

RESEARCH MODEL

**A. Criterion for selection of key security actors**  
 Significant ability to wield coercive force towards the realization of political objectives  
 \* Includes major Hashd groups (7): Shi'a, Sunni and Yezidi - on the principle of category representation (Shi'a pro-Iran, Shi'a pro-Iraq, Sunni and minorities)  
 \*\* Includes main Iraqi security corps (2): police and army  
**Note:** excludes Peshmerga given its anti-regime nature and it not being part of the Hashd



**B. Attitude indicators:**  
 1) Track record of directly undermining the Iraqi government (-5 to +5)  
 2) Track record of reinforcing ethno-sectarianism (-5 to +5)  
 3) Track record of accepting force subordination to the Iraqi security forces (-5 to +5)  
**Period starting as of 2014 (IS taking Mosul)**  
 Visualization: color (green, orange, red)

**C. Relational indicators:**

Hashd groups			
Dimensions	Indicator 1	Indicator 2	Indicator 3
Activity animosity/collaboration	Opposite v collaborative violent coercive activity (2 variables)	Public relations (2 variables)	
Interest (in)compatibility	Security interests (2 variables)	Political interests (2 variables)	Economic interests (2 variables)
Value (in)compatibility	Ideological convictions (2 variables)	Governance structure/allegiance (4 variables)	
Hashd Groups and Iraqi Army			
Dimensions	Indicator 1	Indicator 2	Indicator 3
Activity animosity/collaboration	Opposite v collaborative violent coercive activity (2 variables)	Public relations (2 variables)	
Interest (in)compatibility	Security interests (2 variables)	Economic interests (1 variable)	
Value (in)compatibility	Governance structure/allegiance (3 variables)		

Period starting 1Q17 (still intense fighting against IS) - baseline  
 Visualization: lines (thickness and color)

**D. Power indicators**

Hashd groups					
	Indicator 1	Indicator 2	Indicator 3	Indicator 4	
Coercive & security	Capacity (personnel and equipment) (3 variables)	Frequency of engagement in individual political violence or criminal activity (2 variables)	Dominance in violent clashes (battles won; violent encounters won) (2 variables)		7
Economic and financial	Reliable source of foreign funding (1 variable)	Reliable source of state funding (2 variables)	Reliable self-generated revenue (2 variables)		5
Political	Strength of association with parliamentary and ministerial positions (2 variables)	Relevance of political alliances (1 variable)	Access to and coverage by media channels (2 variables)		5
Socio-religious legitimacy	Estimated level of popular support and mobilization capacity (e.g. protests) (3 variables)	Adequacy of compensation for death in the line of duty (martyr endowments) (1 variable)	Legitimacy across sectarian groups (1 variable)	Strength of in-group sectarian discourse (1 variable)	5
Territorial	Territorial control (over urban areas and provinces) (2 variables)	Territorial interventions (cities free from ISIS) (1 variable)			3
<b>Iraqi security corps (defense and police)</b>					
	Indicator 1	Indicator 2	Indicator 3		
Coercive & security	Capacity (personnel and equipment) (2 variables)	Dominance in violent clashes (battles won; violent encounters won) (2 variables)			4
Economic and financial	Reliable source of foreign funding (1 variable)	Reliable source of state funding (2 variables)			3
Political	Extent and effectiveness of civil-military relations and decentralization of decision-making (3 variables)	Extent of political / sectarian influence (2 variables)	Access to and coverage by media channels (2 variables)		7
Socio-religious legitimacy	Estimated level of popular support and obedience (2 variables)	Adequacy of compensation for death in the line of duty (1 variable)	Representativeness across sects (1 variable)		4
Territorial	Territorial control (over urban areas and provinces) (2 variables)	Territorial interventions (cities free from ISIS) (1 variable)			3

Period starting 1Q17 (still intense fighting against IS) - baseline  
 Visualization: size of circles

25

21

## RESEARCH FOCUS

***Developing greater understanding of the nature and direction of developments towards, or away from, an Iraqi state (#1) that is increasingly capable (#2) to threaten or use coercive force (#3) that is largely seen as legitimate (#4).***

### Explanation of terms

1	Iraqi state	The country's constitutionally-mandated institutions that are meant to represent the interests of the Iraqi people within the country's internationally agreed boundaries
2	Coercive force	The use of physical means to enforce compliance of individuals that live, or groups that are active, on Iraqi territory with objective(s) stated by constitutionally-mandated institutions
3	Increasing capability	Being in control of enforcement mechanisms, resources and agents that, overtime, are more and more capable of achieving stated objectives
4	Largely legitimate	The popular perception that most coercive action undertaken by the government is based on objectives considered in line with the public interest of the Iraqi people and are executed in a manner correspondent with prevailing laws, rules and values

### Annotations

- 1 The research focus explicitly does not imply a state monopoly on the use of force as the desired end-goal of such developments. It leaves open the possibility of plural security provision.
- 2 The objective explicitly links capability with legitimacy to convey the notion that the state is also responsible for respecting and developing a moral basis for the use of coercive force based on public interests

**ACTORS**

PMF Unit	Sectarian nature	Key figures	Areas of Operation	Discourse	Approximate Size	External sponsors/patrons	Political & Institutional Links	Attitude towards research focus
1 Badr Organization	Shia	Hadi al-Ameri	Diyala, Baiji, Himree, Samarra, Makhoul Mountains, Salah Alden, Fallujah, Saqlawiyah, Thirthar, and Baghdad	Slightly mixed (predominantly sectarian following Iran's wilyat al fakih)	Claims 20,000 estimates 12,000	Iran and US	22 parliamentary seats, controls MOI, and some sections of the ISF	Mixed
2 Asaib Ahl al-Haq	Shia	Qais al-Khazali	Vauhum Samarra, Al-Thirthar, Karmah, Abu Ghraib, Ameriyat al-Fallujah, Tikrit, Al-Alam, Salah Alden, and Baghdad	Very sectarian / pro-Iran	Claims 7,000 estimates 4,000	Iran	Al-Sadiqoun with 1 parliamentary seat	Negative
3 Kataib Hezbollah	Shia	Jassim al-Ghanemi	Juraf Al-Sakhar, Ameriyat al-Fallujah, Karmah, Samarra, Balad, Dejlil, Baiji, and Baghdad	Sectarian (strong supporter of wilayat al-fakih)	Claims 6,500 estimate 3,000	Iran	No allegiance to the state	Negative
4 Abbas Combat Division	Shia	Maitham al-Zaydi	Taza, Baiji, Karbala, Nikheb, Jurafal-Sakhar, Balad, Al-Dejlil, and Basrah	Neutral (with some Sunni fighters)	Claims 34,000 current estimates 7,000	Al-Sistani	Pro-government force following the army command system	Positive
5 Saraya al-Salam	Shia	Moqtada al-Sadr, Kathim al-Isawi	Samarra, Al-Ishaqi, Thirthar, and Leine	Nationalistic but with actions against Sunnis and several ransoms	estimates 40,000-50,000	None	Religious leader and 34 seats in Parliament with the Sadrist Movement	Mixed
6 Hashd al-Ashaari (Tribal Mobilization Forces - TMF)	Sunni	Tarik Al-Asal	Anbar, Mosul, and Salah Alden		Claims 20,000	Unknown		Positive
7 Sinjar resistance units	Yazidi	Sheikh Khairy Khedr Mazlum Shengal	Sinjar		Estimates 5,000	PKK and YPG		Mixed

Iraqi security corps	Sectarian nature	Key figures						
8 Iraqi Army	Mixed	General Othman al-Ghanimi	Taking account of Ministry of Defense, National Security Council and Popular Mobilization Commission as sources of power	Chronic polarisation of the security forces and politicized command reappointments	Estimates 12,000	Ministry of Defense, National Security Council and Popular Mobilization Commission	MoD: Minister Irfan al-Hiyali; PMC: Falih Al-Fayyadh; NSC: Qasim Al-Araji [Deputy Chariman], Falih Alfayyadh [Secretary General], Erfan Al-Hiyali [Deputy Chairman]	Positive
9 Federal Police	Mixed	General Muwaffaq Tawfeeq	Taking account of Ministry of Interior, National Security Council and Popular Mobilization Commission as sources of power	The Federal Policy (falls under the authority of the MOI) which is firmly under control of the Badr organization yet received training with Western support.	Estimates 7,000	Ministry of Interior, National Security Council and Popular Mobilization Commission	MoI: Qasim al-Aaraji; PMC: Falih Al-Fayyadh; NSC: Qasim Al-Araji [Deputy Chariman], Falih Alfayyadh [Secretary General], Erfan Al-Hiyali [Deputy Chairman]	Positive

NB: External patrons/sponsors are foreign or domestic actors that provide a security actor with material, ideological or financial support

ATTITUDES (2014)

PMF Unit	Track record of directly undermining the Iraqi government		Track record of reinforcing ethno-sectarianism		Track record of accepting force subordination to the Iraqi security forces		Overall attitude towards research focus
1 <b>Badr Organization</b>	<p>Participated in elections and currently have 22 seats in the Iraqi parliament. Al-Ameri also served as Transportation Minister under Maliki between 2011 and 2014. The Organization also controls the Ministry of Interior. Ameri is said to exert control over some sections of the Iraqi army and policy.</p> <p>However, this gives Ameri and the organization significant power to override the central government. Ameri makes statements beyond his role of leader of the Badr Organization by directly threatening foreign leaders, an action that should be reserved for the Prime Minister of Iraq <i>‘We advise the Turkish President that if he does not retreat troops alive, we will send them back to him dead’</i></p> <p>Another example includes the instance in the Mosul Operation when Ameri changed the plan to allow IS militants and the population to flee west by placing pressure on the government to allow the Badr Organization to enter Tal Afar, thus closing the escape route.</p>	0	<p>Ameri <i>‘The majority of us believe that... Khamenei has all the qualifications as an Islamic leader. He is the leader not only for Iranians but the Islamic nation. I believe so and I take pride in it.’</i></p>	-5	<p>Refusal to incorporate Badr militants into the Iraqi army. For example the statement of Mohammed Mahdi al-Bayati <i>‘The Iraqi Army is an organized body that abides by rules and procedures that the Hashd al-Shaabi cannot follow... The Hashd al-Shaabi and the Iraqi army could have the same operation room. They could share weaponry but they should also remain separate’</i></p>	-3	-2.67
2 <b>Asaib Ahi al-Haq</b>	<p>Acting against the central government (engaged in military action outside Iraq’s border, heavily involved in attacks against the US forces in Iraq between 2006 and 2011, and aim of increasing Iranian influence in Iraq)</p>	-5	<p>Involved in multiple criminal activities from assassinations to kidnappings and reinforce strong sectarian vengeance against Sunnis.</p> <p><i>‘The liberation of Mosul will be the revenge against the killers of Hussein, because these are their grandsons. Allah willing, the liberation of Mosul will be vengeance and retribution against the killers of Hussein’</i></p> <p><i>‘After ISIS, Kurds are the greatest problem, especially Mr. Masoud Barzani. And solving the problems or peace with them is impossible.’</i></p>	-5	<p>Even if they come under the command of the ISF, they have demonstrated that as a force they do not follow the same vision for Iraq as Abadi, and the wider population, and it would be extremely difficult to make them accountable to the democratically-elected civil leadership in Baghdad.</p>	-5	-5.00
3 <b>Kataib Hezbollah</b>	<p>KH sent its members to fight for, and alongside, Assad’s forces in Syria, despite the central government of Iraq forbidding these actions. Akram al-Kaabi, has stated publicly in a televised interview that this force would not think twice about overthrowing Iraq’s democratically elected leadership if Grand Ayatollah Khamenei would give the order.</p>	-5	<p>KH has been accused of atrocities by Human Rights Watch ranging from the destruction of property to the unlawful detention and killings on non-Shia Iraqis.</p>	-5	<p>Even if they come under the command of the ISF, they have demonstrated that as a force they do not follow the same vision for Iraq as Abadi, and the wider population, and it would be extremely difficult to make them accountable to the democratically-elected civil leadership in Baghdad.</p>	-5	-5.00
4 <b>Abbas Combat Division</b>	<p>They support Iraq unity and operate within the authority and leadership structures of the state.</p>	5	<p>Although Shiite in nature, they have many Sunni members.</p>	5	<p>Already follow the army command system. Most importantly, AD has demonstrated a clear willingness to disband and be incorporated within the ISF once the fight against ISIS is over <i>‘My personal view is that Hashd al-Shaabi should be incorporated into the Iraqi army. All of the units, brigades, and companies should join the Iraqi army and assume the responsibility of protecting Iraq.’</i></p>	5	5.00
5 <b>Imam Ali Combat Division</b>	<p>They support Iraq unity and operate within the authority and leadership structures of the state.</p>	5	<p>Many Sunnis have joined the brigade, with estimates that between 16-20% of the force’s members are Sunni.</p>	5	<p>The links between it and the Iraqi Army are already strong as demonstrated by Adil Talib <i>‘the Brigade fights for Iraq. It is a national struggle.. We laugh at the name militia. There is no difference between us and the army’</i></p>	5	5.00

6	<b>Saraya al-Salam a.k.a Mahdi Army</b>	Sadr is a strong champion of anti-corruption with technocratic governance at the core. Although Sadr himself has left politics, he supports and is considered the religious leader of parties with a total of 34 seats in the Iraqi parliament.  At the same time, the Mahdi Army has routinely used their influence to hold the government to ransom.	0	Mahdi Army has retracted from enforcing an ethno-sectarian discourse towards advocating for a nationalistic and development-based agenda. [This, however, is contradictory to its history of ethno-sectarian discourse against Sunnis]	4	Sadr has demonstrated a willingness for his force to be incorporated within the Iraqi army.	5	3.00
7	<b>Hashd al-Watani</b>	Very poor links with the central government - especially due to the tensions between the central government and Turkey. As the Iraqi government has repeatedly asked Turkey to remove its troops from Iraq, Hashd al-Watani's brand goes against the state by inviting a foreign force into Iraqi territory against the will of the Iraqi government.  In addition, Nujaifi's vision for his force as a controlling rather than liberating one to offer security in post-IS Mosul is contradictory to the security that should be offered firmly within the state structure.	-5	Very sectarian discourse in nature and suggests that without Turkey's support Sunnis would be taken advantage of.	-5	NA		-5.00
8	<b>Hashd al-Ashaari (Tribal Mobilization Forces - TMF)</b>	Strong connection between these forces and the ISF and government actors during the battle against ISIS (despite the prior existing strong resentment to the Iraqi government that managed to marginalize them post-Saddam.)	4	Limited ethno-sectarian discourse post-ISIS in Iraq as they have been dominantly marginalized post-Saddam (The heavy-handed treatment and sectarian-motivated abuses, often abetted by Shiite militia forces, increased the sense of Sunni disenfranchisement and resentment toward the Iraqi government.)	3	Leaders expect to be repaid by being integrated into Iraqi security forces and having a larger political voice, at least over their own Sunni Arab areas if not in the government as a whole.	3	3.33
9	<b>Sinjar resistance units (YBS)</b>	They followed the lead of the Iraqi central government and held the Iraqi flag in most of their battles.	3	Several clashes with other Kurdish groups particularly the Peshmerga.  In addition, many Yazidis accuse their Sunni Muslim neighbors of complicity in atrocities committed against them by Islamic State, and say they cannot live together again.	3	The YBS is on a mission to regain greater federal rights in Sinjar under central authority of the government. This entails the sinjar forces regaining security authority of protecting Sinjar province.	0	2.00

POWER

POWER (1Q17-1Q18-3Q18)

The capacity of A to get B to act according to A's preferences in the context of actors, practices and structures of power

Actor: Iraq Police and Army										
Dimension	Definition	Indicator	Variable 1	Calibrate to a scale of 5	Variable 2	Calibrate to a scale of 5	Variable 3	Calibrate to a scale of 5	Computation of indicator value	Annotations
Coercive & Security	Ability to threaten or use violence to exercise influence	Capacity (personnel and equipment)	Total # of enlisted fighters	Calibrate to a scale of 5 (# of fighters/total fighters)*5 Then rank them as highest=5	Possession of light armor vs. heavy weaponry	Small arms (0), light weapons (+2.5), heavy weapons (+5)			[Ranking of # of fighters + type of equipment]/2	
		Coercive dominance in violent clashes (battles won; violent encounters won)	Battles won	(# of battles won/total # of battles participated in)*5	Violent encounters won	(# of violent encounters won/total # of violent encounters participated in)*5			[(# of battles won/total)*5] + [(# of violent encounters/total)*5]/2	
Economic & financial	Ability to influence through conferral of patronage and ensure organizational self-sustenance	Reliable source of foreign funding (other states or trans-/international actors)	Estimated volume of financial support	No known inter-/transnational financial support (0), limited inter-/transnational financial support (+2.5), significant inter-/transnational financial support (+5)					No known inter-/transnational financial support (0), limited inter-/transnational financial support (+2.5), significant inter-/transnational financial support (+5)	
		Reliable source of state funding	Volume of state funds (allotted from the Iraqi central budget)	Decreasing state funding (-5), steady state funding (0), increasing state	Adequacy of public funds (allotted from the Iraqi central budget)	Inadequate (-5), sufficient (0), surplus (+5)			[Volume of state funds + adequacy of public funds]/2	
Political	Ability to influence through the formal political system	Extent and effectiveness of civil-military relations and decentralization of decision-making	Constitutional decentralization of decision-making	Centralized (-5), semi-decentralized (0), fully centralized (+5)	Practiced decentralization of organizational decision-making	Centralized (-5), semi-decentralized (0), fully centralized (+5)	Practiced decentralization of decision-making of associated ministry	Centralized (-5), semi-decentralized (0), fully centralized (+5)	(Constitutional decentralization + Practiced decentralization + ministerial decentralization)/3	
		Extent of political/sectarian influence	Political affiliation of senior personnel	(# of senior personnel with political affiliation/top 10 senior personnel within the organization)*5	Sectarian affiliation of senior personnel	(# of senior personnel with designated sectarian positioning/top 10 senior personnel within the organization)*5			[(# of senior personnel with political affiliation/top 10)*5 + (% of senior personnel with sectarian position/top 10)*5]/2	
		Access to and coverage by media channels	total # of positive mentions in a neutral news outlet (Alhurra news website?)	(frequency positive mentions every week/total articles every week)*5	total # of positive mentions on state TV channel (website)	(frequency positive mentions every month/total articles every month)*5			[frequency positive mentions every week on Alhurra + frequency of positive mentions]	
Socio-religious legitimacy	Ability to influence by mobilization of social base	Estimated level of popular support and obedience	Estimated level of trust (any available survey data)	(% of people surveyed that have high degree of trust)*5	Crime rates	(-1)*(# of reported crimes/total population)*5			[(% of trust*5) - crime rate*5]/2	
		Adequacy of compensation for death in the line of duty	Relative adequacy of compensation	If amount of compensation is (much) lower than average household spent or average income (-5), if equal (0), if more (-5)					If amount of compensation is (much) lower than average household spent or average income (-5), if equal (0), if more (-5)	
		Representativeness across sects	Degree of sectarian fractionalization	Clear overrepresentation of one sect (-5), moderately biased representation (-2.5), proportional sectarian representation					Clear overrepresentation of one sect (-5), moderately biased representation (-2.5), proportional sectarian representation	
Territorial	Ability to influence by area control that allows asset capture and mobilization	Territorial control	Security control over urban areas in major cities	(# of cities/total cities)*5	Security control over provinces	(# of provinces/total provinces)*5			[(# of cities controlled)*5 + (% of provinces controlled)*5]/2	
		Territorial interventions	# of cities freed from (or lost to) ISIS	(# of cities freed from ISIS/total cities battled in)*5					(# of cities freed from ISIS/total cities battled in)*5	

Actor: Hashd Groups										
Dimension	Definition	Indicator	Variable 1	Calibrate to a scale of 5	Variable 2	Calibrate to a scale of 5	Variable 3	Calibrate to a scale of 5	Computation of indicator value	Annotations
Coercive & Security	Ability to threaten or use violence to exercise influence	Capacity (personnel and equipment)	Total # of enlisted fighters	Calibrate to a scale of 5 (# of fighters/total fighters)*5 Then rank them as highest=5	Possession of light armor vs. heavy weaponry	Small arms (0), light weapons (+2.5), heavy weapons (+5)	Occurrence/frequency of rogue incidents/breakaway fractions	Breakaway faction (-5), rogue incidents (-2.5), no breakaway / rogue incidents (0)	[Ranking of # of fighters + type of equipment + incidence of breakaways]/3	
		Frequency of engagement in individual political violence or criminal activity	Total # of committed political assassinations	(# of political assassinations/total assassinations)*5 Then rank them as highest = 5	# of kidnaps for political purposes	(# of kidnaps/total kidnaps)*5 Then rank them as highest = 5			[Ranking of political assassinations + ranking of kidnaps]/2	
		Dominance in violent clashes (battles won; violent encounters won)	Battles won	(# of battles won/total # of battles participated in)*5	Violent encounters won	(# of violent encounters won/total # of violent encounters participated in)*5				[(# of battles won/total)*5] + [(# of violent encounters/total)*5]/2
Economic & financial	Ability to influence through conferral of patronage and ensure organizational self-sustenance	Reliable source of foreign funding (other states or trans-/international actors)	Estimated volume of financial support	No known inter-/transnational financial support (0), limited inter-/transnational financial support (+2.5), significant inter-/transnational financial support (+5)					No known inter-/transnational financial support (0), limited inter-/transnational financial support (+2.5), significant inter-/transnational financial support (+5)	
		Reliable source of state funding	Volume of state funds (allotted from the Iraqi central budget)	Decreasing state funding (-5), steady state funding (0), increasing state	Adequacy of public funds (allotted from the Iraqi central budget)	Inadequate (-5), sufficient (0), surplus (+5)			[Volume of state funds + adequacy of public funds]/2	
		Reliable self-generating revenue source	Revenues from illicit assets or trades	No known revenues (0), limited revenues (+2.5), significant revenues (+5)	Revenues from religious or charity contributions	No known revenues (0), limited revenues (+2.5), significant revenues (+5)				[revenues from illicit assets + revenues from religious or charity contributions]/2
Political	Ability to influence through the formal political system	Strength of association with parliamentary and ministerial positions	Number of seats in parliament of associated political parties	(# of seats in parliament/total seats)*5	Influence over ministries	(# of ministries controlled/total number of ministries)			[(# of seats in parliament/total)*5 + (# of ministries controlled/total)*5]/2	
		Relevance of political alliances	Total number of seats in parliament	(# of seats in parliament/total parliament)	Degree of bias of local media outlets towards group	(# of positive newsitems on group by local media outlet x / # of total newsitems on group by locally media outlet x)/(viewership/total population)*5			(# of seats in parliament/total parliament)	Monitor top-7 local media outlets (see sources) Viewership is gauged SM followers
		Access to and coverage by media channels	total # of positive mentions in a neutral news outlet (Alhurra news website)	(frequency positive mentions every week/total articles every week)*5					[frequency of positive mentions*5 + biasness of local media]/2	
Socio-religious legitimacy	Ability to influence by mobilization of social base	Estimated level of popular support and mobilization capacity	Estimated level of trust (any available survey data)	(% of people surveyed that have high degree of trust)*5	Followers on social media	(# of followers on SM/total population)*5	# of participants in sit-ins and protests	No participation (0), modest participation (+2.5), large participation (+5)	[(% of people with trust)*5 + (# of followers on SM/total population)*5 + degree of participation in sit-ins/protests]/3	
		Adequacy of compensation for death in the line of duty (martyr endowments)	Relative adequacy of compensation	If amount of compensation is (much) lower than average household spent or average income (-5), if equal (0), if more (-5)					If amount of compensation is (much) lower than average household spent or average income (-5), if equal (0), if more (-5)	
		Legitimacy across sectarian groups	Degree of sectarian fractionalization	Homogenous representation of one sect (-5), moderate representation of one sect (0), mixed sectarian representation (+5)					Homogenous representation of one sect (-5), moderate representation of one sect (0), mixed sectarian representation (+5)	Considered from a national out-group perspective (i.e. the average Iraqi)
		Strength of in-group sectarian discourse	Religious references and symbols in discourse	(religious references/total speech)*5					(religious references/total speech)*5	Considered from an in-group perspective (sectarian)
Territorial	Ability to influence by area control that allows asset capture and mobilization	Territorial control	Security control over urban areas in major cities	(# of cities/total cities)*5	Security control over provinces	(# of provinces/total provinces)*5			[(# of cities controlled)*5 + (% of provinces controlled)*5]/2	
		Territorial interventions	# of cities freed from (or lost to) ISIS	(# of cities freed from ISIS/total cities battled in)*5					(# of cities freed from ISIS/total cities battled in)*5	

**RELATIONSHIPS (1Q17-1Q18-3Q18)**

Definition: The nature and quality of the interaction between two different security actors

**Actors: Hashd Groups**

Dimension	Definition	Indicator	Variable 1	Calibrate to a scale of 5	Variable 2	Calibrate to a scale of 5	Variable 3	Calibrate to a scale of 5	Variable 4	Calibrate to a scale of 5	Computation of indicator value	Annotations
<b>Activity animosity/ collaboration</b>	<i>The extent to which group activities demonstrate animosity v. collaboration towards other groups on the street/on air</i>	Opposite v collaborative violent coercive activity	Battles	Battles fought together (+5% battles fought together); No battles (0); Battles fought against each other (-5% of battles fought against each other).  AVG of total battles	Violent confrontations	violent confrontations fought together (+5% of violent confrontations fought together); No violent confrontations (0); Violent confrontations fought against each other (-5% of violent confrontations fought against each other).  AVG of total violent confrontations					[AVG battles + AVG violent confrontations]/2	
		Public relations	Frequency of leadership meetings that are publicized / publicly known	(total # of meetings per week/7)*5	Quality of discourse	Code speeches about each other: Negative/hate speech elements (-5% of negative speeches), neutral speech elements (0), positive speech elements (+5% of positive speeches) Then AVG Speeches					[Frequency of interaction + AVG speeches]/2	
<b>Interest (in)compatibility</b>	<i>The level of compatibility of strategic objectives of a political, security or economic nature</i>	Security interests	Fighting against a common enemy/opponent (e.g. fighting Peshmerga, fighting ISIS, controlling Sunni Iraq, fighting in Syria)	Each common security interest would get a scoring of +5 and conflicting security interest -5. The total value of the indicator would be an average of all security interests between the two groups.	Maintaining independent coercive capacity	Opposing interest in maintaining independent coercive capacity or disbanding/integrating w Iraqi Army (-5) Ambiguous interests (0) Shared interest in maintaining independent coercive capacity or disbanding/integrating into Iraqi Army (+5)					[AVG Security interests + interest in maintaining independent coercive capacity]/2	
		Political interests	Strength of political coalition between the groups	Established political coalition (+5), new political coalition (+2,5), no participation in political coalition (0), newly opposing political coalitions (-2,5), established opposing political coalitions (+5)	Common/conflicting political objectives	Common political objectives (e.g. towards national unity or promoting particular reforms) (+5), no political objectives (0), conflicting political objectives (-5) for each policy objective  AVG total objectives					[political coalition + AVG common/conflicting political agenda]/2	Their political agenda could overlap on certain policies/reforms but conflict over others. Each common policy stance/reform is considered one input into the coding. The variable will be computed through averaging all inputs.
		Economic interests	Common source of foreign support (revenue, training, equipment)	No foreign support in common (0), moderate foreign support commonality (+2,5), significant foreign support commonality (+5)  AVG total foreign support	Jointly generated domestic funds (non-state)	No jointly-generated revenue source(s) in common (0), moderate self-generated revenue source commonality (+2,5), significant self-generated revenue source commonality (+5)  AVG total jointly-generated revenue						[AVG foreign support + AVG jointly-generated revenue]/2
<b>Value (in)compatibility</b>	<i>The level of compatibility of ideological, religious or socio-political outlook and convictions</i>	Ideological convictions	Sectarian identity	Same sectarian identity (+5), different sectarian identity (-5)	Religious school of thought	Similar religious school of thought (+5), no allegiance to religious school of thought (0), conflicting religious school of thought (-5)					[sectarian identity + religious school of thought]/2	Sectarian identity denotes the broad identity group, religious school of thought denotes the religious leadership / thinking a group follows
		Governance structure/allegiance	Political Party	Common allegiance to political party/coalition (+5) No allegiance to political party/coalition (0) Conflicting allegiance to political party/coalition (-5)	External patron	Common external actor (+5) No commonality in allegiance to external actor (0) Conflicting allegiance to external actors (-5)	Internal authority structure (e.g. family leadership, tribal allegiance)	Similar internal authority structure (+5), dissimilar authority structure (-5)	Iraq central government	Positive inclination towards Iraq CG (+5), indifferent inclination towards Iraq CG(0) Negative inclination towards Iraq CG (-5)		[allegiance to pp/coalition + allegiance to external actor + internal authority structure + inclination to central govt]/4

**Actors: Hashd Groups and Iraqi Army / Police**

Dimension	Definition	Indicator	Variable 1	Calibrate to a scale of 5	Variable 2	Calibrate to a scale of 5	Variable 3	Calibrate to a scale of 5	Variable 4	Calibrate to a scale of 5	Computation of indicator value	Annotations
<b>Activity animosity/ collaboration</b>	<i>The extent to which group activities demonstrate animosity v. collaboration towards other groups on the street/on air</i>	Opposite v collaborative violent coercive activity	Battles	Battles fought together (+5*% battles fought together); No battles (0); Battles fought against each other (-5* % battles fought against each other). Then we AVG total battles.	Violent confrontations (including kidnaps & assassinations)	violent confrontations fought together (+5*% violent confrontations fought together); No violent confrontations (0); Violent confrontations fought against each other (-5*% violent confrontations fought against each other). Then we AVG total confrontations.					[AVG battles + AVG violent confrontations]/2	
		Public relations	Frequency of public leadership meetings	(total # of meetings per week/7)*5	Quality of discourse	Code speeches about each other: Negative/hate speech elements (-5), neutral speech elements (0), positive speech elements (+5) Then AVG Speeches					[Frequency of interaction + AVG speeches]/2	
<b>Interest (in)compatibility</b>	<i>The level of compatibility of strategic objectives of a political, security or economic nature</i>	Security interests	Fighting against a common enemy/opponent (e.g. fighting Peshmerga, fighting ISIS, controlling Sunni Iraq, fighting in Syria)	Each common security interest would get a scoring of +5 and conflicting security interest -5. The total value of the indicator would be an average of all security interests between the two groups.	Maintaining independent coercive capacity	Interest in maintaining independent coercive capacity (-5) Mixed interests (0) Interest in disbanding/integrating into Iraqi Army (+5)					[AVG Security interests + interest in maintaining independent coercive capacity]/2	
		Economic interests	Economic interests	Common source of foreign support (revenue, training, equipment)	No foreign support in common (0), moderate foreign support commonality (+2,5), significant foreign support commonality (+5)  Each foreign support would get on input and then AVG all foreign support						AVG foreign support	
<b>Value (in)compatibility</b>	<i>The level of compatibility of ideological, religious or socio-political outlook and convictions</i>	Governance structure/allegiance	Political Party	Clear common allegiance to political party/coalition (+5), ambiguous common allegiance to political party/group (+2,5) No allegiance to political party/coalition (0), ambitious allegiance (-2,5), conflicting allegiance to political party/coalition (-5)	External Actor	Full commonality in external actor(s) w similar objectives (+5), partial commonality in external actors w similar objectives (+2,5), No commonality in allegiance to external actor (0), partial commonality in external actors w opposing objectives (-2,5), Full differentiation in external actors w opposing objectives (-5)	Iraq central government	Positive inclination towards Iraq CG (+5), indifferent inclination towards Iraq CG(0) Negative inclination towards Iraq			[allegiance to pp/coalition + allegiance to external actor + allegiance to central govt ]/3	



Sources

Type of Source	Source 1	Source 2	Source 3	Source 4
<b>Local Media Outlets</b>	Iraq - NRT	Alhadath Iraq	Afaq TV - Nouri Maliki's Channel Pro-Hashd	Alhurra
<b>International/Regional Media Outlets</b>	Al-Monitor	Reuters Iraq	Al-Mayadeen Arabic	AlJazeera Arabic
<b>Think Tanks &amp; Research Institutes</b>	Carnegie Middle East	Middle East Research Institute	Amnesty International	PMF Pulse
<b>SM Accounts (Individuals)</b>	Qais Al-Khazali (t@Qais_alkhazali)	Moqtada Al Sadr (t@Mu_Alsadr) (t@Jawabna)	Minister Irfan Al-Heyali (t@Eheiali)	Qasim al-Araji (f@Qassim.Mohammed.Alaraji)
<b>SM Accounts &amp; Websites (State Organizations)</b>	Popular Mobilization Commission (f@AlhashedAlShabey) ( <a href="http://al-hashed.net/">http://al-hashed.net/</a> )	Ministry of Defense ( <a href="https://www.mod.mil.iq/">https://www.mod.mil.iq/</a> ) (f@mod.mil.iq)	Iraq Army (t@Defense_Iraq) (t@ArmY_Iq)	Ministry of Interior ( <a href="https://moi.gov.iq/">https://moi.gov.iq/</a> )
<b>SM Accounts &amp; Websites (Hashd Groups)</b>	Badr Organization (f@Badrwarnews)	Kataib Hezbollah ( <a href="http://www.kataibhezbollah.com/">http://www.kataibhezbollah.com/</a> )	Sinjar Protection Units (f@JebelSinjar)	