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Sociopolitical Destabilization Dimensions in Comparative Global and Regional Perspective*

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Abstract

This paper examines empirically political instability using a principal component analysis. Conducted tests allow us to identify its three types: (1) 'armed destabilization' with the main contributions on the part of number of killed in terror attacks, number of terror attacks, and guerilla warfare; (2) 'mass protest destabilization' with the main contributions on the part of anti-government demonstrations, riots, and general strikes; and (3) 'elite destabilization' with the main contributions on the part of governmental crises, coups and coup attempts, assassinations, and purges. Our analysis further demonstrates that some MENA countries are the most violently destabilized in the whole world for the period of 1970–2018 among all other countries. These results are supported by the mean factor score values of socio-political destabilization principal components for four world-system regions for three observation periods which show that, both for 1970–2018 and after 2011 periods, the Afrasian instability macrozone in general, and the MENA region in particular, turn out as the areas of the highest mean values of armed destabilization factor scores. Moreover, the conducted tests show that MENA is the only region where mass protest destabilization component is associated with repressions both for the

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general observation period (1970–2018) and for the period after the Arab Spring (since 2011) while for other regions the correlation with purges/repressions indicator is insignificant, though positive (South America and Sub-Saharan Africa) or even insignificant and negative (Western Europe). This appears to imply that in the MENA region protests are accompanied by mass repressions much more systematically than in the other parts of the world. However, we find the presence of number of terror attacks among the significant contributors to mass protest destabilization for Sub-Saharan Africa, which suggests that the mass protest destabilization in that part of the world is also of a rather special type involving a very substantial violent component. In the meantime, the principal component analysis of the destabilization in the MENA region (considered as a semi-peripheral world-system area) in comparison with South America (another world-system area), Western Europe (regarded as a part of the world-system core), and Sub-Saharan Africa (as a part of the world-system core) has yielded the following results. In general, we find that the highest percent of the destabilization variance is explained by the mass protest principal component for the world-system core (represented by Western Europe); and the lowest percent of the destabilization variance is explained by the armed destabilization principal component precisely for this part of the world. We also found that the highest percent of the destabilization variance is explained by the armed principal component for the world-system periphery (represented by Sub-Saharan Africa); and the lowest percent of the destabilization variance is explained by the mass protest destabilization principal component precisely for Sub-Saharan Africa. The world-system semi-periphery appears here in between those poles. The MENA region (which is the core of the Afrasian instability macrozone) ranks the second for both mass protests and armed destabilization, thus displaying very high levels of both (whereas South America occupies an intermediate place between MENA and Western Europe).

Keywords: MENA, the Afrasian instability macrozone, the Arab Spring, the World System, principal component analysis, socio-political destabilization, repressions, Sub-Saharan Africa, Western Europe, Latin America.

Triggered by the Arab Spring, the global wave of socio-political destabilization resulted in a very significant growth of socio-political instability in absolutely all world-system zones in different ways and not completely synchronously (Grinin and Korotayev 2012; Korotayev, Meshcherina *et al.* 2016, 2019; Korotayev, Shishkina, and Issaev 2016; Akaev *et al.* 2017; Korotayev, Shishkina, and Lukhmanova 2017; Ortmans *et al.* 2017; Korotayev, Meshcherina, and Shishkina 2018; Korotayev, Romanov, and Medvedev 2019; Khokhlov *et al.* 2021; Korotayev, Shishkina, and Khokhlova 2022).

The factors of this socio-political destabilization of 2011 in Middle East and North Africa (MENA) have attracted serious attention of various researchers. The existing research on the analysis of socio-political destabilization in MENA countries shows that a number of political factors (regime type, intra-elite conflict, ineffective instruments of power transfer), social factors (presence of intertribal, interconfessional, and other social conflicts and contradictions), demographic factors (demographic structural risks, *e.g.*, the ‘youth bulge’, unemployment among young people with higher education, *etc.*), historical factors (large-scale conflicts in the near past), religious factors (in particular, the inclusion of Islamists in the legal political processes), economic factors (*e.g.*, the second wave of inflation that led to an explosive growth of food prices), and some subjective (socio-psychological and cultural-historical) factors played an important role in the genesis of explosive sociopolitical destabilization in the Arab countries in 2011 (Bilyuga 2017; Butenschön 2015; Grinin and Korotayev 2012; Grinin *et al.* 2016, 2019; Hussain and Howard 2013; Korotayev *et al.* 2011; Korotayev and Zinkina 2011, 2022; Malik and Awadallah 2013; Slinko *et al.* 2017; Steinert-Threlkeld 2017).

At the same time, little has been said about destabilization dimensions and their peculiarities for this region after the Arab Spring. Using descriptive statistics methods, we have distinguished between mass protest destabilization periods in MENA states on the observation of 19 countries (2011–2013 and since 2016) and terror destabilization period (2013–2016) which coincides with the rise of radical Islamist terrorism in the region (Korotayev and Khokhlova 2022).

However, it still remains unclear whether MENA is the most destabilized region, which types of destabilization are typical of it, what the features of these destabilization types are and what are their characteristics compared to other world-system zones.

Types of Destabilization Processes

Much has been written about the problem of socio-political destabilization typology. In general, researchers distinguish between internal and inter-state socio-political destabilization types, whereas all acts of violence, conflict situations and contentious socio-political events are considered as destabilization processes (see, *e.g.*, Flanigan and Fogelman 1970; Hibbs 1973; Gurr and Lichbach 1986; Alesina *et al.* 1996; Benson and Kugler 1998; de Haan 2007; Jong-A-Pin 2009; Celestino and Gleditsch 2013; Klomp and de Haan 2013).

The first attempts to perform a principal component analysis for destabilization indicators were made in order to highlight the main destabilization types already in the 1960s and 1970s (Tanter 1966; Hibbs 1973). In these studies, limited to 1948–1967 period, researchers tended to identify ‘anomic violence’

type of destabilization which includes anti-government demonstrations, strikes and riots, and 'civil war' type as the second destabilization dimension, which includes armed insurgencies and assassinations.

Douglas Hibbs' (1973) 108 nation aggregate data analysis of causal structures that underlie mass political violence within nations (for 1948–1967 period) showed that coups were positively related to the past coups experience, and defense expenditure as a proportion of total government expenditure, and negatively correlated with the development level of (non-military) socio-political institutions. He defined the focus of his investigation as events of domestic violence that have non-systemic character and direct and immediate political significance as well as involve collective or mass actions. The variables that fit his theoretical dimensions are Riots, Guerilla Warfare, General Strikes, Assassinations, Deaths from Political Violence, and Anti-Government Demonstrations (Hibbs 1973: 19). Hibbs' (1973) analysis identified two dimensions (factors): 'anomic violence', which included riots, anti-government demonstrations and strikes, and 'civil war' that combined such forms of political violence as armed assaults, murders and assassinations.

Richard Jong-A-Pin (2009) came up with the following four types of socio-political destabilization: mass civil protest (demonstrations, riots and strikes); politically motivated violence (civil war, guerilla warfare, revolutions, assassinations, internal conflicts, ethnic conflicts); instability within the political regime (strikes, fractionalization, ruling party incumbent period, society polarization, general elections number, governmental crises) and instability of the political regime (constitutional changes, coups, political regime changes, government change and religious factors).

Elena Slinko and others using principal component analysis identify the following four types of socio-political destabilization in their cross-national research using CNTS database: mass protest destabilization (with the main contributions on the part of anti-government demonstrations, general strikes, and riots); abrupt regime change (predominantly due to coups); armed destabilization (terror attacks, *etc.*) and intraelite destabilization (with the main contributions on the part of political crises, assassinations, purges and coups) (Slinko *et al.* 2018). The analysis of the relationship between socio-political and economic indicators with four types of instability by Slinko and others shows that each type of destabilization has its own socio-political conditions that contribute to the risk of its occurrence (*Ibid.*). They also demonstrate that various dimensions of socio-political destabilization affect destabilization types differently. At the same time, the chronological frameworks of the paper are limited by 2010 due to, as they explain, the 'structural shift' (Akaev *et al.* 2017; Korotayev *et al.* 2018) caused by the events of the Arab Spring.

This research aims to contribute to this literature block with world-systems destabilization typology study in order to determine the place of MENA and the Afrasian instability macrozone in the hierarchy of the most destabilized regions of the world for the observation period including 2011–2018 (in contrast to Slinko *et al.* 2018), and investigate its specific destabilization dimensions peculiarities.

Research Design, Materials and Method

Immanuel Wallerstein's world-systems approach is central for the present research (Wallerstein 1974, 1979, 1980, 1987, 1988, 2004). As he noted, this system consists of the following three components:

1) 'core' (in relation to the modern World System, this component refers to the high-income OECD countries with developed industrial/postindustrial economics and strong state);

2) 'periphery', countries and regions specialized on the resource extraction which have predominantly agricultural economy and weak state (the most underdeveloped low income third world countries);

3) 'semi-periphery' (modernized countries of the 'second wave'; socialist countries of the 20th century, all the BRICS countries of the 21st century, middle income third world countries).

According to Wallerstein, capitalist world-system is founded on the non-equivalent division of labor and exploitation of the periphery by the core (of course, this point needs now important qualifications [see, *e.g.*, Grinin and Korotayev 2015; Korotayev, Zinkina *et al.* 2011; Korotayev, Goldstone *et al.* 2015). Core countries force the periphery to supply raw materials at lower prices, which contributes to the prosperity of the center and the impoverishment of the periphery (Wallerstein 1974, 1979, 1980, 1987, 1988, 2004).

Therefore, following Wallerstein, the countries of Western Europe will be taken as an example of the world-system 'core', Sub-Saharan Africa as the 'periphery' whereas South America and MENA countries will be taken as examples of 'semi-periphery' zones.

One can suppose that the 'semi-periphery' regions are the most unstable among the three abovementioned world-system zones due to the fact that the highest risks of socio-political instability are characteristic of the countries with intermediate values of GDP per capita which are typical for this world-system zone, not the countries with the highest or lowest values, as it is observed that until a certain value of GDP per capita is reached, economic growth predicts an increase in the risks of sociopolitical destabilization (Bilyuga *et al.* 2016; Korotayev, Bilyuga *et al.* 2016, 2017a, 2017b, 2018; Korotayev, Vaskin *et al.* 2017,

2018, 2021; Korotayev, Khohlova *et al.* 2018; Vaskin *et al.* 2018; Korotayev, Sawyer, Grinin *et al.* 2020; Korotayev, Sawyer *et al.* 2021; Korotayev, Medvedev *et al.* 2022). At the same time, the destabilization period after the Arab Spring (2011) had a serious effect on the socio-political dynamics of the MENA semi-periphery zone (Akaev *et al.* 2017; Korotayev *et al.* 2018).

Thus, our first hypothesis is as follows:

Latin America and MENA regions as semi-periphery zones of the world-system countries are the most unstable among the four for the period before the Arab Spring, while for the whole observation period as well as after 2011 the highest destabilization values will be observed for MENA region due to the Arab Spring effect.

At the same time, taking into account the Arab Spring phenomena and growth of terrorism threat level in MENA region in 2013–2014 with the Islamic State of Iraq and Levant (ISIS) expansion (Korotayev and Khokhlova 2022), we hypothesize that:

MENA region countries are the most violently destabilized among the four analyzed regions.

The total dataset for 1970–2018 includes 10,133 observations, among them 1,201 for MENA, 1,244 for Western Europe, 588 for South America and 2,255 for Sub-Saharan Africa.

We use the Cross-National Time-Series Database (CNTS [Banks and Wilson 2020]) as the principal database for this research. In addition to the CNTS, we use the Global Terrorism Database (START 2020) for the variables indicating *number of terrorist attacks* and *number of people killed* in terrorist attacks whereas we take the *number of coups and coup attempts* from the *Coups d'Etat 1946–2017* database (Center for Systemic Peace 2020).

To identify the principal components (types of instability) for the whole world, a principal components analysis is used. To extract an adequate number of principal components eigenvalues, we use a modified version of the Kaiser criterion, according to which the eigenvalue must be greater than 0.95, and Cattell's scree test (Cattell 1966).

Tests

Cross-National Investigation

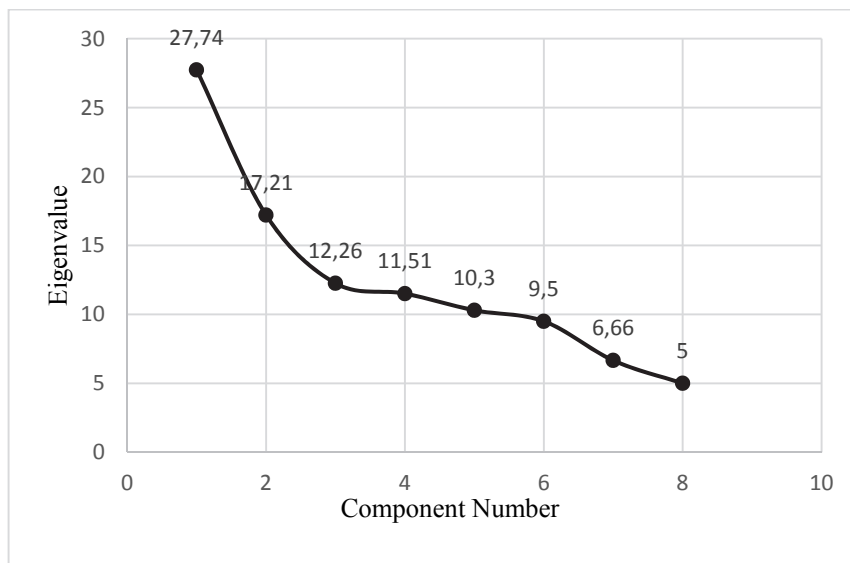
At the first stage, we identify the principal components for the world destabilization processes in order to determine 'typical' for the cross-national sample components using only CNTS database indicators to understand which variables should be included. Firstly, we use observation period of 1946¹ – 2018.

¹ Since CNTS database lacks the data for 1940–1945 because of WWII.

Table 1. Principal components eigenvalues

Component number	Eigenvalue	% of Variance explained
1	2.219	27.74
2	1.377	17.21
3	0.981	12.26
4	0.921	11.51
5	0.824	10.30
6	0.757	9.5
7	0.524	6.66
8	0.397	5

Source: Banks and Wilson 2020.

**Fig. 1.** Principal components eigenvalues. A scree plot for Table 1

Source: Banks and Wilson 2020.

The principal components analysis, with factors rotated by varimax method, gave the following results from 1946 till 2018 for the whole world sample (see Table 2).

Table 2. Loadings of three principal components for the first factor analysis (the whole world)

Political instability indicators	PC1	PC2	PC3
Cnts_domestic1 (Assassinations)	-0.029	0.409	0.597
Cnts_domestic2 (General strikes)	0.789	0.094	-0.010
Cnts_domestic3 (Guerrilla warfare/ Terrorist attacks)	0.183	-0.177	0.798
Cnts_domestic4 (Governmental crisis)	0.132	0.642	0.055
Cnts_domestic5 (Repressions)	0.113	0.551	-0.175
Cnts_domestic6 (Riots)	0.821	0.100	0.148
Cnts_domestic7 (Coups and Coup Attempts)	-0.070	0.701	0.155
Cnts_domestic8 (Anti-government demonstrations)	0.844	0.005	0.051

Source: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

The first component coincides with the result obtained by Hibbs (1973) and Jong-A-Pin (2009). In general, it includes mass protest actions, which may contain separate acts of aggression, but do not lead to large-scale violence. This component can be called ‘*mass protest destabilization*’. The second component deals with instability involving mainly elites and counter-elites rather than masses of population and we called it ‘*elite destabilization*’. The scale of such conflicts may vary from political crises to assassinations, purges/repressions as well as coups and coup attempts. Finally, the third component includes indicators that involve armed violence with the highest loading belonging to guerilla warfare/major terrorist attacks. It is remarkable that among mass destabilization indicators the highest loading belongs to riots that are the only form of mass protest actions that may involve a substantial degree of violence² (unlike antigovernment demonstrations³ and general strikes). We will call this factor ‘*armed destabilization*’.

At the second stage, we add to our factor analysis three more sociopolitical destabilization indicators: number of terrorist attacks and number of the killed people in terrorist attacks from the Global Terrorist Database (START 2020)⁴ and number of coups and coup attempts from *the Coups d'Etat*

² CNTS explicitly defines riots as mass protest actions involving violence, *i.e.* ‘any violent demonstration or clash of more than 100 citizens involving the use of physical force’ (Wilson 2020: 5).

³ CNTS explicitly defines antigovernment demonstration as non-violent mass protest actions, *i.e.* ‘any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature’ (*Ibid.*).

⁴ One should note that due to the fact that Global Terrorism Database starts from 1970, our second factor analysis covers the period between 1970 and 2018.

1946–2017 (Center for Systemic Peace 2018) (see Tables 3, 4). The observation period is 1970–2018.

Table 3. Principal components eigenvalues

Component number	Eigenvalue	% of Variance explained
1	2.802	25.5
2	1.865	16.96
3	1.574	14.31
4	0.946	8.60
5	0.924	8.40
6	0.820	7.45
7	0.610	5.54
8	0.502	4.56
9	0.470	4.27
10	0.350	3.18
11	0.137	1.24

Source: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

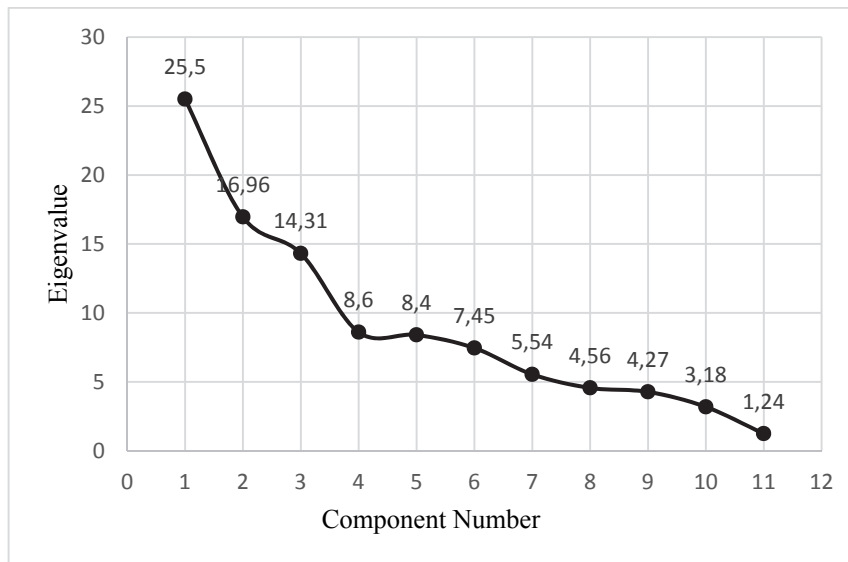


Fig. 2. Principal components eigenvalues. A scree plot for Table 3

Source: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

The principal components analysis, with factors rotated by varimax method, gave the following results for the whole world sample from 1970 till 2018 (see Table 4).

Table 4. Loadings of three principal components for the whole world with the number of people killed in terrorist attacks, number of terror attacks and coups and coup attempts (1970–2018)

Political instability indicators	PC1	PC2	PC3
Cnts_domestic1 (Assassinations)	0.276	0.013	0.465
Cnts_domestic2 (General strikes)	0.022	0.804	0.067
Cnts_domestic3 (Guerrilla warfare)	0.774	0.133	-0.046
Number of Terror Attacks	0.913	0.131	0.086
Number of Killed	0.927	-0.028	0.077
Cnts_domestic4 (Governmental crisis)	0.044	0.144	0.524
Cnts_domestic5 (Repressions)	-0.018	0.198	0.314
Cnts_domestic6 (Riots)	0.139	0.842	0.069
Cnts_domestic7 ('Revolutions')	0.019	-0.065	0.756
Coups and Coup Attempts	-0.080	-0.057	0.685
Cnts_domestic8 (Anti-government demonstrations)	0.085	0.849	0.031

Source: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 4 shows the opposite from the Table 1 results on the world sample with three new variables added to the model: the first component represents 'armed destabilization' type with the crucial values for *number of terrorist attacks*, *number of killed in terrorist attacks*, *domestic3 (guerrilla warfare)* and *cnts_domestic1 (assassinations)*. The second column of data represents 'mass destabilization' type while previously in Table 1 this type of destabilization described the first principal component. The last column demonstrates 'elite destabilization' and covers approximately 15 % of variance of the world instability phenomena. Moreover, taking into account the methodological perspective, Table 4 shows that *cnts_domestic7* and *coups and coup attempts* variables practically replicate each other in terms of the values strength and correlations directions and, as we suppose, are mutually exclusive. Thus, at the third stage, we get rid of the *cnts_domestic7 (revolutions)* variable and it becomes obvious that it does not bring crucial difference to our new test results (see Tables 5, 6).

Table 5. Principal components eigenvalues for the whole world (version with substituted *Cnts_domestic7* with *Coups and Coup Attempts 1970–2018*)

Component number	Eigenvalue	% of Variance explained
1	2.784	27.83
2	1.865	18.65
3	1.262	12.62
4	0.946	9.46
5	0.898	8.98
6	0.782	7.82
7	0.503	5.03
8	0.472	4.72
9	0.350	3.5
10	0.137	1.37

Source: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

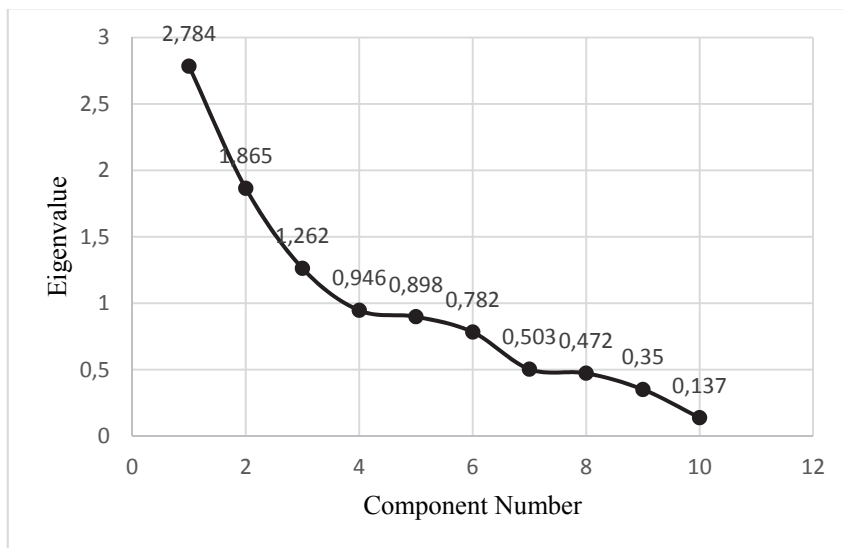


Fig. 3. Principal components eigenvalues. A scree plot for Table 5

Source: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

The principal components analysis with factors rotated by varimax method gave the following results for the whole world sample from 1970 till 2018 with no *cnts_domestic7* index (see Table 6).

Table 6. Loadings of three principal components (version without *cnts_domestic7*, 1970–2018)

Political instability indicators	PC1	PC2	PC3
Cnts_domestic1 (Assassinations)	0.270	-0.016	0.534
Cnts_domestic2 (General strikes)	0.019	0.804	0.084
Cnts_domestic3 (Guerrilla warfare)	0.775	0.139	-0.048
Number of Terror Attacks	0.913	0.131	0.091
Number of Killed	0.928	-0.026	0.068
Cnts_domestic4 (Governmental crisis)	0.032	0.097	0.667
Cnts_domestic5 (Repressions)	-0.027	0.166	0.424
Cnts_domestic6 (Riots)	0.137	0.843	0.085
Coups and Coup Attempts	-0.074	-0.072	0.637
Cnts_domestic8 (Anti-government demonstrations)	0.084	0.853	0.032

Source: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

The test results from Table 6 confirm that the model presented in Table 6 can work without *cnts_domestic7* variable: while excluding this indicator, we get practically the same results for the three principal components which reflect ‘armed destabilization’, ‘mass destabilization’ and ‘elite destabilization’ respectively as in Table 4. Hereafter, the list of variables in all the next tests will be the same as in Tables 5, 6.

In order to find out which countries most contribute to the abovementioned components we use mean values and provide top-20 most destabilized countries of the world in terms mass protest and armed destabilization factors (see Table 7).

Table 7. Top-20 most unstable countries from the perspective of armed and mass protest types of destabilization, 1970–2018

Armed Destabilization			Mass Protest Destabilization		
Number	Country name	Value	Number	Country name	Value
1	Iraq	4.320	1	India	3.793
2	Afghanistan	2.808	2	South Africa	1.144
3	Pakistan	1.577	3	USA	1.139
4	India	1.090	4	China	1.025
5	Colombia	1.085	5	Greece	1.021
6	Ukraine	1.044	6	France	0.959
7	Nigeria	1.042	7	Bangladesh	0.829
8	Somalia	0.711	8	Pakistan	0.762
9	Syria	0.703	9	UK	0.754
10	Philippines	0.689	10	Spain	0.746

Continuation of the Table

1	2	3	4	5	6
11	Yemen	0.564	11	USSR	0.738
12	El Salvador	0.499	12	Israel	0.713
13	Peru	0.467	13	Argentina	0.682
14	South Sudan	0.430	14	Italy	0.624
15	Sri Lanka	0.426	15	Korea	0.578
16	Turkey	0.376	16	Russia	0.553
17	Algeria	0.314	17	Egypt	0.499
18	Egypt	0.254	18	Nepal	0.498
19	UK	0.248	19	Bolivia	0.469
20	Libya	0.216	20	Chile	0.441

Note: MENA region/Afrasian instability macrozone countries are highlighted with darker color.

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 7 demonstrates that almost half of the world's most violently destabilized countries are located in MENA region, for example Iraq, Afghanistan, Somalia, Syria, Yemen, South Sudan, Turkey, Algeria, Egypt and Libya. It should also be noted that Pakistan which sometimes is included in the 'Greater Middle East' and the 'Broader Middle East and North Africa (BMENA)' (see, e.g., Perthes 2004; Latif and Abbas 2011; Markakis 2015), and Nigeria, where Islamic radical movement Boko Haram (now Islamic State's West Africa Province, ISWAP)⁵ operates which pledged its alliance to ISIS⁶ in 2015, are also among the top-20 most violently destabilized countries. Moreover, two of MENA countries, Iraq and Afghanistan, occupy the first two places and are followed by Pakistan which comes third. Together, the values for the MENA countries, which are part of 'semi-periphery system' together with Pakistan, Nigeria, and Mali (see Table 2) comprise more than 70 % of the total violent destabilization factor score points for top-20 violently destabilized countries of the world.

One should also note that both Pakistan, Nigeria, Mali, Somalia, and South Sudan belong to the Afrasian Instability Zone (which includes, in addition to the Greater Middle East, the macro Sahel zone of the Sub-Saharan Africa with Nigeria, as well as such highly destabilized countries as Mali, Somalia and South Sudan). This macrozone has been shown to be characterized by especially high levels of violent destabilization (Korotayev, Issaev *et al.* 2016; Korotayev, Grinin, Malkov *et al.* 2021, *etc.*). Hence, this study provides additional support for this conclusion.

⁵ Terrorist organization banned in Russia.

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Besides, the top-20 violently destabilized countries of the world also include Colombia and Peru which are the countries of the South America region which is the second 'semi-periphery zone'. Other countries, namely India, Ukraine, the Philippines, El Salvador and Sri Lanka belong to the regions which are not analyzed in this study (except for the UK which is a Western European state).

Concerning mass protest destabilization type, it is obvious that is not very typical for the 'semi-periphery' zones: only Pakistan, Israel and Egypt occupy the 8th, 12th and 17th places respectively out of top-20 most non-violently destabilized countries. The largest share of this destabilization factor belongs to Western Europe countries, India and China. At the same time, we observe countries of South America in the top-20 non-violently destabilized countries of the world, for example Argentina, Bolivia and Chile.

At the next stage, we divide the observation period into two and analyze how the countries list changes (see Table 8).

Table 8. Top-20 most unstable countries in terms of armed destabilization for the periods before and after the Arab Spring

1970–2010			2011–2018		
Number	Country name	Value	Number	Country name	Value
1	Colombia	3.148	1	Iraq	8.158
2	Iraq	3.008	2	Afghanistan	6.908
3	India	2.193	3	Pakistan	3.138
4	Peru	2.012	4	Nigeria	2.722
5	El Salvador	1.783	5	Somalia	2.205
6	Sri Lanka	1.655	6	Syria	1.895
7	Pakistan	1.305	7	Yemen	1.637
8	Philippines	1.235	8	Ukraine	1.527
9	Guatemala	1.235	9	Philippines	1.149
10	Afghanistan	1.162	10	India	1.083
11	Algeria	1.116	11	Libya	0.846
12	UK	0.948	12	Egypt	0.580
13	Nicaragua	0.869	13	Turkey	0.417
14	Turkey	0.861	14	Colombia	0.372
15	Lebanon	0.857	15	Thailand	0.346
16	Spain	0.781	16	DRC	0.232
17	USA	0.395	17	Cameroon	0.209
18	Russia	0.344	18	Mali	0.168
19	Italy	0.343	19	Burundi	0.152
20	Angola	0.336	20	Mozambique	0.086

Note: MENA region/Afrasian instability macrozone countries are highlighted with darker color.

Table 8 demonstrates that MENA countries as part of 'semi-periphery zone' occupy more than a quarter of all the places in the list of top-20 most violently destabilized countries of the world before 2011. These countries are Iraq, Afghanistan, Algeria, Turkey and Lebanon (with Pakistan as the sixth country if we take into account BMENA/Afrasian instability macrozone). Moreover, Iraq and Colombia practically share the first place as their values are approximately the same for the period before 2011 (3.1 and 3 respectively), while other countries values are at least 1.5 times smaller.

South America 'semi-periphery region' countries also occupy a large share of the list: Colombia comes first, Peru takes the fourth place.

Since the Arab Spring, the values for the first two countries (Iraq and Afghanistan) comprise almost 45 % of all the countries values. In total, MENA countries values after 2011 comprise approximately 66 % of all top-20 most violently destabilized countries values. It must be noted that the first seven lines of the rating goes to MENA countries, Pakistan and Nigeria, the list is interrupted by Ukraine, the Philippines and India, which are not included in the four regions of the world-system zones of this paper. Thus, one can see that among the four analyzed regions MENA is the most violently destabilized. On the other hand, if we take into account the Afrasian instability zone as a whole, most of top-20 countries belong to it.

Table 9. Top-20 most unstable countries in terms of mass protests destabilization for the periods before and after the Arab Spring

1970–2010			2011–2018		
Number	Country name	Value	Number	Country name	Value
1	2	3	4	5	6
1	India	2.91	1	India	7.393
2	South Africa	2.054	2	USA	2.751
3	USSR	1.714	3	Greece	2.301
4	Korea	1.585	4	China	1.944
5	Israel	1.472	5	France	1.569
6	Argentina	1.343	6	Egypt	1.358
7	Pakistan	1.214	7	UK	1.189
8	Russia	1.155	8	Bangladesh	1.151
9	Spain	1.069	9	Spain	1.134
10	Italy	1.02	10	Pakistan	1.087
11	Bolivia	1.029	11	South Africa	0.996

Continuation of the Table

1	2	3	4	5	6
12	France	1.018	12	Nepal	0.92
13	Bangladesh	0.952	13	Italy	0.96
14	China	0.851	14	Brazil	0.864
15	UK	0.838	15	Venezuela	0.832
16	Haiti	0.771	16	Turkey	0.727
17	Poland	0.731	17	Mexico	0.657
18	Serbia	0.716	18	Sudan	0.64
19	Indonesia	0.655	19	Chile	0.633
20	Yugoslavia	0.6	20	Bahrain	0.617

Note: MENA region/Afrasian instability macrozone countries are highlighted with darker color.

Table 9 demonstrates that except for Israel none of MENA countries are included in top-20 most non-violently unstable countries of the world before 2011 (in addition to Pakistan from the Afrasian instability macrozone). Serious mass protest destabilization type in MENA occurs after the Arab Spring, and predictably affects Egypt, Turkey, Sudan and Bahrain. However, together their values explain 11 % of the 20 countries list.

To sum up, the preliminary results of the factor analysis of socio-political destabilization on the world sample show that MENA countries which belong to 'semi-periphery' world-system zone are the most violently destabilized for the period of 1970–2018 in the whole world: together with Pakistan, Nigeria, Somalia and Mali (from the Afrasian instability macrozone) their values comprise more than 70 % of the total values for top-20 destabilized countries. Serious escalation of armed destabilization occurs predictably after 2011, when the countries of this region occupy more than two thirds of values of the top-20 violently destabilized states of the world.

The next task is to identify what the MENA region socio-political destabilization factors peculiarities are and which indicators each of the three mentioned dimensions includes.

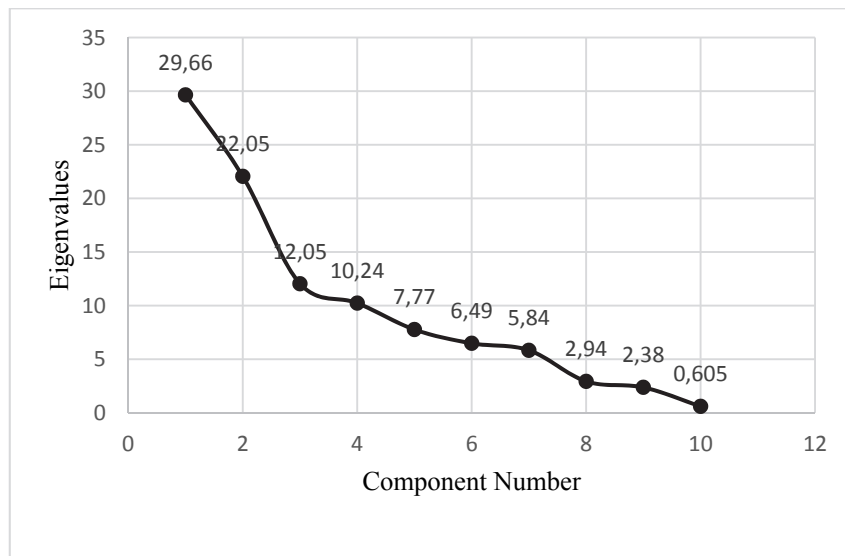
Middle East and North Africa

In this section, we use principal component (PC) analysis in order to investigate the peculiarities of MENA socio-political destabilization dimensions for 1970–2018 (see Tables 10, 11).

Table 10. Principal components (PC) eigenvalues for MENA (1970–2018)

Component number	Eigenvalue	% of Variance explained
1	2.966	29.66
2	2.205	22.05
3	1.205	12.05
4	1.024	10.24
5	0.777	7.77
6	0.648	6.49
7	0.583	5.84
8	0.294	2.94
9	0.237	2.38
10	0.061	0.61

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

**Fig. 4.** Principal components eigenvalues. A scree plot for Table 10

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

The principal components analysis, with factors rotated by varimax method, gave the following results for MENA in 1970–2018 (see Table 11).

Table 11. Loadings of three principal components for MENA (1970–2018)

Political instability indicators	PC1	PC2	PC3	PC4
Cnts_domestic1 (Assassinations)	0.266	0.047	0.728	-0.016
Cnts_domestic2 (General strikes)	-0.096	0.691	0.204	-0.152
Cnts_domestic3 (Guerrilla warfare)	0.896	0.060	-0.037	0.008
Number of Terror Attacks	0.944	0.050	0.174	-0.006
Number of Killed	0.948	0.000	0.158	-0.021
Cnts_domestic4 (Governmental crises)	-0.022	0.124	0.821	0.119
Cnts_domestic5 (Purges/Repressions)	0.025	0.508	-0.062	0.551
Cnts_domestic6 (Riots)	0.125	0.829	0.080	0.078
Coups and Coup Attempts	-0.032	-0.090	0.132	0.883
Cnts_domestic8 (Anti-government demonstrations)	0.072	0.887	-0.018	0.079

Note: PC = principal component.

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 11 demonstrates that the PC1 of destabilization for MENA for 1970–2018 is the ‘armed’ one, which comprises approximately 30 % of all instability phenomena, according to Table 3. We also see that PC1 is produced mostly by *guerilla warfare*, *number of terror attacks* and *number of people killed in those attacks* and to a smaller extent by *assassinations*. The PC2 reflects mass protest destabilization which encompasses 22 % of variance explained. It must be noted that besides those indicators which are typical for mass destabilization on the world sample (see Table 6), like *general strikes*, *riots* and *anti-government demonstrations* indicators, MENA mass destabilization PC2 also includes *purges/repressions* with loadings twice higher than PC2 *assassinations* indicator for the world sample does. This appears to imply that in the MENA region protests are associated with repressions much stronger than in the other parts of the world. The elite destabilization for MENA is divided into two components: PC3 and PC4, which together comprise 22 % of variance that is comparable with PC2 – mass protest destabilization component.⁷

Further we analyze the same components after dividing the observation period into two: before and after 2011 (see Tables 12, 13).

⁷ PC3 consists of *cnts_domestic1 (assassinations)* and *cnts_domestic4 (governmental crisis)* indicators, while PC4 is presented by *coups and coups attempts and repressions*. Such a division of one component into two deserves a separate investigation, so we decided to concentrate only on mass protest and armed destabilization in this paper. Elite destabilization for all the regions will be discussed in another article.

Table 12. Principal components eigenvalues for MENA for the periods before and after the Arab Spring

Component number	1970–2010		Component number	2011–2018	
	Eigenvalue	% of Variance explained		Eigenvalue	% of Variance explained
1	2.843	28.43	1	2.991	29.91
2	1.815	18.15	2	2.386	23.87
3	1.320	13.2	3	1.116	11.16
4	0.891	8.91	4	0.985	9.85
5	0.788	7.88	5	0.712	7.12
6	0.696	6.96	6	0.675	6.75
7	0.632	6.32	7	0.592	5.92
8	0.545	5.45	8	0.275	2.75
9	0.321	3.21	9	0.216	2.16
10	0.150	1.49	10	0.051	0.51

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 13. Loadings of principal components for MENA for the periods before and after the Arab Spring

Political instability indicators	1970–2010			2011–2018			
	PC1	PC2	PC3	PC1	PC2	PC3	PC4
Cnts_domestic1 (Assassinations)	0.594	0.250	0.232	0.261	-0.008	0.690	-0.144
Cnts_domestic2 (General strikes)	-0.023	0.709	-0.054	-0.101	0.742	0.010	-0.283
Domestic3 (Guerrilla warfare)	0.304	0.115	0.523	0.903	-0.045	-0.029	0.072
Number of Terror Attacks	0.922	0.015	-0.038	0.944	-0.023	0.197	0.007
Number of Killed	0.922	-0.024	-0.025	0.954	-0.062	0.134	-0.043
Cnts_domestic4 (Governmental crisis)	0.324	0.525	0.345	-0.027	0.017	0.862	0.145
Cnts_domestic5 (Repressions)	0.018	0.028	0.727	-0.072	0.605	0.000	0.317
Cnts_domestic6 (Riots)	0.032	0.876	0.022	0.057	0.737	0.037	0.352
Coups and Coup Attempts	-0.092	-0.048	0.687	0.025	0.153	0.032	0.882
Cnts_domestic8 (Anti-government demonstrations)	0.106	0.792	0.046	-0.023	0.898	-0.024	0.057

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

As shown in Tables 12, 13, the loadings of socio-political destabilization indicators in the MENA region before and after the 2011 turbulence have their own peculiarities. Although, PC1 for the both periods is ‘armed’ and PC2 for both periods describes ‘mass protest’ destabilization; PC3 for both periods rep-

resents 'elite destabilization' (in fact, PC4 for 2011–2018 observation period also reflects primarily elite destabilization), the results are different as regards the component indicator sets. *Assassinations* indicator is significant for all of the three destabilization dimensions with the highest eigenvalues before 2011. Before 2011, PC1, besides *guerilla warfare*, *number of terror attacks* and *number of people killed in terror attacks* (which were typical for 1970–2010 observation period) as well as *assassinations* also includes *governmental crises*, while for PC1 for the period after 2011 this is not true. It is also possible to indicate an increase in the values of *guerilla warfare*, *number of terror attacks* and *number of people killed in terror attacks* after 2011: the largest escalation is observed for *guerilla warfare* which grows from 0.304 to 0.903. Predictably, significant increase is observed for the loadings of *number of terror attacks* and *number of people killed in terror attacks* indicators. Thus, this implies the decline of the role of *assassinations* in the armed destabilization in MENA region after 2010 and the increase of importance of the *guerilla warfare*.

PC2 for MENA, besides *general strikes*, *riots* and *anti-government demonstrations*⁸ include *assassinations* before 2011 and *repressions* after the start of the Arab Spring. Since 2011 there has been a different change in PC2: one can see that there is no *assassinations* indicator for the 2011–2018 observation period. Moreover, the loading value for *riots* indicator which includes certain violence (see Banks and Wilson 2020) is lower than the value before 2011. In general, one may observe the decline of the *assassinations* contribution to the mass protest destabilization after 2010 (note that the same is shown above with the respect to the bloody destabilization component). After 2010, one can also see the increasing contribution of *general strikes* and *anti-government demonstrations* to the mass protest destabilization and appearance of *purges/repressions* as a significant contributor. This seems to be associated with the fact that after 2010 in MENA mass protests became especially tightly associated with repressions (this was not observed, *e.g.*, in Western Europe and South America and quite predictably the repressions are not found among the contributors to the respective principal component [see below]).

It is important to note that while the percent of variance explained for armed destabilization before and after the Arab Spring hardly changed (from 28.43 % to 29.91 %), this loading value growth for mass protest destabilization is very significant (from 18.15 % to 23.87 %).⁹

⁸ These indicators are of the typical mass protest destabilization according to the tests results for the whole world sample (see Tables 5 and 6).

⁹ Since elite destabilization factor is divided into two components after 2011 (PC3 and PC4) with its own features as PC3 contains only assassinations and governmental crisis indicators while PC4 – repressions, riots and coups and coup attempts, we consider the problem of elite destabilization factor to be a topic for a separate research.

As a result, MENA destabilization types have their special features shown in the indicators sets. It is observed that the role of *assassinations* in the armed destabilization in MENA region after 2010 declined while *guerilla warfare* indicator increased in its value. The same trend for *assassinations* is indicated for mass protest destabilization before and after 2010 while the loading values for *general strikes* and *anti-government demonstrations* significantly grew. Moreover, *purges/repressions* as a crucial contributor is observed for mass protest destabilization after the start of the Arab Spring. It is also shown that the percent of variance explained for armed destabilization before and after the Arab Spring hardly changed (from 28.43 % to 29.91 %), this value growth for mass protest destabilization is very significant (from 18.15 % to 23.87 %).

Western Europe

At the next stage, we replicate the same tests for Western Europe. In Table 14 we identify the main components (types of instability) for the region and use the same principal components analysis for 1970–2018 in order to compare the results further with the ones for MENA.

Table 14. Principal components eigenvalues for Western Europe (all years)

Component number	Eigenvalue	% of Variance explained
1	2.954	29.54
2	1.531	15.306
3	1.363	13.63
4	0.997	9.97
5	0.803	8.03
6	0.655	6.55
7	0.557	5.57
8	0.539	5.39
9	0.336	3.36
10	0.267	2.67

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

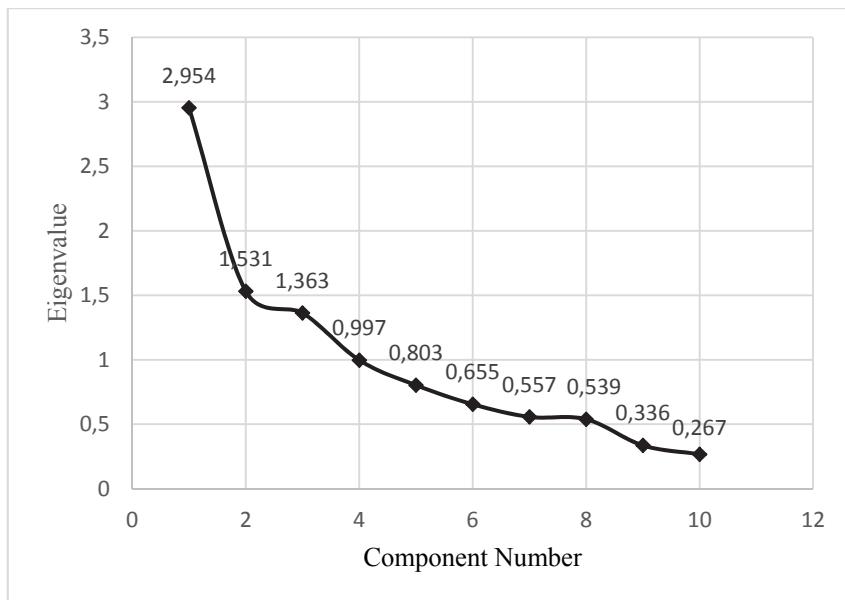


Fig. 5. Principal components eigenvalues. A scree plot for Table 14

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

The principal components analysis, with factors rotated by varimax method, yields the following results for Western Europe in 1970–2018 (see Table 15).

Table 15. Loadings of principal components for Western Europe (1970–2018)

Political instability indicators	PC1	PC2	PC3	PC4
Cnts_domestic1 (Assassinations)	-0.007	0.572	0.003	0.538
Cnts_domestic2 (General strikes)	0.748	0.015	-0.043	0.210
Cnts_domestic3 (Guerrilla warfare)	0.535	0.463	0.144	-0.125
Number of Terror Attacks	0.178	0.878	-0.034	0.100
Number of Killed	0.073	0.835	0.022	-0.093
Cnts_domestic4 (Governmental crisis)	0.176	-0.061	0.057	0.802
Cnts_domestic5 (Repressions)	0.037	-0.025	0.881	-0.111
Cnts_domestic6 (Riots)	0.825	0.143	0.037	0.074
Coups and Coup Attempts	0.013	0.065	0.674	0.445
Cnts_domestic8 (Anti-government demonstrations)	0.848	0.069	0.021	0.018

Predictably, the world-system center represented by Western European countries, is still 30 % much more vulnerable to ‘mass protest destabilization’ type rather than to ‘armed destabilization’ which constitutes half of the first component (15 %). It is predictable that the ‘armed destabilization’ is especially typical for Western Europe before the 21st century as well as elite destabilization type after the last democratic transitions occurred in 1975 in the region.¹⁰ These hypotheses may be proved after splitting the sample into the two periods before and after 2011 (see Tables 16 and 17).

Table 16. Principal components eigenvalues for Western Europe for the periods before and after the Arab Spring

1970–2010			2011–2018		
Component number	Eigenvalue	% of Variance explained	Component number	Eigenvalue	% of Variance explained
1	3.094	30.94	1	3.191	39.88
2	1.477	14.77	2	1.278	15.98
3	1.095	10.95	3	1.122	14.02
4	0.941	9.41	4	0.814	10.18
5	0.876	8.76	5	0.588	7.35
6	0.637	6.37	6	0.451	5.64
7	0.622	6.22	7	0.316	3.95
8	0.571	5.72	8	0.240	3
9	0.443	4.34			
10	0.243	2.43			

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

The principal components analysis, with factors rotated by varimax method, yields the following results for Western Europe in 1970–2010 and 2011–2018 (see Table 17).

Table 17. Loadings of principal components for Western Europe for the periods before and after the Arab Spring¹¹

Political instability indicators	1970–2010			2011–2018		
	PC1	PC2	PC3	PC1	PC2	PC3
1	2	3	4	5	6	7
Cnts_domestic1 (Assassinations)	0.522	0.295	0.091	–0.027	–0.119	0.866

¹⁰ Obviously, ‘elite destabilization’ type is represented by a high value of coups and coup attempts as the chronological framework covers the third wave of democratization in Europe of 1974–1975.

¹¹ Since purges, coups and coup attempts indicators are equal to 0 for Europe after 2011 one should exclude these indicators from the model for 2011–2018 observation period.

Continuation of the Table

1	2	3	4	5	6	7
Cnts_domestic2 (General strikes)	0.147	0.710	-0.072	0.817	0.166	-0.123
Cnts_domestic3 (Guerrilla warfare)	0.615	0.166	0.129	0.367	0.712	0.281
Number of Terror Attacks	0.880	0.163	-0.058	0.302	0.430	0.638
Number of Killed	0.844	-0.035	-0.040	0.093	0.789	-0.108
Cnts_domestic4 (Governmental crisis)	-0.089	0.690	0.123	0.569	-0.484	-0.088
Cnts_domestic5 (Purges)	0.018	-0.042	0.829			
Cnts_domestic6 (Riots)	0.338	0.594	0.102	0.759	0.222	0.372
Coups and Coup Attempts	0.061	0.230	0.745			
Cnts_domestic8 (Anti-government demonstrations)	0.304	0.658	0.148	0.720	0.256	0.395

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

In fact, Tables 16, 17 suggest that for Western Europe before the Arab Spring, PC1, although not that obviously like for MENA sample, represents armed destabilization with the highest loadings for *assassinations*, *guerilla warfare*, *number of terror attacks*, *number of people killed in terror attacks*, accompanied by *riots* and *anti-government demonstrations*. This component explains 30 % of variance. Mass protest destabilization indicator is represented by PC2 which does not explain even 15 % of variance and besides *general strikes*, *riots* and *anti-government demonstrations* is accompanied by *assassinations* and *governmental crisis* indicators.¹²

The results for the period after the Arab Spring are different as, obviously, PC1 swamps with PC2, so the highest loadings of PC1 reflect mass protest destabilization and are driven by *general strikes*, *riots* and *anti-government demonstrations*. The armed destabilization component for Western Europe for 2011–2018 splits into two while we observe no pronounced elite destabilization PC for the region after 2011.

On the whole, Western Europe is predictably more unstable than MENA in terms of mass protest destabilization which is accompanied by governmental crises whereas no *purges/mass repressions* are observed for the region after

¹² Concerning elite destabilization type (PC3) in Western Europe in 1970–2010, it is important to note that it consists of high loadings for repressions and coups and coup attempts indicators – the variables which are absent for the same observations for 2011–2018.

2010 while this indicator becomes the key contributor for MENA (and the Afrasian instability macrozone, as a whole) after the Arab Spring.

South America

At the next stage, we replicate the same tests for the South America region. In Table 18 we identify the main types of instability for the region using the principal components analysis for 1970–2018.

Table 18. Principal components eigenvalues for South America (1970–2018)

Component number	Eigenvalue	% of Variance explained
1	2.198	21.99
2	1.956	19.56
3	1.336	13.36
4	1.034	10.34
5	0.896	8.96
6	0.785	7.85
7	0.725	7.25
8	0.648	6.48
9	0.295	2.95
10	0.127	1.27

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

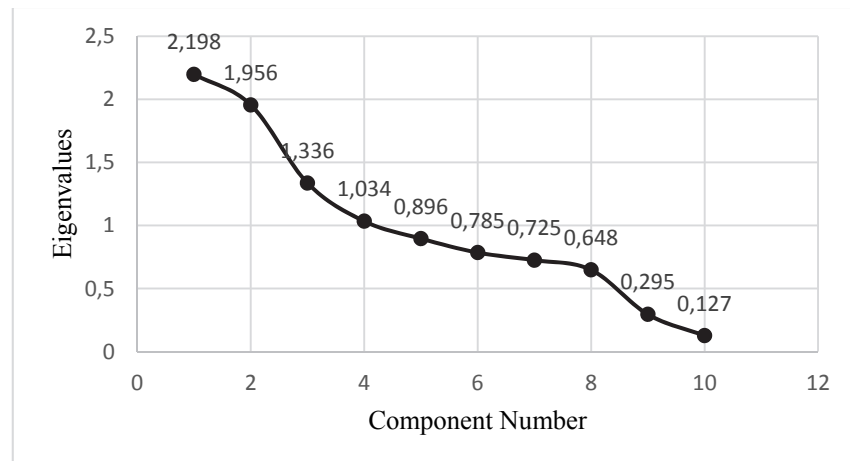


Fig. 9. Principal components eigenvalues. A scree plot for Table 18

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 19. Loadings of principal components for South America (1970–2018)

Political instability indicators	PC1	PC2	PC3	PC4
Cnts_domestic1 (Assassinations)	0.566	0.019	0.076	0.338
Cnts_domestic2 (General strikes)	0.099	0.479	0.416	-0.369
Cnts_domestic3 (Guerrilla warfare)	0.199	0.413	0.093	-0.176
Number of Terror Attacks	0,930	0.057	-0.018	-0.100
Number of Killed	0,918	-0.009	0.011	-0.100
Cnts_domestic4 (Governmental crisis)	0.079	0.119	0.768	0.004
Cnts_domestic5 (Repressions)	0.008	0.116	0.155	0.839
Cnts_domestic6 (Riots)	-0.040	0.876	-0.033	0.182
Coups and Coup Attempts	-0.056	-0.091	0.777	0.177
Cnts_domestic8 (Anti-government demonstrations)	-0.083	0.852	-0.018	0.132

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Tables 18 and 19 show that as well as for MENA, PC1 for South America reflects armed destabilization type factor with typical ‘armed’ indicators (see Table 6) like *assassinations*, *number of terror attacks* and *number of people killed* in them. PC2 also deals with ‘typical’ (see Table 6) mass protest instability indicators involving *general strikes*, *riots* and *anti-government demonstrations*, so this component may be called ‘mass protest destabilization’ type. ‘Elite destabilization’ in South America is divided into PC3 and PC4 and has its own unusual features because of the region history.

At the next stage, we investigate what happens after the observation period is divided into two parts – before and after the Arab Spring.

Table 20. Principal components eigenvalues for South America for the periods before and after the Arab Spring

1970–2010			2011–2018		
Component number	Eigenvalue	% of variance explained	Component number	Eigenvalue	% of variance explained
1	2	3	4	5	6
1	2.530	25.30	1	2.656	29.52
2	1.931	19.31	2	2.069	22.97

Continuation of the Table

1	2	3	4	5	6
3	1.286	12.86	3	1.304	14.49
4	0.988	9.88	4	0.994	11.05
5	0.829	8.29	5	0.648	7.2
6	0.705	7.05	6	0.583	6.47
7	0.693	6.93	7	0.441	4.9
8	0.5	5	8	0.257	2.86
9	0.417	4.17	9	0.050	0.553
10	0.121	1.21			

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 21. Loadings of principal components for South America for the periods before and after the Arab Spring

Political instability indicators	1970–2010				2011–2018			
	PC1	PC2	PC3	PC4	PC1	PC2	PC3	PC4
Cnts_domestic1 (Assassinations)	0.515	0.102	-0.024	0.500	0.087	0.001	0.858	-0.065
Cnts_domestic2 (General strikes)	0.134	0.610	0.280	-0.273	0.285	0.645	-0.241	-0.300
Cnts_domestic3 (Guerrilla warfare)	0.488	0.056	0.500	0.367	0.772	0.237	-0.131	-0.032
Number of Terror Attacks	0.925	0.030	-0.026	-0.050	0.955	0.003	0.007	-0.024
Number of Killed	0.920	-0.040	0.023	-0.084	0.950	-0.057	0.102	-0.030
Cnts_domestic4 (Governmental crisis)	0.089	0.316	0.733	0.069	-0.029	0.084	-0.081	0.956
Cnts_domestic5 (Repressions)	-0.108	0.023	0.145	0.800	-0.100	0.235	0.751	-0.002
Cnts_domestic6 (Riots)	-0.004	0.784	0.024	0.256	0.058	0.853	0.207	0.066
Coups and Coup Attempts	-0.113	-0.059	0.785	0.044				
Cnts_domestic8 (Anti-government demonstrations)	-0.043	0.828	0.017	0.017	-0.062	0.834	0.221	0.209

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

After dividing the observation period into two (before and after the Arab Spring) we see that 2011 phenomena had an effect on the socio-political dynamics of South America countries: the percent of variance for all three types of destabilization sharply grew. Like for MENA countries, PC1 for the both periods is defined as armed destabilization component which comprises 26–30 % of variance explained, mass protest destabilization (PC2) comprises 19–23 % of variance and elite destabilization (PC3 and PC4) makes 13–24 % of variance explained.

Before 2011, PC1 highest loading indicators are the same as for MENA, for example *assassinations*, *guerilla warfare*, *number of terror attacks* and *number of people killed* in terror attacks (see Table 4). PC2 includes typical indicators (see Table 6) set which consists of *general strikes*, *riots* and *anti-government demonstrations*.

Since 2011, PC1 for South America which reflects armed destabilization is accompanied by *general strikes* instead of *assassinations*; one could also observe some growth for *assassinations*, *guerilla warfare*, *number of terror attacks* and *number of people killed* in terror attacks indicators values, the largest escalation is noticed for *guerilla warfare* (from 0.490 to 0.771). Small growth of PC2 (mass protest destabilization) key indicators (*general strikes*, *riots* and *anti-government demonstrations*) is observed. One should note that although South America is the ‘semi-periphery’ zone of the World-System, like MENA region, its PC2 does not include ‘purges/mass repressions’ indicator which MENA PC2 (‘mass protest’ destabilization component) does.

Sub-Saharan Africa

At the next stage, we replicate the same tests for Sub-Saharan Africa. In Table 22 we identify the main principal components (types of instability) for the region for 1970–2018.

Table 22. Principal component eigenvalues for Sub-Saharan Africa (1970–2018)

Component number	Eigenvalue	% of Variance explained
1	3.209	32.09
2	1.653	16.52
3	1.395	13.95
4	0.970	9.7
5	0.765	7.65
6	0.703	7.03
7	0.654	6.54
8	0.289	2.89
9	0.197	1.97
10	0.164	1.64

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

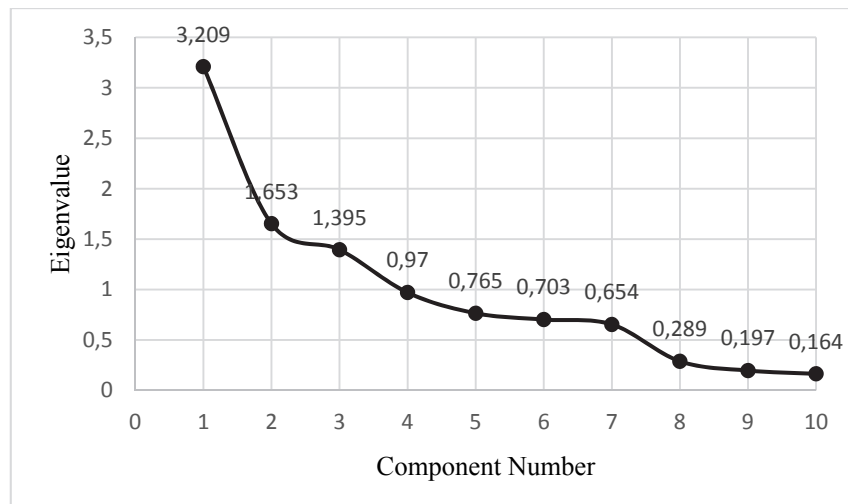


Fig. 7. Principal component eigenvalues. A scree plot for Table 22

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 23. Loadings of principal components for Sub-Saharan Africa (1970–2018)

Political instability indicators	PC1	PC2	PC3	PC4
Cnts_domestic1 (Assassinations)	0.139	0.003	0.731	0.222
Cnts_domestic2 (General strikes)	0.039	0.700	0.048	0.154
Cnts_domestic3 (Guerrilla warfare)	0.918	0.123	0.047	-0.020
Number of Terror Attacks	0.888	0.280	0.071	-0.033
Number of Killed	0.939	0.048	0.038	0.019
Cnts_domestic4 (Governmental crisis)	-0.031	0.184	0.022	0.773
Cnts_domestic5 (Repressions)	-0.022	0.103	0.844	-0.022
Cnts_domestic6 (Riots)	0.105	0.856	0.084	-0.028
Coups and Coup Attempts	0.002	-0.067	0.146	0.757
Cnts_domestic8 ('Anti-government demonstrations')	0.283	0.835	-0.006	-0.008

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Tables 22 and 23 show that Sub-Saharan Africa is the leader among the four regions analyzed in terms of percentage of variance by type of armed destabilization over 1970–2018, accounting for 32 % of the explained variance, which is 2 % higher than for MENA. PC1 includes the highest loadings for *guerilla warfare*, *number of terror attacks* and *number of people killed* in terror

attacks indicators which are ‘typical’ for this type of destabilization for the world sample (see Table 6).

Mass protest destabilization (PC2) explains only 16 % of variance which is the lowest result for all the four regions. PC2 includes the highest loadings for *general strikes, riots* and *anti-government demonstrations* which are ‘typical’ for the mass protest type of instability for the world sample.

The test results with the observation period divided into two are presented in Tables 24 and 25.

Table 24. Principal components eigenvalues for Sub-Saharan Africa for the periods before and after the Arab Spring

1970–2010			2011–2018		
Component number	Eigenvalue	% of Variance explained	Component number	Eigenvalue	% of Variance explained
1	2.625	26.25	1	3.339	33.4
2	1.486	16.82	2	1.790	17.91
3	1.270	12.70	3	1.511	15.11
4	0.972	9.72	4	0.971	9.71
5	0.866	8.66	5	0.783	7.83
6	0.762	7.62	6	0.541	5.71
7	0.738	7.39	7	0.462	4.63
8	0.677	6.77	8	0.289	2.9
9	0.396	3.96	9	0.154	1.54
10	0.208	2.08	10	0.129	1.3

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Table 25. Loadings of principal components for Sub-Saharan Africa for the periods before and after the Arab Spring

Political instability indicators	1970–2010				2011–2018			
	PC1	PC2	PC3	PC4	PC1	PC2	PC3	PC4
1	2	3	4	5	6	7	8	9
Cnts_domes- tic1 (Assas- sinations)	0.059	0.123	0.638	0.224	0.261	-0.026	0.759	-0.051
Cnts_dome- stic2 (Gen- eral strikes)	0.412	0.391	0.073	0.331	0.015	0.801	-0.050	0.011
Cnts_dome- stic3 (Guer- rilla war- fare)	0.005	0.232	0.707	-0.170	0.920	0.163	0.056	-0.028
Number of Terror Attacks	0.369	0.779	0.059	-0.032	0.919	0.229	0.067	-0.035

Continuation of the Table

1	2	3	4	5	6	7	8	9
Number of Killed	-0.076	0.848	0.098	-0.034	0.951	0.047	0.035	0.011
Cnts_dome stic4 (Gov- ernmental crisis)	0.142	0.085	0.104	0.736	-0.029	0.120	-0.021	0.944
Cnts_dome stic5 (Re- pressions)	0.065	-0.143	0.682	0.207	-0.043	0.105	0.791	-0.202
Cnts_dome stic6 (Riots)	0.908	0.085	0.077	-0.009	0.127	0.869	0.072	0.064
Coups and Coups At- tempts	-0.052	-0.042	0.094	0.750	-0.053	-0.077	0.640	0.227
Cnts_dome stic8 (Anti- government demonstra- tions)	0.923	0.072	0.027	0.070	0.302	0.819	-0.015	0.072

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

Tables 24 and 25 demonstrate that after dividing the observation period into two (before and after the Arab Spring) the percentage of variance explained by armed destabilization reaches its all-time highs of 33 % for 2011–2018 period for the Sub-Saharan Africa countries. The differences in percent of values of the principal components for the region before and after the Arab Spring show that the 2011 phenomena for Sub-Saharan region resulted predominantly in the escalation of armed destabilization while a relatively small mass protest destabilization escalation is observed.

It must be noted that before 2011 PC1 for Sub-Saharan Africa has the highest loadings of mass protest destabilization indicators (which is not typical for MENA region, MENA PC1 reflects armed destabilization) and includes *general strikes*, *riots* and *anti-government demonstrations* accompanied by *number of terror attacks* indicator, which is a unique feature for Sub-Saharan region (where, in fact, the first PC turns out to be a mixture of the mass protest and armed destabilization). One can state that the presence of *number of terror attacks* among the significant contributors to mass protest destabilization for Sub-Saharan Africa before 2011 suggests that the mass protest destabilization in that part of the world was of a rather special type involving a rather substantial violent component.

The second principal component before 2011 comes as armed destabilization with its highest values of *guerilla warfare*, *number of terror attacks*, *number of people killed* in terror attacks and *general strikes*, which is not typical for other regions either.

After 2011, Sub-Saharan Africa principal components coincide with MENA's, with armed destabilization type coming as PC1, followed by mass protest destabilization as PC2. Strong loadings escalation for armed destabilization indicators is observed after 2011. It also includes assassinations and anti-government demonstrations after 2011, but no longer includes general strikes.

It is interesting that PC2 indicators set after 2011 is the same as before the Arab Spring for Sub-Saharan Africa region (of a special interest is that the number of terrorist attacks remains among significant contributors to mass protest destabilization).¹³

Discussion

Using the tests results above on the percent of variance explained by each type of socio-political instability factor for the abovementioned four world-system regions in 1970–2018 (see Tables 10, 14, 18, and 22), it is possible to provide the next general comparisons (see Figs 8 and 9).

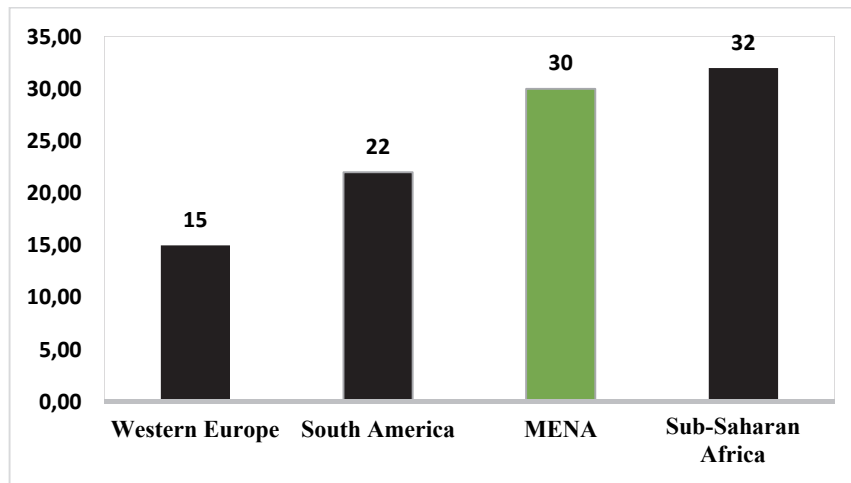


Fig. 8. Armed destabilization type percent of variance, 1970–2018

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

¹³ Elite destabilization for both observed periods is divided into two and has its own features.

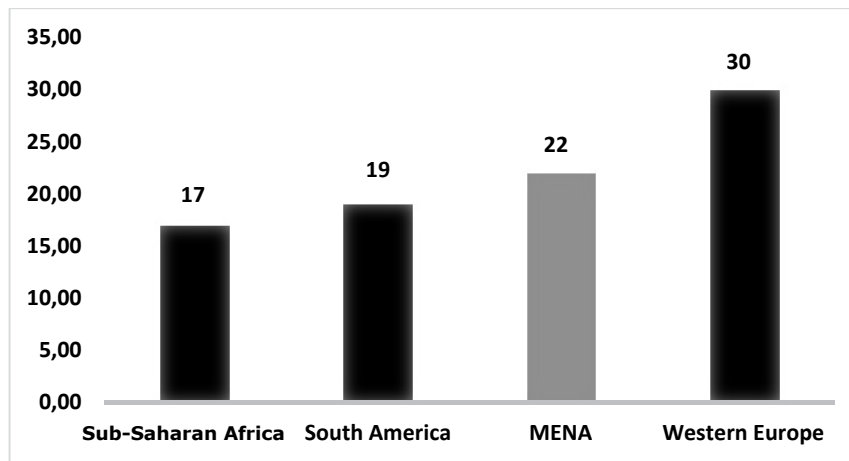


Fig. 9. Mass protest destabilization type percent of variance, 1970–2018

Sources: Banks and Wilson 2020; START 2020; Center for Systemic Peace 2020.

From the figures above one can conclude that armed and mass protest destabilization types in MENA for 1970–2018 together cover the largest percent of variance explained among the four analyzed regions (52 %), which proves our first hypothesis that MENA region as a ‘semi-periphery’ world-system zone turns out to be the most socio-politically unstable region in the world. The MENA region is followed by Sub-Saharan Africa (49 %), Western Europe (45 %) and South America (41 %), which shows that South America, on the contrary, being a ‘semi-periphery zone’ as well as MENA, is the least unstable region among the abovementioned four.¹⁴

Socio-political destabilization characteristics of the MENA region can be described by a relatively high armed destabilization level accompanied by a relatively high mass protest destabilization level. For Sub-Saharan Africa, the highest level of armed destabilization type is accompanied by the lowest level of mass protest destabilization rate. On the contrary, for Western Europe, the highest level of mass protest destabilization is accompanied by the lowest level of armed destabilization type. Finally, South America is characterized by intermediate levels of armed and mass protest destabilization.

Conclusions

The present paper aims to determine MENA's (and the Afrasian instability zone as a whole) place in the hierarchy of the most destabilized regions of the

¹⁴ We believe these discrepancies deserve to be investigated in a separate study.

World System for the observation period including the phase after the Arab Spring (2011–2018) as well as before 2011 and to investigate the region's unique destabilization peculiarities.

Our analysis based on CNTS, Global Terrorism and Center for Systemic Peace databases shows that some MENA countries which belong to MENA 'semi-periphery' world-system zone are on the list of top-20 most violently destabilized states of the world for the period of 1970–2018: together with Pakistan, Nigeria, and Mali (that belong to the Afrasian instability macrozone) their values comprise more than 70 % of the total values. In MENA, armed destabilization serious escalation predictably occurred after 2011, when countries in this region account for 66 % of factor score values of the top-20 violently destabilized states of the world.

In addition, our principal component analysis allows defining the following important patterns in the development of socio-political destabilization in the MENA region.

Firstly, regarding armed destabilization in MENA, one can observe the decline of the role of *assassinations* indicator for the region after 2010 and the increase of importance of the *guerilla warfare* indicator.

Secondly, regarding mass protest destabilization peculiarities in MENA, it is found that after 2010 one could identify the increasing significance of *general strikes* and *anti-government demonstrations* in comparison with the period before the Arab Spring and appearance of *purges/repressions* as a significant contributor to the abovementioned component for the region after 2010. The high values of the purges/repressions indicator loadings are typical both for the general observation period (1970–2018) and for the period after the Arab Spring (since 2011), while for other regions the loading values of this indicator are insignificant (South America and Sub-Saharan Africa) or even insignificant and negative (Western Europe for 1970–2018 and 1970–2010 observation periods; for 2011–2018 this indicator is equal to 0). This appears to imply that in the MENA region (and in the Afrasian instability zone as a whole) protests are accompanied by mass repressions much more systematically than in the other parts of the world. On the other hand, we find the presence of *number of terror attacks* among the significant contributors to mass protest destabilization for Sub-Saharan Africa, which suggests that this destabilization in that part of the world is of a rather special type involving a very substantial violent component.

Finally, one should note that for MENA while the percentage of variance explained for armed destabilization before and after the Arab Spring remained almost unchanged (from 28.43 % to 29.91 %), the value growth for mass protest destabilization is very significant: from 18.15 % to 23.87 %. For Western Europe, the mass protest destabilization component explains a much higher percentage of variance than the same MENA factor for 1970–2018 (30 % and

22 % respectively) while Sub-Saharan Africa armed destabilization component explains a slightly higher percentage of variance than the same MENA factor for the same observation period (32 % and 30 % respectively). However, MENA turns out to be the most destabilized region taking mass protest and armed destabilization factors together (52 % of variance explained) for 1970–2018. South America's both mass protest and armed destabilization dimensions are smaller than MENA's for 1970–2018.

In general, we found that the highest percentage of the destabilization variance is explained by the mass protest principal component for the world-system core (represented by Western Europe). On the other hand, the lowest percentage of the destabilization variance is explained by the armed destabilization principal component precisely for this part of the world.

We also found that the highest percentage of the destabilization variance is explained by the armed principal component for the world-system periphery (represented by Sub-Saharan Africa). On the other hand, the lowest percent of the destabilization variance is explained by the mass protest destabilization principal component precisely for Sub-Saharan Africa.

The world-system semi-periphery appears here in between those poles. The MENA region (which is the core of the Afrasian instability macrozone) occupies the second highest places in terms of both mass protest and armed destabilization, thus displaying very high levels of both (whereas South America occupies an intermediate place between MENA and Western Europe).

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