas reserves since the 1990s. Vietnam's reserves were estimated at 0.7 tcm in 2010 before stooping to 0.6 tcm in 2011. Nevertheless, all of these numbers are only estimates and no one knows the exact amount of gas the region possesses. Complicating the matter, there are simply disputes over proven and probable reserves which further implicates on regional security of supply.

It is in the face of such dwindling regional supply, the pipelines need to be complemented by the liquefied natural gas (LNG). The LNG provides an alternative for transporting natural gas in the

region. Although much costlier than pipelines, LNG allows natural gas to be transported much easier and more practical over long distance, reducing the need to build difficult connecting pipelines especially between remote offshore production centers and onshore redistribution pipelines (transmission lines network). Thus the expansion of the TAGP to include LNG has two implications; while the constructions of interconnecting cross-border pipelines continue (as well as the national network), member countries will begin to develop their respective LNG terminals to help ensure sufficient regional gas supply. These terminals could serve as storage capacities to send out gas to member countries experiencing supply shortages.³ Rumor has it that these LNG terminals might be interconnected via undersea pipelines as part of the TAGP project (Petronas senior executive, 2013, pers. comm., 21 February).

The second implication relates to the acquisition of natural gas supply from external sources. With LNG terminals in place, the region is set to receive LNG imports not only from the regional indigenous supply sources but also from outside the region namely from Qatar. Southeast Asia then may again subject itself to the mercy of the energy market that simply bring back the old issues of volatility both in prices and supply. Having said that, however, the LNG imports remain consistent with the original objective of the TAGP project that puts priority over regional energy security. What it means is that regional leaders are practical and pragmatic in their strategies; when the regional indigenous supply is no longer capable of meeting the objective, other alternative supply sources will be exploited. The only thing that will not change is the core objective of energy security (Bala, V.S., 2013, pers. comm., 15 February).

The genesis of the concept of TAGP was undoubtedly negotiated within a regional institution that has given it an institutional character. However, our discussion earlier shows that it involves more than the regional institution ASEAN. As a result, the formulation of the regional project has different actors representing the public, private and civil engaging in a particular process. Interestingly various forces both regionally and domestically have continued to provide the context to its formulation.

5.0 GASUR vs TAGP : applying the framework of analysis

While Chávez had clearly initiated the GASUR project, it was clear that he sought for ‘consent’ from the region’s two traditional power heavyweights- Argentina and Brazil. The region clearly becomes a space where diplomacy is being shaped by the power hierarchy. Being energy-rich does not automatically make Venezuela a leader. Other powerful regional actors namely Brazil and Argentina wield political power essential to realize regional projects like GASUR. Bearing this in mind, Chávez took the opportunity to unveil the proposition during Mercosur meeting, the same time it submitted its candidature for Mercosur’s full membership. Diplomatically this was a gesture of solidarity as Caracas was suggesting a collective leadership to maneuver a mega regional energy project. Three main state actors were now prepared to launch an unprecedented regional energy initiative that would soon augur an integrated gas market in the region.

While GASUR relied upon the collective leadership of the regional ‘heavyweights’, the TAGP was nurtured as a collective leadership of all regional countries. At the point of its conceptualization, ASEAN was still a loosely institutionalized regional institution. Very few regional initiatives were of binding nature hence ASEAN member countries often engaged rather than committing themselves to potential regional initiatives. Regional dynamics however was

more alive that observing individual states' interactions is worthier. Thailand and Vietnam, being the main gas consuming countries in the region, were especially interested in the TAGP (Taylor, 2013, email, 23 May). Nevertheless, the gas productions were mainly controlled by Indonesia and Malaysia, while Singapore, capitalizing on its highly liberalized market, controlled much of the gas business. The challenge then was to streamline these different interests among these producing and consuming countries, something that ASEAN required a truly technical and expert knowledge of the players in the gas sector. This then brought ASCOPE into the picture; similar to GASUR, TAGP saw state actors as primary movers but contrary to GASUR, TAGP was left to the private sector for its potential realization.

Both TAGP's and GASUR's initiative heavily rely upon private initiative for its successful realization. National oil companies are the main driving forces and their partnerships play a catalytic role in ensuring sufficient financing as well as sound technical progress. The fact that these different national oil companies (and authorities) have different experiences with regard to their involvement in the gas sector, both GASUR and TAGP clearly rely upon the major regional oil heavyweights. This is obvious in both GASUR and TAGP. In the case of GASUR Petrobras from Brazil and PdVSA and to a certain extent YPF Argentina were featured centrally in the initiative. As far as TAGP is concerned, the two regional oil heavyweights, Pertamina of Indonesia and Petronas of Malaysia, are in the front positions to drive the TAGP initiative. However, while the form of the partnership may be similar, the structures and substance of such partnership reveal striking differences between GASUR and TAGP.

As clearly demonstrated by the way Chávez put forth his GASUR's plan, his emphasis was purely on infrastructure development- constructing the mega pipeline. Chávez's GASUR plan conveniently assumed that gas supply was sufficiently developed and would increase further throughout the GASUR's initiative. Hence, all efforts should be directed at the mega pipeline's construction. The TAGP's plan, however, seem to address both supply and pipeline infrastructures. National companies would enter into partnerships with each other to develop new gas supplies in the region that will justify the construction of the proposed interconnections. Perhaps such modest approach of the TAGP lies in the fact that Southeast Asia may not have as large gas reserves as South America does that Chávez was optimistic about GASUR's success.

Even with regard to the infrastructure development, GASUR and TAGP feature different approaches. GASUR proposed Petrobras, given its huge financial capabilities, as the major financiers for the mega pipeline construction. Such major role by Brazil's Petrobras was also due to the fact that the major part of the mega pipeline's route would pass through Brazil's territory. At least from the early concrete GASUR's proposition tabled to both Argentina's and Brazil's presidents, the initiative did not specifically include specific bilateral cooperations to construct new cross-border pipelines as part of the initiative. On the contrary, the TAGP initiative specifically provides provision on increasing bilateral connections to support and facilitate the realization of the initiative. Thus, the TAGP does not rely on single or any specific financier to help finance the infrastructure development of the initiative. Instead, much of the critical infrastructure development in the TAGP is to be undertaken by each member countries with the help of different private financing institutions. The details discussed in the West Natuna (Indonesia) - Singapore undersea pipeline clearly demonstrates how private partnerships between the various private companies led to the successful production, commercialization, and transportation of the gas supply from West Natuna to Singapore.

GASUR failed to eventually come to its full realization. TAGP, on the other hand, survived its conceptualization phase and is yet to be fully formed and realized hence a complicated initiative. In principle, both of the initiatives reflect a different degree of failure; GASUR met with a complete failure and TAGP took off under complicated environment which arguably is a failure in the making (Sovacool, 2010:503). This analysis found both GASUR and TAGP took place within a context that reveals three key conditions namely regional politics, domestic gas markets, and supply. Nevertheless, the comparative analysis reveals that while these three conditions affect both of the initiatives, their effects in the provision of leadership do present interesting variations across the two regions.

Being regional initiatives, the formation of both GASUR and TAGP was and is dependent upon regional politics, although the way in which it affects the two initiatives varies across the two regions. As the case of GASUR indicates, Petrobras's withdrawal was key in triggering the collapse of the South American initiative. Undoubtedly, economic sense drove Petrobras out of the project. But given a number key regional events at the time, such withdrawal had more to do with the way Brazilian political leaders assessed their regional environment. Following the shocking nationalization of Petrobras's energy interests in Bolivia, the ensuing higher import gas prices had caused Brazil's economy to suffer.¹ The fierce and politically motivated attack on Brazil's bioethanol project by Chávez during the first South American Energy Summit and Regional Integration in mid-April 2007 really soured Brasilia's further regional commitment for a united South America. President Lula's final decision to opt out of GASUR was then justified on not wanting to overly wed Brazil's economy to regional politics that worked against Brazil's national interests.

Interestingly, instead of driving out participants like Brazil from GASUR, regional politics has facilitated the formation of the TAGP initiative. The two main gas producing countries, Indonesia and Malaysia, saw opportunities to be exploited in the TAGP. By default, both countries could increase more revenues from their increased gas sales. Beyond this however both Indonesia and Malaysia are also pursuing different interests. While the former sees greater opportunity to develop domestic gas markets through the TAGP, the latter sees opportunity to advance a particular style of regional energy leadership. Meanwhile, gas exports would allow Myanmar to earn necessary income not only for domestic economic development, but also for the regime to stay in power. More importantly, Myanmar's participation in the TAGP can indeed help repair Myanmar's international image. Still non-producing consuming countries like Thailand, the Philippines, and Singapore wanted to ensure an uninterrupted gas supply through a regional commitment like the TAGP. It is extremely essential for their economic survival although Thailand might also justify for its strategic survival in securing Myanmar's gas supply (Sovacool, 2010:506-507). It is rather obvious that regional politics seem to have brought together, as opposed to drive out countries (GASUR), the different countries in Southeast Asia to conceptualize and be on the way of realizing the TAGP. Nevertheless, the question remains as to how long can these differing interests among regional countries sustain the collective interest in

¹ Through a Supreme Decree of May 1, 2006, President Evo Morales of Bolivia nationalized Bolivia's energy sector. The decree states that all foreign companies must hand majority control over to state-owned Yacimientos Petrolíferos Fiscales Bolivianos (YPFB). Consequently then this had negatively affected the two largest holdings in Bolivia's energy industry; the Spanish-Argentine venture Repsol YPF and Brazil's Petrobras. Of the two, however, Petrobras was hardest-hit as the increased gas prices resulting from the nationalization policy directly affected Brazilian consumers, who consumed half of its gas from Bolivian import.

realizing the TAGP. The analysis views that there will simply have to be at some point where streamlining of differing interests has to occur in creating the needed synergy for success.

Domestic factors have also come to the forefront as domestic gas markets condition the extent to which GASUR and TAGP evolve. The analysis found both South America and Southeast Asia are host to a group of mixed level of development of domestic gas markets. Venezuela which pioneered the GASUR's proposition has an underdeveloped domestic gas market. The same can be said about Bolivian gas market where more than 70% of its local productions are exported. Brazil's gas market is also in its infancy stage due to competing fuels namely bioethanol and hydropower still dominating its electricity sector. Argentina is the only country where gas market is the most developed reflecting its long history with gas utilization in the different sectors namely the electricity, residential, and industrial.

Similar observation can be made in Southeast Asia where the biggest gas producers like Indonesia (and Malaysia) do not necessarily have a developed gas market at home. Instead, apart from being still highly regulated, domestic gas utilization has still far more way to go (Norton Rose, 2010). While Singapore to date remains as the only developed gas market in the region, there are many other regional countries whose gas markets are underdeveloped. Myanmar is comparable to Bolivia, though not in terms of the amount of gas reserves, where its gas productions are mainly for export due to weak domestic demand at home. Laos and Cambodia do not currently have domestic gas market given the two countries' heavy reliance on hydropower especially to generate electricity.

Domestic gas markets in both South America and Southeast Asia are generally still highly regulated. Domestic gas productions in many producing countries are mainly for export market suggesting less focus on domestic utilization. The problem with such policy is that it is not sustainable and in many cases counterproductive. Leaders and policymakers alike should not formulate gas policy based on short-term goals. Gas sales need to be viewed as one of rather than the only option available. Flexibility in the export policy must be able to accommodate the increasing future domestic demand, thus striking the right balance between export and domestic consumption. It is absurd to think that the production of indigenous resources such as natural gas should be less (or never) consumed domestically.

In both GASUR and TAGP, the issue of supply proves to be decisive. However, once again the effects of gas supply drive different fate for both of the initiatives. In GASUR, the issue of supply drove interested parties out thus failed the initiative completely. Luis Giusti, former president of PdVSA, in commenting on GASUR's failure, pointed out the fact that Venezuela simply did not have the gas needed to supply the pipeline for the time being (Márquez, 2007). His view was indeed well founded. Putting aside all the political instability and nationalization issues, the supply numbers simply do not convincingly add up. Chávez proposed GASUR partly as a solution to the growing needs for gas especially in both Brazil and Argentina. Ironically, Venezuela's own gas productions were fully consumed domestically in 2005, the same year GASUR was proposed. Moving slightly further ahead into 2007 and beyond, Venezuela's gas deficit widened. Clearly then Venezuela was incapable of satisfying its own domestic demand, never mind making available significant surplus for export capacity to supply its neighbors.

Surely Chávez was both right and practical to have immediately brought in Bolivia into the GASUR's proposition. Bolivia was critical in performing the role of the 'second important supplier' to supply the GASUR initiative while the 'largest regional supplier' Venezuela developed its mammoth gas reserves. Interesting point to note about Bolivia then, it was already at the time contracting its gas to Brazil and, to a lesser extent, to Argentina. Given the statistical numbers, Bolivia's spare capacity (defined here as surplus of domestic supply) was too small to absorb any additional surge in demand from Brazil and Argentina. Indeed, if GASUR were to function ideally as a truly integrated network of gas supply, where shortages in any single point could be effectively overcome by supply from another points within the network, Bolivia's spare capacity was by itself insufficient to balance up Venezuela's deficit.

Similarly, the dwindling supply has been affecting the very formation of the TAGP. Over a decade from 2001 until 2011, the supply-demand balance has been favorable. Although consumptions have increased significantly over the period, such increase have been matched by proportionate increase in productions. However, a closer look at the figures reveal some worrying signs of downward trend in the demand - supply balance of natural gas at the regional level. Beginning in 2010, the demand-supply gap has widened which put intense pressure on productions to meet the growing demand for natural gas in the region.

It is obvious that there is a real crisis of indigenous gas supply shortages in the region. The situation is further aggravated by the difficulty and delay in the East Natuna field's development. However, this constraint in gas supply, rather than making the TAGP to fall apart, has instead provoked some creative solution from the regional policy planners. In recognizing the need to import its gas supply from external sources, the TAGP working group had proposed the inclusion of LNG to complement pipelines. The LNG option alongside the pipelines has created a special condition to allow for the regional gas supply to capitalize on both indigenous and foreign resources. In fact, at the time when the TAGP initiative was revised in 2011, countries in the region have increased their efforts to build re-gasification terminals on their territories. As these LNG terminals would potentially be interconnected via submarine pipelines, the original spirit of the TAGP, which rests on pipelines integration, will remain intact.²

6.0 Conclusion

State actors are still strongly present in providing leadership in the gas sector. One can indeed speak of a state-led leadership style in driving gas cooperation initiatives in both South America and Southeast Asia. This should not however lead us to conclude that such leadership reflects the highly bureaucratic, political, and inefficient nature of state's involvement in an economic sector. Constrained by the high capital investments, state actors in both regions pursued an open and inclusive strategy in realizing gas cooperations. Private actors are brought in to form public-private partnerships. South America, however, suggests less rigorous public-private partnerships than Southeast Asia does where private actors' role has been observed to be more significant.

² Having said that, however, even LNG supply poses its own unique problems. The higher LNG prices, for example, pose at least two dilemmas: 1) expensive LNG imports require a thorough restructuring of domestic gas prices, 2) higher LNG prices in the foreign markets such as Japan would justify regional exporters' option, namely Indonesia and Malaysia, to sell to destinations outside the region. In short, even LNG supply poses a real uncertainty in the region to meet its growing demand.

Such observed differences in the depth and breadth of the non-state actors' role can further explained by the context in which regional gas cooperations take place. From the analysis, the context reveals three conditions namely regional politics, domestic gas markets, and gas supply. These conditions work either to constrain or facilitate the formation of the studied gas cooperations. While both regional politics and gas supply work differently in the two regions, domestic markets have a similar constraining effect on the formation of both GASUR and TAGP.

In the final analysis, South America and Southeast Asia do not feature any marked distinctive leadership style. However, variances in the provision of leadership do indeed persist. They are the direct consequences of the different effects caused by the different conditions. Although these variances do not directly lead to the formation of the studied gas cooperation initiatives in the two regions, they do affect the breadth and depth of those cooperation initiatives.

7.0 Implication

The findings drawn from this analysis present two important implications to potential investors with investment interests in the South American and Southeast Asian gas sector. Firstly, the still strong state-led leadership style means that investors and companies need to prepare for appropriate strategies in negotiating contract terms- appointing experienced and skilled negotiators who understand the nexus between energy, geopolitics, and region. Secondly, related to the first one, the key to understanding the political economy of the regional gas cooperations is to be able to assess as accurate as possible the ever-changing context that conditions how and to what extent gas cooperations are pursued. Toward this end, statistical figures must always be analyzed together with political, historical, and socio-economic changes affecting countries and regions. As shown in the analysis, statistical information alone are insufficient for mid- to long-term trends may prove to be more determining.

References

- Aggarwal, V. (1985) *Liberal protectionism*. Berkeley: University of California Press.
- ASEAN (2002) *The ASEAN Memorandum of Understanding (MoU) on the Trans-ASEAN Gas*. [online] Available at: <http://www.asean.org/news/item/the-asean-memorandum-of-understanding-mou-on-the-trans-asean-gas> [Accessed: 10 January 2011].
- Axelrod, R. (1967) *Conflict of Interest: An Axiomatic Approach*. *Journal of Conflict Resolution*, 11 (1).
- Axelrod, R. (1984) *The Evolution of Cooperation*. New York: Basic Books.
- Bass, B. (1960) *Leadership, psychology, and organizational behavior*. New York: Harper & Brothers.
- Berne, E. (1961) *Transactional analysis in psychotherapy*. New York: Grove Press.
- Bird, C. (1940) *Social Psychology*. New York: D. Appleton-Century Company.
- Burleson, B. (1994) *Friendship and similarities in social-cognitive and communication abilities: social skill bases of interpersonal attraction in childhood*. *Personal Relationships*, 1.
- Burns, J. (1978) *Leadership*. New York: Harper & Row.
- Dabène, O. (2012) "The New Wave of Post-Trade Regionalism", paper presented at CEE-CERI-CEVIPOF Seminar, Sciences Po, Paris, 11 April.
- El, M. (2000) *TotalFinaElf buys stake in Bolivia-Brazil gas line*. [online] Available at: <http://www.ogj.com/articles/2000/06/totalfinaelf-buys-stake-in-bolivia-brazil-gas-line.html> [Accessed: 23 March 2012].
- S. Bala, V. (2013) *Interview on TAGP*. [in person] ASCOPE Secretariat, Manila, 15 February 2013.
- Fiedler, F. (1967) *A theory of leadership effectiveness*. New York: McGraw-Hill Book Company.
- Gilpin, R. (1975) *U.S. power and the multinational corporation*. New York: Basic Books.

- Goldstein, J. and Freeman, J. (1990) *Three-way street*. Chicago: University of Chicago Press.
- Haas, E. (1980) *Technological Self-Reliance for Latin America: the OAS Contribution*. International Organization, 34 (4).
- Haggard, S. and Simmons, B. (1987) *Theories of international regimes*. International Organization, 41 (3).
- Hale, C. and Delia, J. (1976) *Cognitive complexity and social perspective taking*. Communication Monographs, 43.
- Hersey, P., Blanchard, K. and Johnson, D. (2013) *Management of organizational behavior*. 10th ed. Boston, Mass.: Pearson.
- House, R. (1971) *A path goal theory effectiveness*. Administration Sciences Quarterly, 16.
- Jönsson, C. (1987) *International aviation and the politics of regime change*. New York: St. Martin's Press.
- Kahler, M. (1992) *Multilateralism with small and large numbers*. International Organization, 46 (3).
- Kellerman, B. (2004) *Bad leadership*. Boston: Harvard Business School Press.
- Kellerman, B. (2008) *Followership*. Boston, Mass.: Harvard Business School Press.
- Keohane, R. (1988) *International Institutions: Two Approaches*. International Studies Quarterly, 32 (4).
- Keohane, R. (1984) *After hegemony*. Princeton, N.J.: Princeton University Press.
- Keohane, R. (1989) *Neoliberal Institutionalism: A Perspective on World Politics*. In: Keohane, R. eds. (2013) *International Institutions and State Power: Essays in International Relations Theory*. 1st ed. London: Westview Press.
- Keohane, R. and Nye, J. (1977) *Power and interdependence*. Boston: Little, Brown.
- Kindleberger, C. (1973) *The world in depression, 1929-1939*. Berkeley: University of California Press.
- Krasner, S. (1976) *State power and the structure of international trade*. World Politics, 28 (3).
- Krasner, S. (1982) *Structural causes and regime consequences: regimes as intervening variables*. International Organization, 36 (2).
- Lake, D. (1993) *Leadership, Hegemony, and International Economy: Naked Emperor or Tattered Monarch with Potential?*. International Studies Quarterly, 37 (4).
- Lewin, K., Lippitt, R. and White, R. (1939) *Patterns of aggressive behavior in experimentally created social climates*. Journal of Social Psychology, 10.
- Márquez, H. (2007) *Energy - South America: Mega Gas Pipeline Plans Held Up*. IPS Inter Press Service, [online] 2 august 2007. Available at: <http://www.ipsnews.net/2007/08/energy-south-america-mega-gas-pipeline-plans-held-up/> [Accessed: 4 may 2012].
- Norton Rose (2010) *Indonesian Energy Report*. [report] Norton Rose.
- Nye, J. (2008) *The powers to lead*. Oxford: Oxford University Press.
- Olson, M. (1965) *The logic of collective action*. Cambridge, Mass.: Harvard University Press.
- Peterson, M. (1988) *Managing the frozen south*. Berkeley: University of California Press.
- Puchala, D. and Hopkins, R. (1982) *International regimes: lessons from inductive analysis*. International Organization, 36 (2).
- Rittberger, V. and Zurn, M. (1991) *Regime Theory: Findings from the Study of East-West Regimes*. Cooperation and Conflict, 26 (4).
- Rowlands, I. (1992) *International regime formation: the politics of ozone layer depletion and global warming*. PhD. London School of Economics.
- Snidal, D. (1985) *The limits to hegemonic stability theory*. International Organization, 39 (4).
- Sovacool, B. (2010) *Exploring the Conditions for Cooperative Energy Governance: A Comparative Study of Two Asian Pipelines*. Asian Studies Review, 34 (December).
- Sovacool, B. (2010) *A critical stakeholder analysis of the Trans-ASEAN Gas Pipeline (TAGP) Network*. Land Use Policy, 27 (3).
- Stogdill, R. (1974) *Handbook of leadership*. New York [u.a.]: Free Press.
- Stogdill, R. (1948) *Personal factors associated with leadership: A survey of the literature*. Journal of Psychology, 25.

- O'keefe, B. (1984) 'The evolution of impressions in small working groups: Effects of construct differentiation'. In: Sypher, H. and Applegate, J. eds. (1984) *Communication by children and adults: Social cognitive and strategic processes*. 1st ed. Beverly Hills, CA: Sage.
- Taylor, P. (1978) *A Conceptual Typology of International Organization*. In: Taylor, P. and Groom, A. eds. (1978) *International Organization: A Conceptual Approach*. 1st ed. London: Frances Pinter.
- Taylor, T., Tony.Taylor@ihs.com (2013) RE:Farizal writing from Sciences Po, Paris. [email] Message to Farizal, R. (farizal.binmohdrazalli@sciences-po.org). Sent 23 May 2013.
- Vroom, V. and Yetton, P. (1973) *Leadership and decision-making*. Pittsburgh: University of Pittsburgh Press.
- Wertheim, P. (2006) Accord signed for Venezuela-Argentina gas line. [online] Available at: <http://www.ogj.com/articles/2006/01/accord-signed-for-venezuela-argentina-gas-line.html> [Accessed: 15 April 2012].
- Young, O.R. (1991) Political leadership and regime formation: on the development of institutions in international society. *International Organization*, 45 (3).
- Young, O.R. (1989) *International cooperation*. Ithaca: Cornell University Press.
- Young, O.R. (1982) Regime dynamics: the rise and fall of international regimes. *International Organization*, 36 (2).
- Young, O.R. (2012) Regime theory thirty years on: taking stock, moving forward. [online] Available at: <http://www.e-ir.info/2012/09/18/regime-theory-thirty-years-on-taking-stock-moving-forward/>. [Accessed: 11 May 2013].