COMPETITIVE STRATEGIES IN THE CONTEXT OF THE OIL INDUSTRY

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ABSTRACT

Formally or informally, rationally or intuitively, oil companies are forced to adopt advance practices in order to compete equally with other companies on the market. The pressure to remain competitive in an environment with great price variation has stimulated companies' in the oil industry to ignore the conventional methods in order to explore new ways to overcome its rivals on the market. Competitive strategies are widely used throughout entire oil industry and whether one will be successful depends on the economic value one is ready to produce to gain competitive edge over its rivals. The effect of competitive strategies is relatively different for each industry and its essence is often visible in the way how managers cope with the uprising trends on the market. Thus understanding the basic structure of the oil industry and its revolving nature is de facto a fundamental step in formulating the competitive strategy.

The aim of this paper is to discuss the importance of competitive strategies in the context of the oil industry, by identifying those strategies which are crucial for oil companies' success. The primary part of the research is aimed toward reviewing the theoretical framework of the concept of strategy. The secondary part is focused on importance of competitive strategies for the oil industry and on identifying the type of competitive strategies oil companies need to apply specifically in the context of the oil industry by identifying the potential sources of competitive advantage. According to the author's findings, competitive strategies are in fact an essential component of modern oil business and without clear strategic context oil companies cannot create a value to sustain its market power.

KEYWORDS
COMPETITION; STRATEGY; COMPETITIVE STRATEGIES; COMPETITIVE ADVANTAGE; OIL INDUSTRY

JEL CLASSIFICATION
M10; Q40;

1. INTRODUCTION

Competition is the fundamental challenge of business strategy and a key determinant for the successful operation of any modern company. The subject of competition is closely incorporated in the work of history's most renowned scientists such as Adam Smith, Karl Marx, David Ricardo and Edward Chamberlin.

Nowadays, there is no industry in the world that imposes more diversified set of human, mechanical, and technological capacities than the oil industry. What is symptomatic though is that the oil industry is most often portrayed as monolithic, where in fact there is an evident variation in terms of size and roles of companies. Crude oil is the primary resource for the successful functioning of the world. It does not belong to the group of renewable energy sources hence it is very difficult to find. Thus access to oil does not only affect governments and countries around the world, but is also a crucial element for companies itself, because it defines the basis for companies' production activities. The oil industry is grounded on the principle of competition. Competition is one of the major drivers of economic and social development in countries around the world. From ancient times, when competition played a key role in a foreign trade, to this very day, competition has been central to the functioning of global oil markets. Strong competition on the market – driven by the entry of new oil companies – and the impact of the macroeconomic factors – the variability of supply and demand and oil price fluctuations – are just some of the elements that makes the oil industry so uncertain and vulnerable to change. Thus oil companies are forced to constantly reinforce its competitive strategies in terms of securing strong competitive position on the market. The authentic character of competitive strategies is in fact the one that provides value to consumers. However, value alone is not enough for oil companies to maintain its leadership position on the market. This process is time consuming and entails not only a huge investment but also a shift in upper management priorities toward creating a more differentiated offer within the value chain. Essentially, this shift has emerged as a result of the recent projections that oil demand will continue to grow and that high oil prices will have long term impact on the overall marginal costs in terms of supply. These calculations in the oil industry are often treated as speculative due to the dynamic nature of the oil business itself.

It is necessary for oil companies to strategically differentiate those areas which are important for their economic growth. Hence, the clearer the trajectory of future competitive activities, the easier is to face upcoming challenges in real business scenario. The pressure to be competitive in an environment where there is great price variation has forced companies in the oil industry to find new ways to overcome its market rivals. The emphasized focus in the upward segment and the growth of oil reserves are just some of the elements that encourage greater competitiveness on the market. The impact of competition on oil businesses is not universal and depends on the industry itself and the legislative policy of the country. Therefore, the aim of this research paper is to identify specific strategies which will be based on the industry itself and in accordance with long-term policies of oil companies.

2. AN OVERVIEW OF THE CONCEPT OF STRATEGY

The theoretical concept of strategy is under a constant revision by the global academic community. Within the strategy and management research, no single concept has ever been prone to change as strategies are in the business. Therefore, the debate concerning the concept of strategy is quite versatile and includes rather different perception regarding this phenomenon. Forming guide lines for choosing the right strategic decisions to ensure company's competitiveness is one of the most difficult tasks in the strategic management process. When it comes to the essence of this concept, the scientific development of strategy has always been followed by different interpretations. Through a generic review of the most influential studies in the field of strategy, we have presented only those which are considered pivotal when it comes to the competitive nature of this concept. First, we have review strategy from the aspect of competition. Second, we have evaluated strategy from the context of the industry structure. Third, we have review strategy from the aspect of competitive advantage.

2.1 STRATEGY AS A MEANS FOR CONFRONTING COMPETITION

To remain relevant in today's business world, it is necessary for companies to have a clear goal and strategy that will strengthen their position in relation to other rivals on the market (Chandler, 1962). Regardless of the industry, competition is always a motivational factor for companies to advance its innovations, diversity of supply, and competitive prices for its consumers. Competition stimulates strategic action and enables clear distinction between leading companies (Ansoff, 1965). If managers do not understand the competitive landscape of their market, they cannot successfully compete in a given industry.

Therefore, the importance of strategy is primarily driven by market competition, and without market competition there is no need for strategy (Rugman and Verbeke, 1994). Thus competition and strategy are interrelated. Strategy stems from competition and the more concentrated a particular market is the more difficult is for companies' to differentiate its product attributes. According to Thompson (1982) strategy can affect both competition and market in a positive manner and stimulate further economic growth. High competition on the market reduces companies' odds to generate profit thus pushing companies to maintain its sustainability by increasing operational performance (Schmidt, 1997). According to Chen and Miller (2013) companies' interaction is a corn stone of strategy and competition and its intensity depends on the market concentration and resource profile. Hence strategy is a set of competitive activities which includes actions and consequences as a result of the interaction between market rivals (Miller and Chen, 1996). In essence, strategy lays the foundation of long-term functioning through the effective use of techniques to overcome market competition (McGahan, 1999). If strategy is not based on competition and the external environment, it will not produce the desired effect in the context of creating a competitive edge.

2.2 STRATEGY AS MEANS OF COMPLYING WITH INDUSTRY STRUCTURE

There is no universal strategy that will match the shape and structure of each industry. When defining a competitive strategy, companies must always take into account the structure of the industry and its external environment (Porter, 1980). Strategy, as the highest business act of a company, is something that is created internally within the company itself and that can be changed overtime, whereas the structure of industry is created within the system of the external environment. Industry structure is a key determinant for a company's successful performance. In essence, the structure of the industry must always be aligned with the driving forces of competition on the market. A more profound overview of the industry structure might disclose a detailed image of the industry's profitability by generating a suitable framework for predicting changes in industry's competition (McGahan and Porter, 1997). As the structure of the industry changes, companies are forced to change and adjust their strategies because their profitability is solely determined by the profitability of the industry itself (Raza *et al*., 2011).

According Roure and Keeley (1989) it is company's management, who chooses the right industry and strategy whereas structure of the industry can indirectly influence strategy as well. Depending on its complexity, a particular industry may in fact be a main driver or a repressor of company's operating processes. For instance, the crude oil industry structure has complex regulations regarding new competition on the market due to high entry barriers. Therefore, managers tend to stick with the industry type they are most familiar with by inheriting specific industry characteristics and choosing strategies to utilize advantage of those characteristics. Once managers evaluate the profile of competing companies, they begin to identify an appropriate strategic position through which they will build a competitive advantage (Kim and Mauborgne, 2009). Based on the applied competitive strategy, companies adjust all activities within the value chain by defining its targets and budget.

2.3 STRATEGY AS A MEANS FOR CREATING COMPETITIVE ADVANTAGE

One of the most eminent strategy scholars in the world, Michael Porter, has differently examined this conception and its applicable nature. According to Porter (1980) competitive strategies reflect companies' differentiating characteristics through the selection of different actions aimed toward realization of a unique combination of values. In a nutshell, companies can improve its business operations by either applying the low cost or differentiation strategy. Porter (1980) emphasized that every industry has a distinctive structure, which actually shapes the character of the competitive interaction that develops among companies over time. Through adequate implementation of competitive strategies, certain companies can more easily define their position relative to the competition, which essentially leads to the creation of sustainable competitive advantage (Pisano and Hitt, 2012).

Competitive advantage is acquired when the company possesses unique attributes that will enable to outperform its competitors (Wang, 2014). In other words, competitive advantage reflects the difference between the values created by the company versus value created by competitors. A company with a competitive advantage is able to create higher economic value for its shareholders, customers, and suppliers than its competitors (Porter, 1987). As concluded by Hunt (2000), a company's superior financial performance can solely be achieved by sustaining a strong competitive advantage on the market. However, the company strives to maintain its competitive advantage through continual innovation in production processes, product characteristics and trade methods.

Overall, competitive advantage is the basic principle of competitive strategies and its only relevant driver of generating above average profitability (Porter, 1991). To succeed in attaining its goals, companies must perform better than its rivals and identify a competitive advantage that distinguishes the business from its competitors. In order to show the difference between companies, Barney (1991) studied the relationship between company's internal resources and sustained competitive advantage, based on four empirical indicators: value, rareness, imitability and substitutability. These indicators reveal how heterogonous and immobile companies' resources are and to what extent they are useful for creating sustainable competitive advantage. As other scholars confirmed, it is more effective when companies use its internal resource base to overcome external opportunities and challenges (Wernerfelt, 1984; Prahalad and Hamel; 1990). Thus companies will be able to better understand their strengths in terms of allocation of resources by using its internal capacity as a competitive advantage.

3. THE IMPORTANCE OF COMPETITIVE STRATEGIES FOR THE OIL INDUSTRY

The importance of competitive strategies for the oil industry is caused by the fact that oil companies operate in an environment of deterministic chaos hence it has become necessary to adapt to challenges produced by the environment. Crude oil is a homogenous product and as such differs in quality and price. In order to generate bigger income, oil companies need to distinguish their products and services different than the competition. Hence competitive strategies can assist oil companies to better comprehend and analyze the competitive environment by identifying new areas for competitive growth. The structure of the crude oil market consists of three leading segments: upstream (exploration and production); midstream (transportation and storage); and downstream (refining, distribution and marketing).

From the value chain perspective, there are a number of oil companies that participate only in one segment (upstream) while there are integrated oil companies which are involved within the entire value chain operations (upstream, midstream, downstream) of the business. In that regard, the competitive strategies in the oil industry, having in mind the structure of the industry itself, are more related with those operational activities which consist the oil industry value chain. The intensity of competitive activities depends on the relevance of the segment and how attractive is for oil companies. Highly profitable oil companies are precisely those who know how to look ahead and identify key areas for building and sustaining competitive advantage.

3.1 TYPES OF COMPETITIVE STRATEGIES IN THE OIL INDUSTRY

There are number of competitive strategies that are characteristic for the oil industry and which oil companies use them as a basis for creating competitive advantage. An important element in the formulation of competitive strategies is of course the structure of the industry and the specific segments that affect the profitability of the industry itself. According to the study performed by Singh (2010) there are two types of strategies which are common for the oil industry. The non-differentiating strategies - which are the most common industry wide strategies – and differentiating strategies – which are only applicable for certain oil companies.

Table 1: Competitive strategies in the oil industry

1. Non-differentiating	**2. Differentiating**
Portfolio management	*Asset based differentiation*
Operational efficiency	*Enhanced oil recovery*
Financial management	*Development of hard-to-produce reserves*
Sustainability	*Evolved sustainability strategies*

Source: Singh (2010)

3.1.1 Non-differentiating strategies in the oil industry

3.1.1.1 *Portfolio management*

The *Portfolio management* strategies refer to the balanced portfolio of assets related to the diversity of geological and geographical risks. Each successful oil company evaluates the risk of its assets so it can effectively optimize the overall performance of their property portfolio. Within the oil industry, the essence of the portfolio management strategy lies within the diversified business unit which encompasses the portfolio of assets and projects and portfolio of technology and competences (Skaf, 1999). Hence it is important to emphasize that the production of oil reserves is what actually characterizes a particular region and what makes it competitive. Managing oil reserves is a complex process and requires knowledge and advanced geological expertise. There are a number of geological sites that provide an appropriate combination of reserve capacity, which manifest the equilibrium and the duration of the return on investment. Given that the oil industry managing economy is slowly beginning to shift its focus – from cost reduction to adopting new type of asset management practices – portfolio optimization is another effective way to analyze and enhance the overall value of assets (Adams *et al*., 2001).

3.1.1.2 Operational efficiency

The *Operational efficiency* strategies are closely related to implementing a cost effective strategies and cost coordination in terms of finding new oil fields and maintaining production levels by controlling operating costs. In practice, operational efficiency measures the generated profit as a function of operating cost. The higher the operational efficiency, the more profitable a company or an investment is. Operational efficiency strategies allow oil companies to prove that they are capable of managing their assets in a way that is reliable, sustainable and profitable. Key activities that stimulate the operational efficiency of oil companies are related to adequate interpretation of seismic data, dynamic management of oil reservoirs by extending their lifespan, as well as effective production optimization by consolidating operational databases. Operational efficiency allows oil companies to save much of their operating profit. Given that in the last decade, the cost of extracting oil has rose significantly has put even more pressure on how to remain profitable in a situation when oil prices are falling and costs are rising (Eller *et al.*, 2011). Therefore, it is necessary to establish a balance between optimizing existing assets and developing new assets. If oil companies fail to improve the level of operational efficiency and economy, they can have a negative effect on future long-term growth.

3.1.1.3 Financial management

The *Financial management* strategies include the financial flexibility achieved by maximizing revenues and cash flows while controlling costs, sustainable capital expenditures, business growth and high shareholder return, expressed in dividends and repurchasing stocks. It is important to note that the amount of revenue and net profit of oil companies is primarily conditioned by global prices of consumer goods. Oil corporations, on the other hand, are forced to postpone further exploration and extraction when oil prices fall due to weak demand or overproduction, in order to avoid negative cash inflows (Agostinho and Weijermars, 2017). These variables are constantly fluctuating and are mainly drive by factors whose nature is uncontrollable, such as global supply and demand, political stability, market forces and government market regulations. What determines the level of future investments in the oil industry is mainly conditioned by the future expected profitability. Since profitability and production are highly correlated, the investment outlook is also improving due to a higher oil prices. Over the past year, investments within the upstream segment has declined significantly whereas the same trend is expected to continue in 2021, demand for oil is expected to increase in the near future. Reduced investments and supply could cause market volatility and rising oil prices, which could further jeopardize energy stability and international politics.

3.1.1.4 Sustainability

The *Sustainability* strategies support the paradigm associated with corporate social responsibility. In that context, some of the corporate social responsibility strategies in the oil industry include the following elements: a) Employee strategies which are related with the quality of life, safety and diversity; b) Climate change strategies which are aimed at reducing the greenhouse gas emissions carbon storage and improving process energy efficiency; c) Environmental strategies whose goal is replace the fossil fuels with different sources of renewable energy thus reducing the impact on air, water, and soil quality. Key principles for environmental sustainability are most often associated with maintaining a healthy natural environment by increasing awareness for more responsible environmental behavior (Anis and Siddiqui, 2015). In order to do so, it is vital to design more advanced models of oil production and consumption and a full transition toward green economy in order to sustain a clean energy with a decreased level of carbon oxide thus mitigating climate change.

3.1.2 Differentiating strategies in the oil industry

3.1.2.1 Asset based differentiation

The *Asset based differentiation* strategy is widely used in the oil industry. It is an essential element of structural empiricism due to the fact that oil companies are forced to differentiate their products in order to avoid destructive competition. Differentiation emphasizes the authenticity of the product while authenticity is the basis for creating competitive advantage. The number of crude oil grades traded on the international market has increased significantly in recent years due to the strong desire to differ sources. Although the prices of these different grades move along on the market, it is important to emphasize two different characteristics (Bacon and Tordo, 2005). First, the price differentials among different crude oils are quite large. The price of crude oil (wholesale and retail) is not the same everywhere and it differs primarily in terms of price and quality. The higher the quality, the higher the price. Second, the size of the differentials between given grades appears to increase along with the rise of the general price of crude oil. In addition, oil companies can differentiate their products based on physical attributes, such as innovation, consistency, durability and reliability. This type of differentiation is more present in the downward segment, especially within the gasoline market, where consumers can make a clear distinction when choosing the right retailer.

3.1.2.2 Enhanced oil recovery

The *Enhanced oil recovery* strategy is equally important for creating a distinctive position in the oil industry. The amount of crude oil concentrated in a particular area is always uncertain. In pursuing fossil and non – conventional energy sources, oil companies are obliged to simultaneously utilize as much oil as possible from the existing energy sources. By effectively applying this strategy, oil companies can identify themselves as leaders in technology by stimulating production from mature oil fields. But what is important for oil companies is certainly the percentage of oil that can be recovered (produced). Adequate application of the enhanced oil recovery method can result in 30% to 60% more oil than the estimated tank volume, compared to 20% and 40% when using primary or secondary techniques. The process of crude oil recovery is influenced either by the producers of crude oil or as a reaction of nature itself. Recent improvements in technology and the current economic climate indicate that the future growth of the enhanced oil recovery will depend on the degree of innovation in the drilling segment, the cost of crude oil, including capital and human resources, which are essential to the success of enhanced oil recovery strategy.

3.1.2.3 Development of hard-to-produce reserves

The strategy of *Developing – hard – to – produce reserves* is one of the most challenging strategies oil companies face today. Large conventional fields are gradually being emptied and entering a phase of decline. As the rate of oil reserves decreases, the world oil demand increases. These events are forcing oil companies to start developing more complex fields which impose the application of more advanced technology for the production of hydrocarbons and refining. The process of developing hard renewable assets includes the following characteristics: low oil recovery factors in a situation where conventional technology is used for the development of oil fields; high financial costs for new labor force; high reservoir temperature (1000 degrees Celsius); reserves that can be located in a surface deeper than 4 km; presence of high viscosity oil in oil basins; and the need to use non-traditional technologies with specially designed equipment. Many of the reserves that are extracted from unconventional sources belong to the group of hard-to-produce reserves (bituminous oil, shale oil, gas hydrate etc.). Through this strategy, oil companies actually demonstrate their distinctive position on the market by consciously focus on the exploration of unconventional sources which are crucial for the global oil industry.

3.1.2.4 Evolved sustainability

The *Evolved sustainability* strategy represents the sustainability of human existence through the careful balance of economic, social and environmental capital. The main goal of this strategy is to meet the oil needs of the global society at moderate cost, safely, and with minimal impact on the environment, until adequate alternative energy sources are available. In past years, oil companies have integrated sustainability as an important segment of their governance policies and continue to create programs based on the principles of ethics, human health and safety. Hence it is essential for oil companies to implement a change in the overall management paradigm, which in turn indicates the need for systemic solutions to the problem of sustainability. On this way, oil companies will change the current image they project as conglomerates, concerned only with revenue growth and profits, while ignoring the importance of the concept of ecological and sustainable development.

3.2 SOURCES OF COMPETITIVE ADVANTAGE IN THE OIL INDUSTRY

Building a competitive advantage within the commodity industry such as the crude oil is rather a complex task for managers worldwide. The global oil industry is composed of a set of key parameters within which oil companies can build a competitive advantage. The relevance of these parameters solely depends on those specific areas that are considered as a leading driver of long term profitability. Competitive advantage must be something sustainable, something that will enable oil companies to survive on a long run. How oil companies will position within the value chain is crucial when building a competitive advantage. Identifying the sources of competitive advantage in the oil industry is extremely important for both scientists and practitioners. Thus there are three crucial areas where oil companies can create sustainable competitive advantage: technology and innovation; costs and production growth; alternative energy sources.

3.2.1 Technology and innovation

Technology is one of the key drivers of competitive advantage in the oil industry. The reason why the importance of technology in the energy world is increasingly emphasized is primarily due to the growing deregulation of the market, globalization and rapid technological processes. In the oil industry, technology is not only a key factor in differentiation, but it also improves the economy of business performance. Hence competitive companies in the oil industry define access to technology itself as a source of competitive advantage. The more effective the technology of an oil company, the greater its competitive advantage. However, the process of adapting to new technology is considered risky because of the high cost and the variable final results. The financial return on technology investment can be huge, both for oil companies and for nation's energy security. Development and application of advanced technology is vital for today's oil industry especially in the context of discovery and development of oil resources. Oil tanks are covered with thick layer of stone, which further complicates the visibility of the quantity of deposits located underground. But advances in three-dimensional (3D) seismic studies have made it possible for oil companies to develop accurate models that measure the depth and size of underground capacities. New technology improves the economy for developing large offshore oil deposits. Drilling oil at great depths significantly enhances the complexity, costs, and potential risks of carrying out the entire process. Recent technological innovations have enabled oil companies to meet these challenges by introducing the horizontal method of drilling and hydraulic fracturing thus enabling oil companies to build competitive advantage by exploiting unconventional resources (shale oil) which many considered redundant in terms of profit. Rapid digitalization and automation of processes has changed the course of information technology in the oil industry enabling companies to manage large data and drive efficiency in order to decrease carbon emissions. As the energy industry reshapes, technology and innovation will be crucial for oil companies to meet demand with less impact on the environment.

3.2.2 Costs and production growth

In the oil industry, each company who manages to extract a sufficient amount of oil reserves while maintaining low operating costs is considered to have competitive advantage. Nowadays, the cost reduction strategy is being used as core strategy by oil companies worldwide. This occurs as a consequence of the global economic recession which positions costs as pivotal for long-term sustainability. In order for oil companies to produce affordable oil products, they are obliged to carefully manage their costs within various projects, by optimizing their portfolio in a cost effective way. Oil companies can maintain a competitive edge over its rivals through sound investment flow and planned production which will be aligned with the global demand. When oil prices sharply declined as a consequence of COVID – 19 pandemics, increased production has actually proved contra productive because oil companies were unable to neither store it nor sell it at appropriate prices. When oil extraction costs rise, oil companies prefer higher crude oil prices in order to make profit. Otherwise, when extraction and production costs are rising and crude oil prices are declining, oil companies will lose money or struggle to break even. These unpredictable price shocks are always followed by excess supply and profit decline. In order to remain competitive, it is important for oil companies to cut costs in a way that will not harm its current production and will boost the rate of economic recovery.

3.2.3 Alternative energy sources

The future of the global energy industry lies within the alternative energy sources. They are vital for the future successful operation of the global economy. Although projections for oil reserves are increasing every year, it is the non-renewable capacity of crude oil that leads oil companies to invest in the development of renewable sources that are expected to be the main driving force of the new energy world. The use of alternative sources has a key role in operation of CO2 emissions that are released in large quantities in the atmosphere when using conventional fuels. Global practices in the energy industry indicate a growing trend of de-carbonization and complete transformation toward green energy economy. This means changing the strategic vision of oil companies by identifying new areas of competitive advantage. As they transit toward cleaner energy sources, oil companies are launching solar and wind projects through the special development of the state-of-the-art technology that is considered more profitable on the long run. Growing concerns about climate change makes the need for renewables even more relevant especially given the low tolerance of investors toward excessive carbon emissions. Even though, the return on oil companies' investments in alternative sources has not been satisfactory as that of oil and gas, it is necessary to maintain competitiveness in this segment due to its growing potential. In the energy sector, things are changing rapidly, and lagging behind competition also means losing market power.

4. CONCLUSION

Achieving the desired performance is one of the biggest preoccupations of managers in rapidly growing markets such as the oil industry. In attaining their goals, oil companies face a series of challenges that they need to overcome in order to keep up with the developed energy world. For oil companies, to be competitive means to be sustainable economically. In order to do so, a strong degree of competitive advantage is required for oil companies to generate profit. Therefore, it is necessary to change the generic approach to oil commercialization and emphasize the differential attributes of it.

The results of this research indicate that competition and competitive strategies have strong impact in the oil industry, which is evident throughout each stage of the value chain. Competitive strategies are the driving force of oil company's economic activities. They enable oil companies to grow and create sustainable value within different stages of the value chain. Implementation of advanced technology, cost management, and continuous innovation are the key areas for creating a distinctive market position. As a process, creating a competitive advantage in the oil industry is relatively hard, but maintaining it is even harder. That is why many oil companies fail to secure a long-term edge over its market rivals.

Given that new market trends are changing priorities in the energy sector, it is crucial for oil companies to change their focus on developing cleaner energy sources with renewable capacity. The new competitive challenge of oil companies will certainly be how to transform oil into energy. Thus development of alternative energy sources is the new competitive advantage in the oil industry. The fore coming transformation in the oil industry is expected to be slow, considering the large share of fossil fuels within the overall energy consumption. Nonetheless, the future of alternative energy sources is bright and its long-term implications are crucial in creating more competitive, healthier, and greener energy economy for nations.

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