



TOWARDS THE GEOPOLITICAL-ECONOMICS OF CONFLICT OVER RESOURCES: THE GATE VALVE THEORY



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ABSTRACT

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The aim of this paper is to present a theory that could give an account of the intersection between geography, politics and economics regarding resources. This theory assumes that “it is not only the actual source space or arterial space but also the informational constructs pertaining to the source space or arterial space that generate the gate valve effect on the global or secondary market of resources and their derivative products.” The gate valve effect is the dynamics of power exercised over the resource flow in the gate valve mechanisms whether spatial or informational. It is the resulting mechanism of control over resource flow. The geographic side of the theory pertains to the source location and arterial space defined by chokepoints where the resource passes or gets distributed. The economic side of the theory pertains to the informationally sensitive futures market of the resources. And the political side of the theory relates to the power-dynamics to control the source or arterial space or influence the market of the resource.

Contribution/ Originality: This study contributes to the existing literature of energy economics in a theory that combines geography, economics and politics as an analytical framework.

1. INTRODUCTION

Economics assumes that resources are scarce. Oil as a source of energy is not abundant considering that not all places in the world would yield such a resource inasmuch as such locational sources are limited. Since the geographic sources which yield this resource are scarce, such in abundance is aggravated by the method with which this resource courses its way into some geographic chokepoints for its distribution. But even if this resource surpasses the geographic difficulty from geographic source to their geographic delivery, the prices with which they are sold and bought are also informationally sensitive and such sensitivity could be aggravated by the conflict that could germinate from the geographic source or chokepoints.

Conflicts, however, flashpoint at some crucial hotspots on earth. The unique geographical arteries that conduit vital resources that states produce, transport or consume are prone to breed disagreements among competing states. Choucri and North (1972) acknowledged that “population differences, technological growth, differential access to resources, markets and influence yield to the dynamics of conflict and warfare.” Control of raw materials that are vital for industrialized nations and for the mechanization of warfare could influence the shift and

distribution of power among states (Morgenthau, 1978). But the production of materials or resources alone which states covet does not simply lead to conflict. While there are certain parameters which Choucri and North advanced in order to assess the tendency of states towards violent interaction in the face of population-resource-technology nexus, it is also the way they are distributed that sprout the possibility of international conflict. Suez Canal in 1956 and Shaat-al-Arab in 1980 are examples of arteries where conflicts among competing states precipitated.

Oil and gas pipelines that cross international borders, the mere fact of their existence and even plan of construction are also arteries that germinate conflict. The Qatar-Turkey gas pipeline, which Syrian president Bashar Al-Assad objects, is believed to be the rallying point of the United States to support the Arab spring movement in Syria. Russia keeps its grip on Georgia because of the Baku-Tbilisi-Ceyhan oil pipeline that runs from Baku, Azerbaijan to Tbilisi, Georgia and terminates at Ceyhan, Turkey. The Baku-Novorossiysk oil pipeline begins in Baku, traverses and loops over the conflict-ridden section of Chechnya, Russia and ends at Novorossiysk. It is for this reason that Russia had extinguished the desire of Chechnya to be independent.

1.1. The Theory

This paper then aims to present a theory to define the patterns of this politico-geographic situation where arterial locations in space become hotbeds of conflict among states. It is this paper's aim to present a theoretical framework or organizing principle that combines the nexus of geography, politics and economics (geopolitical economics) in order to explain the occurrence of power play on resources of vital importance to various peoples.

This theory can be called the Gate Valve theory. Its primary thesis is:

“It is not only the actual source space or arterial space but also the informational constructs pertaining to the source space or arterial space that generate the gate valve effect on the global or secondary market of resources and their derivative products. The power-dynamics over the control of the spatial or the informational gate valves is critical to the distribution of these resources and their derivatives.”

The gate valve effect is the dynamics of power exercised in the gate valve mechanisms whether spatial or informational over resource flow. It is the resulting mechanism of control over resource flow. Gate valves are means of physical or informational apparatus of control over the resource flow. Physical control would mean the use of apparatuses of organized force for control while informational control would mean the use of knowledge bits for control. Gate valves are geographically situated in source space or arterial space. Source space is the origin of the resource in a geographic location. Arterial space is a narrow choke point, channel or conduit of the resource situated in a geographic site. The informational gate valve is a market system that is information driven and information sensitive. The market can be global where prices of the resources are determined through international transactions and which prices become index for the secondary market. The secondary market is the domestic market where the resources are finally sold and bought by the consumer. Derivative products are processed subsidiaries, residuals, extracts or by-products of the resource. The theory can be reduced into the following hypotheses:

The higher the degree of disruption on the actual source space of the resource or its derivative, the higher the price volatility of the resource or its derivative in the global market. The higher the degree of disruption on the actual arterial space of the resource or its derivative, the higher the price volatility of the resource or its derivative in the global market. The more negative the expressivity of public information on the actual source space of the resource or its derivative, the higher the price volatility of the resource or its derivative in the global market. The more negative the expressivity of public information on the actual arterial space of the resource or its derivative, the higher the price volatility of the resource or its derivative in the global market. The higher the volatility of the prices of the resource or its derivative in the global market, the higher the volatility of its prices in the secondary or domestic market. The higher the volatility of prices and the greater the need and demand for the resource or its derivative, the higher the desire to control the spatial or informational gate valves. This results in the gate valve effect on the market of resources or their derivatives.

This theory asserts that it is not just the source of the resource that has the tendency to germinate conflict but it is also in the space where chokes of distribution where the conflict ripples through the market that affect its distribution. It is not just the source of the resource that commands the distribution of power but on the control of either the geographic valve or information- sensitive-market valve where power is shared or even monopolized. Here is where the gate valve effect comes in.

Picture a reservoir of water. Control or ownership of the reservoir of water could emanate right on top of the tank. But it does not rest there. The one who has control of the valve at the end of the long pipe also commands control over the resource. The one who turns the valve at the end of the pipe with which the people would be beholden to if he or she wishes to turn on the valve and let the water satisfy the need of the thirsty or not. At that moment, the one who controls the valve has control of the resource. Thus it is at the valve where conflict would arise and the exercise of power rests at the terminus where the valve is located. Fighting over the water or cooperating over the resource may not only be witnessed at the top of the tank where the resource is stocked but it is at the valve at the end of the pipe where cooperative or violent activity could emerge, unless somebody else blows up the tank and nobody gets any of the resource. But it does not end here again. If the water is sold and bought in the open market, the price of the existing inventory of contained resource could be affected because of the conflict that happens either on the reservoir or on the valve at the end of the pipe. The fact is, not everyone is there to personally experience the conflict arising at the reservoir or at the valve. If the resource is sold at a distant market, then the consumers have no way of witnessing the events unfolding at the source or at the valve. They would have to rely on information about the unfolding events which affect their buying behavior. If conflict arises on top of the tank, corresponding effect could be witnessed for fear that the resource might be lost but conflict at the valve also may also sprout price spikes. At the end of the day, how the resource is distributed through the dynamics of price and volume of demand and supply is affected by the information one has if the consumer is not there to witness what is really happening at the source or at the valve. The market then, with its information that turns it on or off could dictate the way the resource gets distributed. This is another form of valve.

1.2. The Gate Valve Effect

The gate valve exists in any or a combination of either the geographic or informational gate valve. Just like a gate valve on a pipeline, which functions to control the flow of fluid on a pipe, gate valves, whether geographic or informational, also work to control the transit of resources through spatial channels or through prices in the market. Gate valves do not close and open by themselves. Another entity manipulates to control the flow of liquid. An entity which exercises control to turn the valve in order to open or close it exercises power over the flow of the liquid on the pipe. An entity also that has control over the gate valves also has control over the transit or distribution of resources. A person can physically twist and turn the pipe to control the liquid flow. With that, the person is geographically situated on the location of the gate valve in order to manipulate it. But another person could also use information in order to command, persuade or influence the other person handling the wheel of the gate valve. This person need not be geographically situated but he or she uses information in order to manipulate the liquid flow. Thus there are also two types of gate valves which we are concerned about: geographical and informational.

Due to the sensitivity of the gate valves, they have the tendency to attract or precipitate conflicts or disputes for physical control or even control over what information about them is made available among those who would need them in order to execute their buying and selling in the market. Control over the geographic gate valves can start right at the source space where the resource is extracted or processed. The control can also be controlled at its transit which occurs at the arterial space. Geographic arteries are narrow chokepoints along the transit of resources.

The gate valve effect is the dynamics of power exercised in the gate valve mechanisms, whether spatial or informational, over resource flow. The dynamics of power can then be understood as to how power is exercised.

1.3. Power Dynamics

Power as viewed in this theory is not linear. It is not viewed within the framework of “A having power over B, if it influences B to do something.” A more linear view of power in political science is articulated by realists. Hans Morgenthau had thematized that states pursue their foreign policies in the dictum of “interest defined in power” (Morgenthau, 1978). States use power to preserve the power they already have, acquire more power as they desire, or demonstrate power as a means to prop up the power they already possess. This is power conceptualized in Robert Dahl’s thesis that power is all about control. He defines power as “A’s capacity to bring about outcomes favorable to A’s preference or desires.” It involves a semblance of causation or outcome. A has power if A can bring about favorable response so as to bring about results intended by A (Dahl, 1991). By control, Dahl distinguishes four types: a) command where control is manifested by directives coupled with threat or reward; b) reciprocity where outcomes are produced through assurances of mutual action and benefit; c) manipulated field control where the field is manipulated in order to produce an outcome; and d) spontaneous manipulated field control where an actor does not command or even manipulate the field but executes an act that would induce others to act favorably as to his or her desire (Davies and Lewis, 1971). Morgenthau summed up power as a concept expressed in man’s control over the mind and actions of other men (Morgenthau, 1978). For this he distinguished power from influence, force, and legitimate forms of power.

Thus A is able, or wants to be able, to control certain actions of B through influencing B’s mind.

Whatever the material objectives of a foreign policy, such as the acquisition of sources of raw materials, the control of sea lanes, or territorial changes, they always entail control of the actions of others through influence over their minds (Morgenthau, 1978).

International politics is the enduring struggle for power. “The strong will do what it wants to do and the weak will follow” is the realists’ mantra. The linear nature of power is exercised by the strong over the weak. The strong will do what it wishes done over the weak or what it desires the weak done. So much for the curse that the weak nations would have, nations would rationally pursue power in order to make itself strong so it would not be the footstool of the strong.

The realists’ assumptions that states are the main players in international politics because they have the means of military capability to exercise power and with it is the idea that “high politics” or military issues are the main issues of states are also assumed by neo-realists only with the objection that states possess the same strength whichever states it is dealing with. The power that states possess is not dependent upon the organizing principle which it is subject to. The neo-realists suggest that the power that states possess is dependent upon the structure which it is hierarchically organized in.

Kenneth Waltz argues that the structure is characterized by its ordering principle and the capability of units. Waltz tries to connect the system structure with the unit-level analysis. He contends that “structures affect units as units affect structures” (Waltz, 1990). Interacting units once juxtaposed with other interacting units would behave differently and would have different degrees of capability. Power, therefore, is dependent upon the structure of the system. Likewise, power is dependent upon the distribution of capability within the structures as the structure is dependent upon the ordering principle of the system.

The structure of a system changes with changes in the distribution of capabilities across the system’s units. And changes in structure would change expectations about how the units of the system will behave and about the outcomes their interactions will produce (Waltz, 1979).

With the incorporation of the concept of system structure, power will depend on how the unit is situated and ordered in the system. Power will not be universally constant as innate in the unit but what the unit can do and

how much power it can dispense would be dependent on how the structure is ordered or even by what unit it is structure with.

Power is estimated by comparing the capabilities of a number of units. Although capabilities are attributes of units, the distribution of capabilities is not a unit attribute but a system-wide concept (Waltz, 1979).

The neo-realists do not depart from the idea that the strong will do what it wants to do, only that, the strong may be constrained to do what it wishes done depending on the structure and how it is structured in it. But the interdependencists oppose all the assumptions of the realists or neo-realists altogether as they posit that international politics or world politics, as they call it, is not an arena of states alone. They contend that states do not have the monopoly of power for other non-state units are players in the international system also. Consequently, various issues and not just military that high politics characterize are areas which players in world politics can deal with.

Robert Keohane and Joseph Nye assume that there are two types of interdependence: sensitivity and vulnerability. Sensitivity interdependence suggests “how quickly do changes in one country bring about costly changes in another” while vulnerability interdependence can be defined as “an actor’s liability to suffer costs imposed by external events even after policies have been altered” (Keohane and Nye, 1977). Since states suffer from costly changes either before policies are imposed or changed (sensitive) or continue to suffer cost even after policy changes (vulnerable), then power as interdependence posits would redound to entities in the international system pursuing outcomes despite costs.

Power can be thought of as the ability of an actor to get others to do something they otherwise would not do (and at an acceptable cost to the actor). Power can be conceived in terms of control over outcomes (Keohane and Nye, 1977).

It is not a matter then of which wins over conflicts, which states would emerge victorious in confrontation with other non-state players, but it is a matter of how costly the conflict has been even among the victors. Power, then, even for interdependencists is linear if viewed on the outcome that it is supposed to achieve.

Interdependence, however, opened up a new and different way of looking at international affairs by expanding the players in world politics, not just states, and increasing the issues that these players engage themselves with. This would include economics which realists consider as low politics.

In terms of economics, another group of theorists emerged looking at the relations of economically powerful and the economically dependent states within the North-South divide. The dependency theory assumes that the lack of development in poor countries is a factor of asymmetrical relations between them and the developed countries which exercise undue advantage on them. Characterized by three schools and hanging on to their debates, the liberal reformers of Paul Presbisch, the Marxists of Andre Gunder Frank and the world-system of Immanuel Wallerstein all hark on three core assumptions: 1) that dependency characterizes an international system divided between dominant-dependent (liberal reformer, Marxist), center-periphery (world-system) or metropolitan-satellite states where the dominant-center-metropolitan states are rich, industrialized states while the dependent-periphery-satellite states are the poor, underdeveloped states, 2) that external forces which include multinational corporations, international commodity markets, foreign assistance, communications, and any other means by which the advanced industrialized countries can represent their economic interests subject the dependent-peripheral-satellite states into domination, 3) that the dependency relations between the dominant-dependent (liberal reformer, Marxist), center-periphery (world-system) or metropolitan-satellite states is an ongoing interaction that reinforce unequal patterns meant to internationalize capitalism (Ferraro, 2008).

Power then is still linear that originates from the industrialized to economically dominate the underdeveloped states and in the pursuit of internationalizing capitalism, only one purpose is served and that is to enrich the already rich states.

Power that is viewed in this paper departs from the linear character of these theories. Power can be conceived as *a) power empowers, b) power is multidimensional, c) power radiates both of its intended and unintended outcomes, d) power is not meant only to control but to react and counter-react.*

Viewed along these terms, the use of power by the powerful to control the less powerful makes the less powerful powerless against the powerful. "The strong will do what it wishes done over the weak and the weak will simply do the strong's wishes." But power, though dispensed in various modes will empower the weak or the one with less power to do something which the strong may not have foreseen. Power then comes in different directions. It does not only come one way from the strong to the weak but the weak can also be empowered to react and react further in answer to the strong. That way power which the strong intends with its designed outcomes might enable the less powerful to react and produce consequences which have not been intended by the entity that uses power. The strong then will do what it wants to do but the weak will also do what it wishes. The strong could get what it wants but the strong could harbour other costly effects by the weak which the strong may not have calculated.

Thus in regard to resources either on the source space or arterial space, any entity would wish to dominate and use its might to geographically or spatially control the resources but it would attract the reaction of other entities and in the course of control, costly effects ensue.

1.4. Information as Valve

Aside from considering politics as a strategy of control, politics is also viewed by Karl Deutsch as the capability to steer a group or society into achieving social goals. The political system is a communication system with processes and mechanisms for the acquisition, collection, transmission, selection and storage of information makes for a self-regulating, self-controlling system (Davies and Lewis, 1971). These mechanisms allow or encourage habit-forming activities that provide for the cohesion of the society. This is information contained in the organization that makes it capable of being steered.

Information, on the other hand, can be gatekept and agenda-set. This is information available in public which could mold public opinion. Gatekeeping is a function of the media organization where information is filtered as it goes through gathering, writing, editing publishing or broadcasting the information. Journalists and editors select from a wide range of stories and skew the information into a slant capable of generating more views. The selection is systemically biased, driven by news norms or audience interest (Soroka, 2012).

The agenda-setting function of the media suggests that aside from their filtering function, the information that they transmit is able to provide the images in our heads.

The media set the public agenda, in the sense that they may not exactly tell you what to think, but they may tell you what to think about (McCombs and Shaw, 1972)

While gatekeeping gives the organizational function of filtering information, agenda-setting provides the effect of the filtering.

The international market, on the other hand, does not work like the usual farmer's market, where the consumers could even converse with the farmer that produced the farm goods. The buyer does not just have the luxury of examining the goods he is intending to buy but also ask the farmer-seller how he produced the goods and discern the products quality even the difficulty on how the farmer was able to produce the goods. The international market with sellers and buyers exchanging the price and volume of the goods they intend to exchange, transact via third parties and brokers who know nothing of how the goods are produced and even the condition on how they are distributed. The buyers do not see the goods or even examine them. They do not have firsthand knowledge of how the goods were produced and the condition on how they were transported. This market has the semblance of securities market which Efficient Market Theory could explain.

An 'efficient' market is defined as a market where there are large numbers of rational, profit-maximizers actively competing, with each trying to predict future market values of individual

securities, and where important current information is almost freely available to all participants. In an efficient market, competition among the many intelligent participants leads to a situation where, at any point in time, actual prices of individual securities already reflect the effects of information based both on events that have already occurred and on events which, as of now, the market expects to take place in the future. In other words, in an efficient market at any point in time the actual price of a security will be a good estimate of its intrinsic value (Fama, 1965).

Fama argues that no single market player can outperform the market and achieve profit all the time since the market operates by virtue of information that everyone would have.

Information or *news* in the EMH is defined as anything that may affect prices that is unknowable in the present and thus appears randomly in the future (Fama, 1965).

While this market operates like that of the securities market, the market of homogenous goods in a competitive market is also defined by the significant number of information needed for the choice of the commodity. A competitive market is marked with competition if similar or slightly dissimilar competing commodities in the market have more or less equal probabilities of getting selected. Competition in a competitive market is defined as the condition where homogenous or slightly heterogeneous products in competition have more or less equal chances of getting chosen if not bought. Competition occurs with information as a vital component together with time and price (Gabriel, 2014).

Thus the currency for which players in the international market would hold would be information available among institution in terms of the amount of supply and the volume of demand and even projections of these conditions in the future. Public information from the media, on the other hand, supply not only these information but also the current condition and events evolving in the source of even in the arteries where the supply would route. While the supply and demand may originate from state institutions, international organizations or rating firms, the media provides the on-the-dot information regarding how these goods find their efficient, if not arduous, way into the market.

Information then could be processed to generate its expressivity. Expressivity can be defined as the measure of positiveness, neutralness or negativeness of the reportage of the media on certain events, creating media events. Media-events are occurrences processed by the media through gathering information them, writing them into preferred journalistic format, editing them to conform to their own media style and disseminating them into specific media-product-information. Since there are different types of media, media-events can be newspaper-article-events, television-documentary-events or radio-news events (Gabriel, 2012).

Expressivity then can be measured through its rating which is the average of the net difference between the percentage of positively coded media-product-information $P+$ and the percentage of the neutrally coded media-product-information P_0 and the net difference of the of the percentage of neutrally coded media-product-information and the percentage of the negatively coded media-product-information about the media-events (Gabriel, 2013).

2. CONCLUSION

Conflicts then could arise not just in the source space where the resources transacted in the international market are produced but even in the arterial space where the resources are transported along narrow choke points. Control of these spaces could precipitate conflict in order to control the flow or resources for who controls these “gate valves” could have the means to command its flow. But the control as a means to power is not linear. It could result in reactions and counter-reactions that could backlash on the very entity that would seek its control. Seizing the valve could have momentarily given the entity the victory but it could have vigorously rippled on the prices and engendered to him too much cost. The price backlash could be the result of information which could generate negative expressivity among the consumers of information who could also be players in the market. The unintended

effect of such conflict results in fear that would skyrocket the prices in the international market and create a glut in the demand. Information then as another gate valve would either create panic or calm down the market as to the gatekeepers and agenda-setters of the information.

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