

The Influence of Digital Literacy and Product Innovation on the Competitive Advantage of Modern Beverage Businesses

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ABSTRACT

This research explores the geopolitical dynamics of the Shanghai Cooperation Organization (SCO), paying particular attention to the slogan “Central Asia for Central Asians.” Although SCO officials espouse a message of sovereignty, non-interference, and regional ownership, the investigation reveals a rift between these norms and residual patterns of China and Russia. 1) Regarding the research methodology and materials, (broadly defined at the beginning of the paper by Kaplan as a primary concern of geopolitical dynamics—sources of power) the qualitative approach and analysis of policy documents help us understand how regional independence is used both as a tool of legitimacy by Central Asian states and as a means to maintain some semblance of stability (or lack thereof) by major powers aligned with their regional interests²) On the other hand, China uses it as a tool for economic integration through the Belt and Road Initiative, and Russia uses it to maintain its elite security and business networks. Therefore, this study fills a gap in the literature by investigating the differences between institutional rhetoric and power practices within regional organizations, as well as providing a deeper understanding of Central Asia's limited regional autonomy. The current findings also have implications for regional governance, suggesting that external dependence continues to be a determining factor in the region's long-term policy space and sovereignty.

Keywords: *SCO, Central Asia, Regional Sovereignty, China, Russia, Geopolitics*

INTRODUCTION

Statement on behalf of the European Union and ASEAN at the meeting Federica Mogherini: The New Great Game in Central Asia: Competition between great powers. The five member states, Ukraine, Kazakhstan, Uzbekistan, and parts of Kyrgyzstan, faced particular challenges after the dissolution of the Soviet Union, forcing them to define complex strategies for their actions, navigating the balance between the international system and internal sovereignty. The creation of the Shanghai Cooperation Organization (SCO) in 2001 was seen in some circles as an attempt to create a distinct regional institutional space to address security and economic issues in its own way, bordering on what is commonly referred to as the Shanghai Spirit.

The SCO and the greater Central Asian dynamics have also garnered attention from various angles by quite a few scholars. (2007), who argues, for example, that the SCO almost operates as a regime-security platform rather than as a trigger to deep regional cooperation. (2018) on similar lines states how Its commitment to sovereignty and non-interference, far from constraining state behavior, often looks closely to the preferences of authoritarians who seek to sustain internal stability. In a legal and institutional context, the article by Noora Naarajrvi (2012) demonstrates that the SCO deliberately avoids strong supranational mechanisms, which means that collective action is constrained. At the same time, Marlene Laruelle (2018) has identified the growing economic position of China in the region, particularly through the Belt and Road Initiative (BRI), while Alexander Cooley (2012) writes that Central Asian states are not pairwise passive but actively balance between competing external powers.

Individually, these studies offer some interesting bits of the puzzle, yet they usually tackle the Shanghai Cooperation Organization (SCO) from only one angle security, law, or with regard to external actors rather than combining at least two of these arenas. Remarkably, debate about the discrepancy between the SCO's official output and actual practices remains limited. Such a gap is all the more apparent in the slogan "Central Asia for Central Asians," which intimates regional independence but is rarely explored thoroughly.

The SCO, Yet, the reality spans shades of gray. It's not unusual for regional governments to be drawn towards authoritarian capitalism especially those that have a tendency to prioritize stability over political reform. This is transforming regional economies mostly through the Belt and Road Initiative which China has been aggressively pursuing through infrastructure projects for the last few years and Moscow still retains clout in security matters, especially through military cooperation and institutions such as the Collective Security Treaty Organization (CSTO).

This tension between rhetoric and reality raises an important question that has received little attention in existing scholarship: how much the SCO actually supports regional autonomy. Our study examines how the idea of "Central Asia for Central Asians" is represented in official SCO documents compared to how it manifests in the region through the strategic actions of China and Russia. By attempting to bridge the gap between discourse analysis and geopolitical reality, this study promises a more grounded understanding of what regionalism in Central Asia is. The paper is structured as follows. It begins with a brief review of the relevant literature on regionalism in Central Asia, followed by an overview of SCO policy documents to date. It then analyzes China's economic initiatives and Russia's security engagement in the case study and then makes some general remarks about the limitations of regional autonomy based on these.

LITERATURE REVIEW

Theoretical Framework and Variable Operationalization

A quantitative analysis of the literature on Shanghai Cooperation Organization (SCO) and discourse on "Central Asia for the Central Asians" will be presented based on the levels of a multi level analysis. Following Waltz (1979), the independent variables are generally grouped into three levels of analysis: (1) individual level (elite perception), (2) domestic level (political stability and economic interests), and (3) international system level (distribution of power).

Central Asian countries' current level of active participation in the SCO is a dependent variable-heartless. It can be measured through several indicators such as intensity of participation in high level meetings, that on the number of ratified security agreements, your volume of relationships, military and level of engagement in the SCO regional economic project.

Applying a foreign policy analysis approach (Hudson, 2005) A foreign policy analysis approach (Hudson, 2005) would enable measuring the elite perception variables using the frequency of official statements on terrorism threats, domestic anti-extremism measures and security budget distributions as proxies. Ambrosio (2008) shows that the in the discourse the "three evils" (terrorism, separatism, extremism) was positively associated with an increment in regional security cooperation. In a quantitative design, this correlation can be tested through regression analysis between the intensity of threat rhetoric and the level of security cooperation within the SCO.

Elite Perception and Geopolitical Dynamics

The growing US military presence in Central Asia post-2001, for example, has been correlatively associated with the burgeoning of SCO institutional activities (Systemic issues like the number of foreign military bases or level of foreign military aid could be different proxies for external pressure.) Quantitatively, there is a hypothesis to be tested here:

H1: There is a positive relationship between the level of Western military presence in Central Asia and intensity of security coordination within the SCO.

Furthermore, Ambrosio (2008) identified a pattern in which states with less access to democracy are more active in the SCO as a security mechanism. We can use democracy index data (Polity Score or Freedom House for instance) to statistically assess the link between the type of regime and the strength of participation in regional security cooperation. The study also suggested that despite a rise in institutional activity, the level of regional integration is still poor. This can be demonstrated by examining the number of official declarations in comparison with the number of tangible policies enforced, i.e. cross-border economic projects or regional market integration.

Political Stability and Economic Dependence

The two level game theory (Putnam, 1988) can be operationalized for testing the relationship between domestic factors and external behavior. Political stability indicators (like the World Bank's Political Stability Index World Governance Indicators) can be cross-categorized with SCO levels of involvement.

H2: Is that have low levels of political stability, participate more in regional securitisation of Asia via SCO.

For es with low level of economic dependence on China and Russia it can be inferred by means of data on trade, Remittances Cooley (2012) data also brings notice to significant Chinese investments made within Central Asia since mid 2000s. Additional hypotheses include:

H3: The higher the economic dependence on China, the greater the tendency for Central Asian states to support economic agendas in the SCO.

Allison (2008) terms this pattern as virtual regionalism, which can be tested quantitatively by a gap analysis of formal commitments (number of agreements) verses actual implementation (value of realized projects).

Power Distribution and Soft Balancing

According to structural realism (Waltz, 1979) material power distribution is a key variable. As such, internal dominance of the SCO might be assessed in terms of capability with measures like GDP, military spending, relative economic strength, etc. The While China is contributing the most economically to the organization on this theme, Russia is the leading in regional security aspects.

Freire (2018: 273) observes that the SCO has not transformed into a military alliance with a legal personality. On a quantitative level, this can be gauged through the presence of collective defence clauses or by the absence of any appreciable level of military integration that resembles what it exists in NATO.

H4 : The correlation between SCO's major powers' economic/military capabilities and Central Asian states' level of regional policy autonomy is negative.

An Examination of the vote distribution, finance of the organizations and its leadership within the structures of authority provides us with an index of the degree of internal power concentration.

Regional Identity and Regional Integration

With regard to a constructivist perspective of how we can measure regional identity quantitative indicators the frequency of regional solidarity narratives in official documents, the number of Central Asian country initiatives which don't smear great powers and the level of trade integration within the region would be possible metrics.

Pragmatic stability requirement in China's involvement in SCO has been shown by Zhao 2013, which can be confirmed quantitatively by following the trend in regional trade and investment which is still more about China than intra Central Asia integration.

H5: The extent of intra Central Asia integration is lower compared to that of bilateral integration with China and Russia.

We can employ regional trade data and Economic Integration Indices to see how much regional identity is actually operationalized at the economic practice.

METHODOLOGY

This study employs a robust quantitative framework that seeks to explore the gap between the institutional rhetoric of the Shanghai Cooperation Organization (SCO) and the empirical socio-political realities of Central Asia. We primarily collect a holistic mix of secondary data covering the period 2015–2025 sourced/aggregated from several leading global datasets such as the World Bank, UNCTAD, and others, as well as regional development index reports. The study focuses on the core Central Asian countries of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, along with the dominant influence of fluctuations between China and Russia. Ten annual observation modules for each country have been used to form a longitudinal dataset of 70 data points, achieved through careful merging of records with the help of unique country codes that ensure data consistency over the decade-long analysis.

The core of this methodology is the use of the Herfindahl-Hirschman Index (HHI) as the primary measure of concentration. The HHI was originally designed to estimate structural concentration (Hirschman, 1945) and has been applied here to determine the level of market dominance and influence of actors in the context of Central Asian trade. It measures product concentration by taking the square of each actor's share in total sales and summing them using the following formula:

$$HHI = \left(\frac{A+B}{100}\right)^2 + \left(\frac{C+E}{100}\right)^2 + \left(\frac{D}{100}\right)^2 + \left(\frac{F}{100}\right)^2 + \left(\frac{G+H}{100}\right)^2 + \left(\frac{I}{100}\right)^2$$

The HHI provides a key metric where high values close to 1 indicate “monopoly rhetoric” or near-total domination by a single actor, while low values close to 0 more closely resemble the “collaborative reality.” Thus, this calculation allows the authors to empirically verify whether a single actor wields all the power and whether regional cooperation is truly multilateral or whether it is instead essentially a bloc structure centered on a powerful hegemon.

By validating these macro-level findings and directly addressing detailed participant revisions deemed necessary by the lecturers, the study is enriched by primary perception data obtained through a structured survey. The survey focused on a precise sample of 292 participants (with a proportional mix of academic specialists, policymakers, and regional stakeholders) from five Central Asian countries. Source: The survey used a purposive sampling method to ensure specific insights into the SCO's institutional performance and regional security processes. Data were collected over a six-month period from August 2025 to January 2026 to provide a current picture of the impact of SCO policies in the region.

The next stage is the analysis stage, where this data is processed through descriptive statistics and a logistic regression model to measure the impact of regional integration on peace. This model aims to determine the exact relationship between external systemic pressures and variations in the level of internal coordination among member

states. By evaluating the HHI figures against 292 expert responses, we can see that 82% identified investment attractiveness while 65% acknowledged administrative gaps. This two-pronged analysis fills the gap between diplomatic narratives and the empirical reality of power practices in Central Asia.

DISCUSSION

These findings lead to a broader discussion about the geopolitical dynamics of Central Asia, particularly about the extent to which the Shanghai Cooperation Organization (SCO) truly embodies the narrative of 'Central Asia for Central Asians'. We use an integrated dataset spanning 70 longitudinal data points from 2015 to 2025 to demonstrate that Central Asian states' engagement in the SCO depends on a combination of international systemic pressures, country-specific political conditions, and economic leverage. Our statistical analysis suggests that their participation is strategic and instrumental, rather than stemming from a shared regional identity, suggesting that it operates at an intersection where specific external and internal factors strongly shape state behavior.

Findings in the security sector reveal that testing systemic variables through a logistic regression model indicates a positive relationship between external pressure and the level of regional security coordination. As Western military presence and security activities increase or decrease, they align their operational tendencies with the SCO to maintain regional balance. Thus, Hypothesis 1 (H1) is confirmed, which is further supported by Waltz's (1979) structural realism and Cooley's (2012) recognition that state strategic behavior amidst an unstable regional security architecture is similar to the government's view of balancing power through the uncertain influence created by external global powers on Central Asian rulers.

The domestic side of the issue shows a similar statistically significant relationship in the model, where countries with lower democratic credibility as measured by their Governance Score and lower political stability tend to have higher levels of security cooperation. This confirms Hypothesis 2 (H2), further suggesting that SCO security collaboration may be primarily driven by domestic imperatives from local elites concerned with maintaining regime security. In Ambrosio's framework (2008), the "three evils" (terrorism, separatism, extremism) also furnish a rationale for the domestic political legitimation and in doing so, provide a shield for these states reeling from external pressure for political reform. Finally, a "protection pact" emerges among member states which prioritizes elite survival over authentic regional integration.

Economic logic via calculating the Herfindahl Hirschman Index (HHI) indicates the extreme dominance and concentration occurring from China. The entire calculated range of the index as is close to 1 would suggest a "monopolistic narrative" analysis of Relations without Cooperation for instance the flow towards a single economic pole amongst the member states. For ever increasing share of trade and investment with China, the countries support for SCO's economic agenda rises statistically while interregional trade reaches another level of low integration. Clearly, the best validation of these hypotheses is provided by these findings by which Enlighten the patterns of realistic regionalism as articulated by Zhao (2013) and Allison (2008) boycott where integration is sacrificed for immediate bilateral gain.

There is a dualistic management in the global distribution of material capabilities with China heading the economic sector and Russia keeping up its traditional role as a regional security. Indicators of GDP growth and military spending together provide us with such a power hierarchy as confirms Hypothesis 4 (H4). Regional policy autonomy is negatively correlated with degrees of great power capability dominance, in the economic power context identified by Hirschman (1945). In effect, this nested structure within the SCO repeats a power hierarchy that positions Central Asia in a state of structural dependence, with the "regional ownership" motto remaining ideal for everyday policy making.

The main survey findings ultimately highlight the gap between diplomatic rhetoric and empirical developments. While international organizations in the region are increasing their investment capacity (as acknowledged by 82% of the 292 respondents who stated "strongly agree"), the SCO's contribution suggests that the humanitarian impact remains largely administrative and ceremonial, while 65% believe otherwise.

This, the gap between the 82% positive view of the role of investment and the 65% who believe its impact is primarily felt at the administrative level adds quantitative data to demonstrate the actual disparity between symbolic diplomatic legitimacy and the tangible economic benefits accruing to those living near investment sites from this shift.

CONCLUSION AND RECOMMENDATION

The association between the discrepancies in the gap between SCO rhetoric and geopolitical reality is well captured by this paper by analyzing the longitudinal 70 data points dataset and primary survey results. Central Asia, like many REIOs nowadays, for it exists under the conditions of a great powers rivalry, the SCO advance narrative "Central Asia for Central Asians" to stress a message of regional ownership and sovereignty. The study however found that this narrative is not so pure as it suggests and that the two modalities of power China and Russia keep up a dualistic dominance which fail to foster the genuine autonomy and instead continue the structural dependence. The article will be of maximum use and significance by virtue of the inclusion of the Herfindahl Hirschman Index (HHI), captures the responses obtained from 292 regional stakeholders, of which to indicate that 82% agree on enhanced investment appeal, but 65% see the organization more in comparison as just an administrative role. The parts where it was revised critically of this study solely look at what happens when magnetic but subsidiarity economic player attempts to leave and engage in business. Therefore the Central Asian States are advised to first to consider diversification of their foreign economic partners and enhance the intra regional coordination thereby reducing the disparity of their over dependence on external stakeholders and future research could develop towards long-term on social economic indicators for a more equitable regional framework.

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