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The economic system of oil countries:

Authoritarian political capitalism

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Abstract
The paper considers 18 OPEC countries that were low-income countries when oil was found. Oil has given the countries an easy path to high income. Normally, wealth leads to democratic market capitalism, but oil countries have a different development path. Here the economy is dominated by a public oil company, making the rulers rich and powerful. Especially the six oil countries on the Arab Peninsula have conservative socio-cultural values, and they are staunchly authoritarian. Thus, the OPEC countries score poorly on legal quality and protection of property rights, and they have more state capture and corruption than other countries at the same income level. Thus, they develop authoritarian political capitalism.

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1. Introduction

The paper deals with the development of the economic system in oil countries that were LDCs (less developed countries) when oil was found. The countries included are the 18 present and past large oil exporters of OPEC (Organization of Petroleum Exporting Countries). They fall into two subgroups: **6AP** is the six oil countries on the Arab Peninsula, and **12oO** is the other twelve OPEC countries. They are compared with **25Western** and **124Other** countries.[3]

1.1 The development of oil countries and two encompassing concepts

Most OPEC countries are capitalist, in the version termed *Political capitalism*. It is defined in two steps: *Political insiders are politicians, administrators, and businessmen with some power over the political system. Political capitalism means that a significant part of GDP is generated by political insiders using this power.* It is an encompassing term for a set of closely related economic systems, see section 1.2. Some political capitalism is found in all countries – it is small in NW Europe, while it is large in OPEC countries.

The paper also uses another encompassing term: *Institutional genes,* which cover the historical roots of culture, religion, and institutions, including the legal system.[4] In the MENA region (Middle East and North Africa) conservative institutional genes have been developed by more than a millennium of Arab/Muslim institutions. In addition, oil countries are slower to adjust institutions as wealth reduces the pressures for reform and gives rulers extra power.

Most of the 18 countries were oil exporters before the formation of OPEC in 1960. Few have data before 1950, so the data used starts in 1950, which gives 1,050 observations. Most of these countries are conservative politically and as regards institutions. The 6AP countries are among the most conservative countries in the world when it comes to sociocultural values, and they are staunchly authoritarian.

By far the largest firm in oil countries is the national oil company. Most of its revenue is highly taxed resource rents, giving a large inflow of foreign exchange to the treasury of the ruler. This gives him power and allows large public expenditures combined with low taxes. In addition, the inflow of foreign exchange appreciates the exchange rate, making other exports less competitive. Thus, the economy develops a different structure than in other countries.

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[3] The analysis refers to (Paldam, 2021, 2024, 2025a to c) and Paldam and Saadaoui (2025) as *ibid*.

[4] The term was introduced in a recent book on China (Xu 2025), which abundantly demonstrates that 'genes' have been formed by the last couples of millenniums of Chinese history. They remain important today, as they provide the default even after large political changes and social experiments. A similar story applies for the long historical roots of society in the Arab-Muslim countries of the MENA region that include 10 of the 18 OPEC countries.

1.2 The definitions: classifying economic systems

Cross-country empirics require simple and robust definitions. The first distinction deals with the ownership of the real capital: *Socialism* is public or collective ownership. *Capitalism* is private ownership. All countries have a mixed system with public and private sectors (making private goods and services). A large literature discusses the division between the two and the optimal relative sizes of the sectors. The preference for public vs. private ownership (in the private sector) is the main dimension in the political spectrum from *socialist*, *liberal*, *conservative*, to *libertarian*.[5] In OPEC, only Venezuela and perhaps Iran are socialist.[6] The other 16 OPEC countries have much more private ownership.

Capitalism has two versions: *Political* and *market capitalism,* where the capitalists are outside the public sector and compete. The best measure for political version is the ***SC*-index** of state capture and less precisely the ***T*-index** of corruption, while the ***EF*-index**, the Fraser index of economic freedom, is a measure of the market capitalism.

Economic systems with a large fraction of political capitalism have other names covering concepts that are close to political capitalism. The two closest are *state capture* and *crony capitalism* – in practice they are indistinguishable, see Paldam and Saadaoui (2025). For oil countries the term *petrostates* is sometimes used.[7]

In theory, capitalist systems have shares s_m and s_p, adding to 1, of market and political capitalism respectively. The ideal of democracy requires that s_p is small. Even in democracies it is often difficult to keep s_p small. There are many inevitable links between the private and the public sector. Private suppliers of goods and services to the public sector often develop ties to the relevant decision makers in the public sector, and many pious words have been spoken about the importance of public-private cooperation.

In an autocracy it is easy and thus tempting for the top people to develop such ties to become rich.[8] The legal system and the media have a big role in keeping the ties clean. For political capitalism to thrive the political insiders must control the legal system and the media. Such controls (further) limit democracy.

The key method to make money from political influence is rent seeking, using the

[5] Socialist and libertarian are far apart. The two middle categories liberal and conservative have a softer division line. Another dimension is sociocultural values, which change due to the transition from traditional to modern society. Liberals tend to like the changes, while they are resisted by conservatives, often based on religious beliefs.

[6] Venezuela is ruled by the authoritarian president of the United Socialist Party, see Roy and Cheatham (2024) and Burgess and Corrales (2024). Iran has a system where the economy is dominated by a convoluted system of semi-public/religious foundations and limited property rights, see Pryor (2009), Harris (2019), and Vahabi (2024).

[7] The literature on *petrostates* was started by Karl (1997). Burgess and Correles (2024) is a new contribution.

[8] Some dictators care about power only, but most become rich – sometimes very rich.

insider power to obtain monopoly and hereby monopoly rents. The illegal part of rent seeking is corruption, where an agent colludes with an outsider to cheat his principal.

Section 2 surveys the development of the political system in the OPEC countries, section 3 studies the economic system, using the three indices *EF*, *SC,* and *T* as proxies for market and political capitalism. Section 4 discusses the logic of the economic systems in the countries, and section 5 concludes. The two appendix tables are for easy reference: Table A covers the variables, while Table B lists the OPEC countries.

Two working papers (in ref) provide background: Paldam (2025b) gives additional information and demonstrate the robustness of the results, while Paldam and Saadaoui (2025) surveys the many definitions of the variables and looks at the grand pattern in the *SC*-index.

2. Income and the political system

Income is defined as the (natural) logarithm to real GDP per capita; see Table A (Appendix). The analysis starts by looking at the path of income for the four country groups.

2.1 Income

Figure 1a shows the path of income as just defined using a color scheme defined in the note. It is also used in Figures 4 and 8a. Figure 1b shows the real oil price. It has a clear connection to the curves for the OPEC countries.

Figure 1a. Income in the OPEC countries comparatively

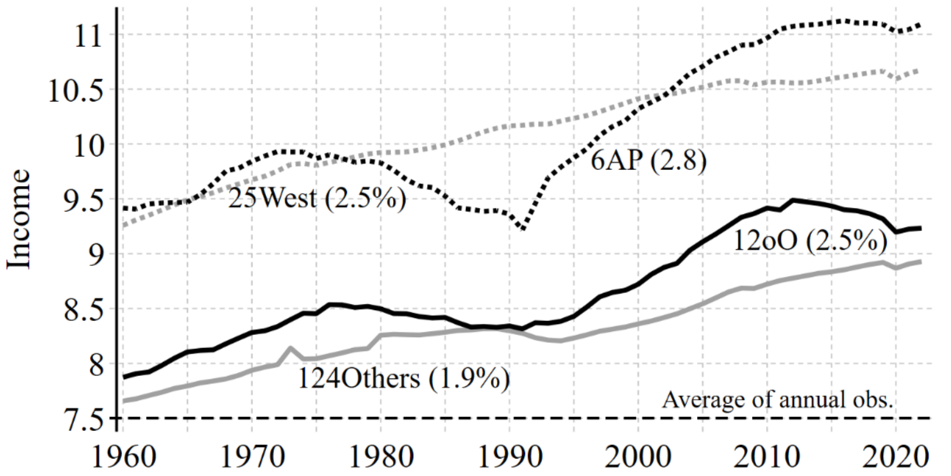
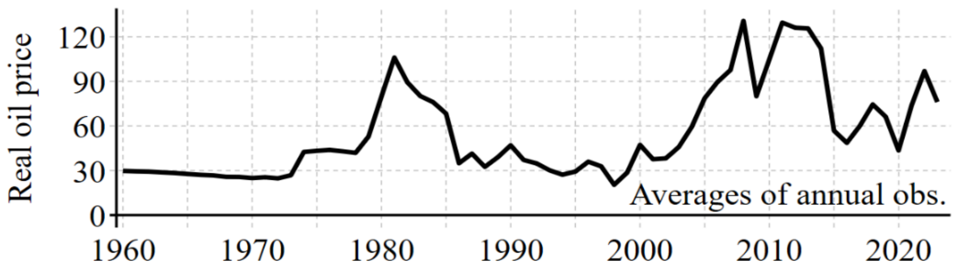


Figure 1b. Index for the real price of oil



The two OPEC groups are black, with 6AP dashed. The two groups for comparison are gray, with the 25West dashed. Parenthesis holds growth rates. Figure 1b is the US oil prices divided by the consumer price index.

The level of income in oil countries and comparable countries can be done, with some sense, for the MENA group of countries, for the African countries, and for the Latin American countries. In three groups the oil countries are 2-5 times wealthier, and as Figure 1 shows they also grow marginally faster.

The political economy of Dutch disease/Resource Curse is analyzed in a large literature, started by Corden (1984).[9] It discusses whether abundant resources are a blessing or a curse; see Ploeg (2011) and Paldam (2013). The large income difference suggests that it is a blessing. As we go along, some less favorable consequences will appear.

2.2 Political system: The missing democratic transition

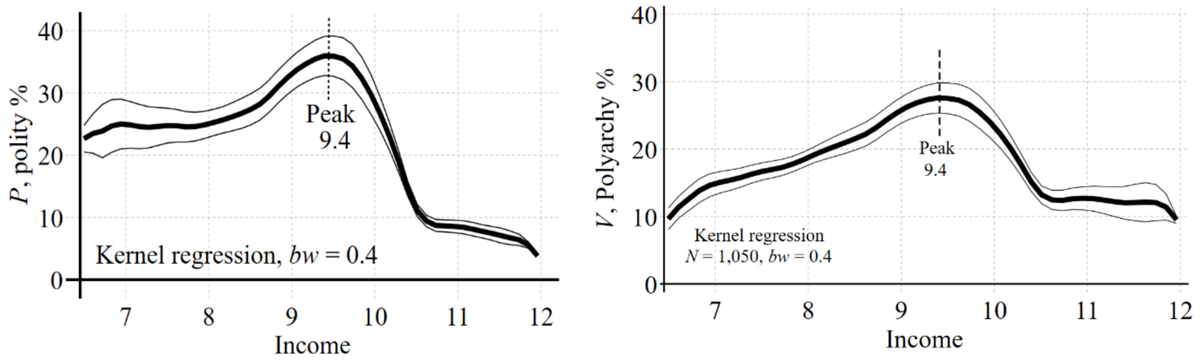
Democracy indices are controversial, so the analysis uses two indices, Polity and Polyarchy (appendix). They have different scales, aggregate (somewhat) different indicators, and give pictures that differ a little. The paper makes them comparable by a conversion to a percentage of the range of the indices; see Table B (Appendix).[10]

Figures 2, 3, 5, and 8b are done by kernel regression, on unified data. That is, the panel X_{it} becomes the vector X_j, with *it* elements. The kernel regression sorts X_j by the explanatory variable. The kernel curve is a smoothed moving average with a fixed bandwidth, *bw*.[11] This technique is well known in other fields, but little used in comparative macro analysis, where it should be prominent, as it identifies common trends in the data for country groups. The 95% confidence intervals show how well the common trend is determined.

When income rises from the traditional to the modern level in non-OPEC countries, the political system moves from an authoritarian (kingdom) to a democratic system around a common path of the democratic transition, which is very robust in the data, *ibid*.

Figure 2. The development of the political system over income in the OPEC countries

Figure 2a. Polity (%) Figure 2b. Polyarchy (%)



The kernel curves are the bold black curves. They are surrounded by two thin black 95% confidence intervals.

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[9] The theory has even longer roots as pointed out by Vahabi (2018).
[10] In addition, *P* and *V* differ a little conceptually: *V*, increases if political power is more shared amongst citizens. *P* increases if the political process is more open and competitive. They are strongly correlated.
[11] The Kernel technique is discussed in *ibid*.

Figure 2 shows that when income rises in oil countries, it causes a hump-shaped path in the political system , peaking at income 9.4, and then turning downward toward (even) more authoritarian systems. Thus, the political systems in OPEC and other countries have diverged. This has given rise to considerable political tensions.

Table 1. The stability of the two democracy indices, 1950-2018

	A: Average annual gross changes Numerical first differences				B: Average annual net changes First differences			
	6AP	12oO	25West	125Other	6AP	12oO	25West	125Other
	P, polity pp				*P*, polity pp			
Average	**1.16**	**2.30**	**0.30**	**2.25**	0.00	0.14	0.11	**0.47**
Standard error	(0.19)	(0.34)	(0.07)	(0.12)	(0.21)	(0.35)	(0.07)	(0.12)
	V, polyarchy pp				*V*, polyarchy pp			
Average	**1.37**	**1.45**	**0.53**	**1.69**	0.15	0.22	**0.31**	**0.42**
Standard error	(0.20)	(0.14)	(0.06)	(0.06)	(0.21)	(0.15)	(0.06)	(0.06)
	Number of first differences				Number of first differences			
For both indices	329	703	1,549	6,059	329	703	1,549	6,059

Significant averages are bold, and pp means percentage points. Recall that the two indices are rescaled to a percentage of their ranges.

2.3 *Political system stability*

Table 1 reports gross and net changes in panels A and B. The estimates for polity are at the top section of the table, while the ones for polyarchy are at the second section. They are similar. Gross changes are the sum of the numerical changes. Some changes are in zigzag. The net changes cancel out movements that counteract each other. Thus, gross changes are (much) larger than net changes.

The two OPEC groups have insignificant net changes. Thus, the OPEC countries have strong conservative forces keeping the political system constant. This seems to suggest that present systems are in steady state, and not in a temporary status quo equilibrium.[12]

Income rises over time, so the two democracy indices should increase over time. Figure 3 shows they have increased, but the increase is small, especially for the *V*-index. Note that both curves and the curves in Figure 2 are in the bottom half of the range. The confidence intervals in Figure 2 are narrower, so Figure 2 is better determined.[13]

[12] Table 1 also tells two stories about the non-OPEC countries. The democratic transition was already made in the West in 1950, except for a few South European countries, where the transition took place in the early 1970s. In the 124Others, the net movement is about 0.45 pp (percentage points) in both indices. It is highly significant and indicates the speed of the democratic transition. As the full democratic transition is about 70 pp (of the full range), it takes 150 years at this speed. However, most countries in the group have already progressed some of the way.

[13] Both curves explain little of the variation, so there is ample space for both trends.

Figure 3. The development of the political system over time in the OPEC countries

Figure 3a. Polity

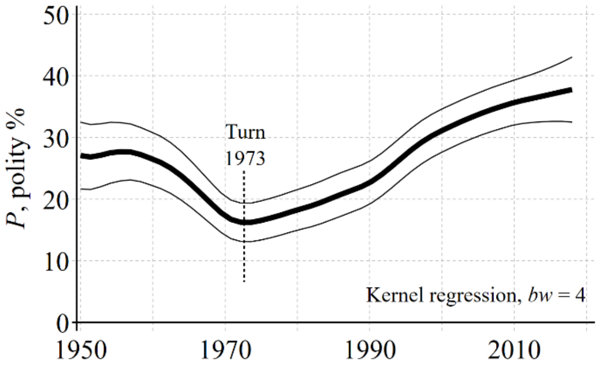
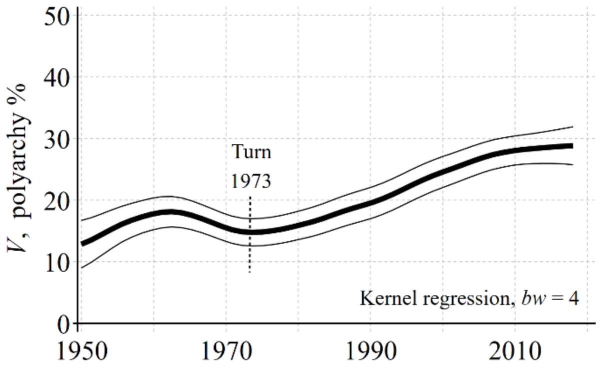


Figure 3b. Polyarchy



2.4 Big money inflow to an authoritarian political system

Thus, we are dealing with authoritarian systems where a large flow of money passes through the treasury of the ruler. This gives two mechanisms:

(i) A flypaper effect. Even when the rulers use the flow to finance public goods such as schools, hospitals, infrastructure, defense, etc., some of the flow is diverted to finance the private expenditures of the ruler: palaces, wives, luxury cars, big yachts, airplanes, etc.

(ii) A low tax effect, as the oil tax replaces other taxes, so people feel that they receive public goods as free gifts from the ruler. Even when they know where the money comes from, they are still unburdened by taxes.

3. The economic system: market vs. political capitalism

As mentioned, capitalism is an economic system based on private property rights. Section 3.1 looks at the *EF*-index of market capitalism, while section 3.2 considers the *SC*- and *T*-indices for political capitalism. Table 2 shows the correlation between these indices. The *EF* index grows with income *y*, while the *SC* and *T* indices fall. Thus, the *EF* and *SC* indices are negatively correlated. If the two indices were perfect measures, their correlation should be -1 – it is substantial, but well above -1. The correlations are considerably larger for the main sample than for the OPEC sample, but the signs are the same.

Table 2. The correlations of the three indices and income

A: OPEC countries, *N* = 126				
	SC	*T*	*EF*	*y*
SC	1			
T	-0.10	1		
EF	-0.48	-0.27	1	
y	-0.42	-0.54	0.50	1

B: Other countries, *N* = 1,051				
	SC	*T*	*EF*	*y*
SC	1			
T	-0.84	1		
EF	-0.70	-0.77	1	-0.
y	-0.68	-0.77	0.76	1

The correlations are for all observations where the four variables are available. The largest limitation is that the *SC* index is available only for nine years. 1997, 2000, 2003, …, 2021. The *EF* index for 1995 is used for 1997. *SC* and *T* are relative indices calibrated to have a constant average. *EF* and *y* are absolute indices with trends.

3.1 The EF-index as a measure of market capitalism

EF is the Fraser Institute index for economic freedom. It measures the freedom to run a private business on a scale from 0 to 10. The libertarian philosophy behind its construction is explained in several reports, available from the Fraser Institute home page (references). A socialist economic system or a system with no law and order gives low scores, and vice versa. This is close to measuring the degree of market capitalism. [14] Apart from Venezuela (and Iran?), the OPEC countries are capitalist.[15] The index is compiled by a net of conservative/libertarian think tanks. It used 5-year intervals from 1970 to 2000 and annual observations since then. It started with data for 93 countries, and now it covers 165 countries.

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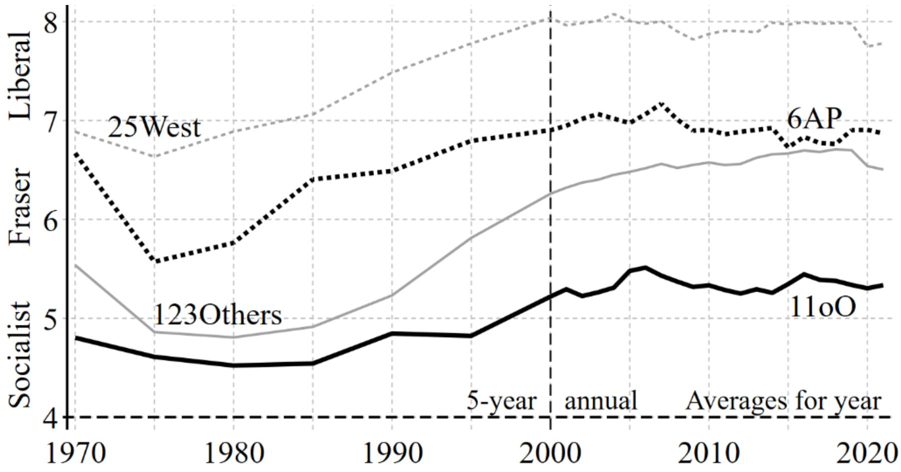
[14] An item of the World Values asks about the preferences for private or public ownership to business. Bjørnskov and Paldam (2012) use these data to construct a national index of socialist vs capitalist preferences. The preferences for capitalism increase when the income of countries grows, so the trends on Figure 4 may be demand driven.

[15] Six of the countries, Algeria, Angola, Congo Br, Iraq, Libya, and Venezuela, have had socialist periods, but today only Venezuela and perhaps Iran remain socialist. The three Arab countries had Arab socialism; see Takriti and Safieddine (2022). It is not well defined, but it contains public ownership of natural resources and large businesses, plus land reform. Both Angola and Congo Br were Marxist-Leninist one-party states before 1992. Only Iran and Turkey have been independent throughout. The socialist policies in the other countries may be a reaction to their old Western colonial masters, as it was pursued shortly after independence.

Figure 4. *EF*, the Fraser index for economic freedom comparing the four country groups



The EF-index has no data for Equatorial Guinea, so 12oO becomes 11oO.

Several studies analyze the property of the index. The latest is O'Reilly and Murphy (2025), looking at the unit-root properties of political institutions and economic freedom. The results are mixed. Some countries have mean reversion of their political institutions, so they are in equilibrium. Others do not have mean reversal. They must be carefully observed in future studies, as the question of how economic freedom could help to achieve the democratic transition could be key in explaining the kind of capitalism in these countries.

Figure 4 shows the patterns in the *EF* data for the four country groups. The 25West has high scores as expected, while 123Others are less liberal. The difference was above 2 Fraser points in 1980-90, but since then it has fallen to about 1.2. The period from 1985 to 2005 saw a wave of liberalizations, especially in the group of 123Others. The wave was due to a spreading realization that the hitherto popular ISI (import substitution strategy) had failed. Liberalizations require painful short-run adjustments for long-run gains. With plenty of oil wealth, the urge to incur short-run adjustments becomes less urgent.

The two groups of OPEC countries only partly follow the world trend in liberalization. In particular, the liberalization wave was small in 11oO. The level of the indices differs substantially for the four groups. The 6AP countries are about 1.4 Fraser points lower than the 25West, and since 1985 the difference has slowly grown. The 11oO countries are the least liberal group, and they liberalize as slowly as the 6AP group. The group includes Venezuela, which is the most socialist OPEC country with no economic growth since the early 1950s. It is below the average index for the 123Other countries since the early 1990s.

Table 3. Averages for the *SC* and the *T* indices

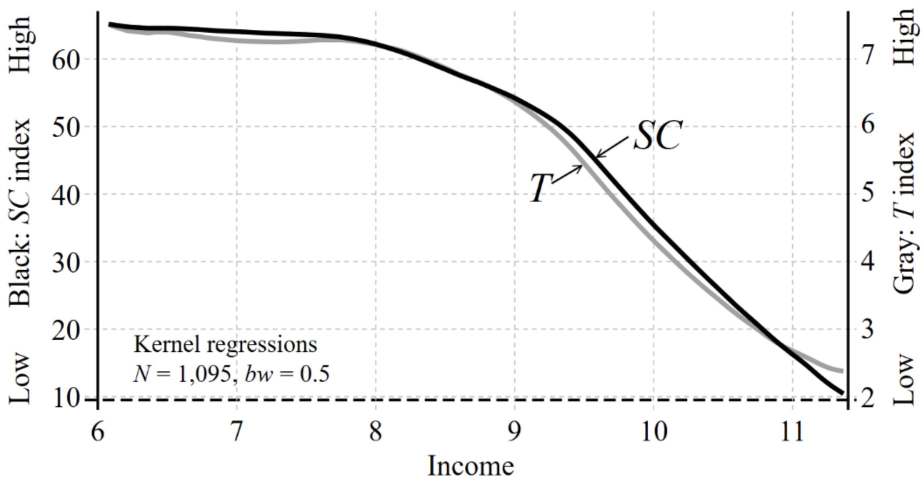
	SC, state capture 1996-2022				*T*, corruption, 1995-2023			
	6AP	12oO	25west	128Others	6AP	12oO	25 West	128Others
Average	61.2	70.4	12.1	54.9	4.70	7.58	2.42	6.29
Standard deviation	10.1	14.2	6.8	20.4	1.04	0.66	1.43	1.52
Countries N_c	6	12	25	128	6	12	25	145
Standard error (N_c)	4.12	4.09	1.36	1.80	0.42	0.19	0.29	0.62
Observations N	54	108	225	1,152	126	276	702	3,135
Standard error (N)	1.37	1.36	0.45	0.60	0.09	0.04	0.05	0.03

3.2 The SC (state capture) and T (corruption) indices as measures of political capitalism [16]

The *T* index is $T = 10 - TI$, where *TI* is Transparency International's corruption/honesty index. *T* gives the index the same direction as the *SC* index. Figure 5 demonstrates that both indices fall with development. The indices are made by independent NGOs, and they aggregate different indicators. They are highly correlated, so they measure something that we take to be political capitalism. However, one reason the two indices are so close is that they are relative, so they are calibrated to have a constant cross-country average that is the same every year.

Table 3 shows that the West is the main exception. State capture is rather high in the OPEC countries, while corruption is close to the average in the world. Figure 5 shows the SC(y) and T(y) relations for the 1,095 non-OPEC observations, while Figure 6 shows how the OPEC observations fit into the picture.

Figure 5. The transitions of the *SC*, state capture and *T*, corruption indices



Both curves are calculated for the 1,095 non-OPEC observations where the *SC*, *T*, and income data are available. The correlation is 0.82; in the smaller sample of Table 2B it is 0.70. The OPEC sample is included in Figure 6.

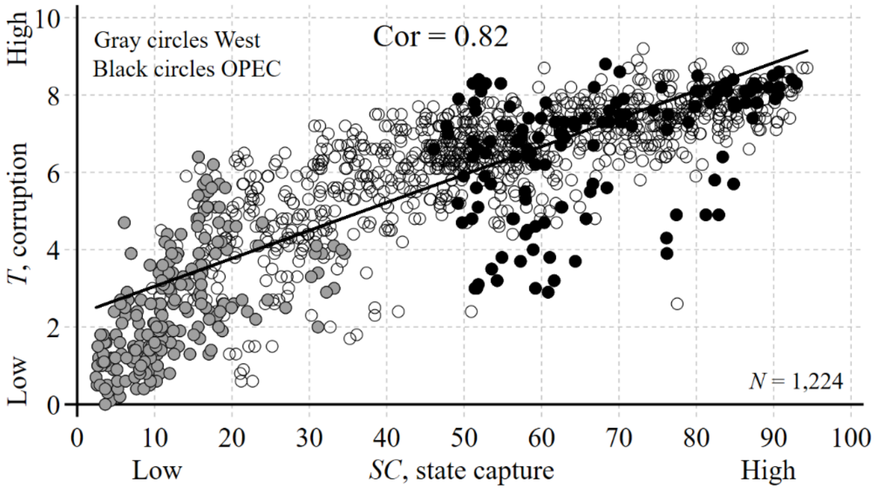
[16] The definitions of these indices are discussed in *ibid*.

The two relations depicted on Figure 5 are analyzed by kernel regressions, showing that both variables have neat transitions that are virtually the same. Thus, the two variables are scattered around a straight line of proportionality as shown on Figure 6a. This explains the correlation of 0.70 between the two indices. Figure 5 shows that political capitalism is high at low income and only starts to fall at an income level of 8 (i.e., a *gdp* of 3,000 in fixed 2011 US$). Both variables are still falling at high income, but they cannot fall below zero, so the transition is still going on. The transitions in *SC* and *T* are late.[17]

It is easy to explain why political capitalism is highest in LDCs. Most LDCs have small economies, with few large firms. Thus, they become relatively important, and business and political leaders often meet and may form alliances. Also, LDCs have more authoritarian regimes, so it is no wonder that they have more political capitalism. It has often been noted that the easiest way to wealth in poor countries is through the political system.

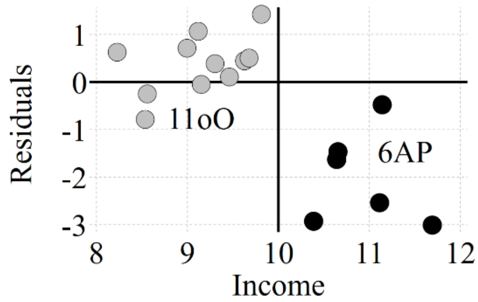
As predicted, the point scatter on Figure 6a looks linear. Two groups of countries deviate from the linear regression displayed: The Western countries are below the curve, and so are some of the OPEC countries.[18] Figure 5b looks at the average residuals for the line shown for each of the OPEC countries. While the 11oO countries are close to the line, the 6AP countries are well below the line. This means the level of corruption does fall in the oil-rich countries, while the amount of state capture remains high. We shall return to this point several times below.

Figure 6a. The position of West and the OPEC countries in the (*T*, *SC*)-scatter



[17] The scatter on Figure 6a illustrate the fuzziness of the variables around transition curves. The numbers are limited by the *SC*-index. They are half the observations of the *T*-index, but the curve is the same for all *T* observations.
[18] The deviation of the West is analyzed elsewhere, *ibid*. It is due to a fall of corruption in countries that have been wealthy for a long time. It will not be discussed at present. If the West is excluded, the remaining observation will look even more linear.

Figure 6b. Average for each oil country of residuals for the line drawn on Figure 6a

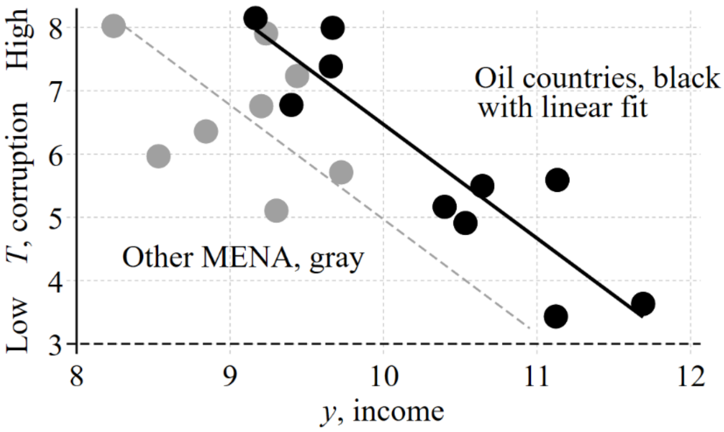


OPEC countries are still relatively corrupt for their income levels. They have become rich quickly due to resource rents, and they have kept many institutional traits at the level where they would have been without oil. That supports two theories: (T1) Oil wealth furthers corruption. (T2) Corruption changes slowly, because institutional genes change slowly.

Diwan et al. (2018) documents the extent of political capitalism in MENA countries by careful mapping of the ownership structure in a handful of countries.[19] The only OPEC country is Iran. It has a large sector where semi-independent public foundations own businesses.

Figure 7 tries to sort out the two explanations by a crude assessment. The figure looks at the 18 MENA countries. The points are eight gray non-oil and ten black oil country points. They show that with rising income, corruption falls as predicted. The line through the oil points is to the right of the non-oil points.

Figure 7. Corruption in the MENA group: Averages for *T* and *y*



The points are averages for 2003-23, where the *T* Index is complete. The dashed gray line shows how much the black line should move to be in the middle of the gray points.

[19] Diwan et all (2019) uses the term crony capitalism and joins a dozen books with studies of crony capitalism in different parts of the world. Political capitalism is always there, but it is low in an established wealthy democracy.

The dashed gray line shows how much the black line through the oil points should move to be in the middle of the other MENA countries. It is approximately 0.8 income points. The excess income due to oil is 1.6 points. Thus, the two theories explain the same amount of excess corruption in the MENA oil countries. Hence, both theories (T1) and (T2) contribute equally to explaining the excess corruption in the OPEC countries.

3.3 *Adding the five components of the EF index*[20]

The Fraser index has five components: EFA1 to EFA5. Table 4 shows three factor analyses of these components and five other variables: Income, growth, the two democracy indices, and the *T*-index for corruption.[21] The gray shading gives the clusters of low intercorrelation. Note that Others have one cluster of all variables except EFA1 and growth, while OPEC has two separate clusters, where the *V*, *P* and *EFA*1 form a separate cluster, while growth is different. Thus, EFA1, for government size, is uncorrelated with the other four areas of the Fraser index, which are positively and substantially intercorrelated.

Table 4. For the 16 OPEC and 129 Others, and all 129 in 2018

	A. OPEC 16 countries, $N = 239$		B. Others 129 countries, $N = 2,150$		C. Others in 2018 For one year, 2018 $N = 129$	
	Factor1	Factor2	Factor1	Factor2	Factor1	Factor2
Eigenvalue	5.03	1.73	5.49	0.77	5.47	0.77
Cumulative prop.	0.72	0.97	0.84	0.96	0.81	0.92
	Factor loadings		Factor loadings		Factor loadings	
y, Income	**0.85**	-0.22	**0.94**	-0.19	**0.81**	0.21
T, corruption	**-0.94**	0.02	**-0.88**	0.28	**-0.90**	-0.02
EFA2, legal	**0.83**	0.32	**0.86**	0.06	**0.95**	0.07
EFA4, free trade	**0.76**	0.41	**0.84**	-0.07	**0.84**	0.14
EFA5, regulation	**0.85**	0.33	**0.82**	0.37	**0.87**	0.21
EFA3, money	**0.72**	0.30	**0.83**	-0.21	**0.70**	0.27
V, polyarchy	-0.62	**0.70**	**0.73**	-0.02	**0.82**	-0.48
P, polity	-0.73	**0.54**	**0.68**	0.57	**0.66**	-0.53
EFA1, public size	-0.06	**0.64**	.000	-0.01	-0.22	0.04
Growth	0.02	0.14	-0.18	0.39	0.03	0.28

Prop. is proportion. Factor2 is fine in Part A, but dubious in B and C. Factor3 adds so little that it is deleted

The *T*-index reduces the sample. It is weakly negatively correlated with the EFA1 index.

[20] This section does not consider the *SC*-index, as it greatly reduces the number of observations and is closely correlated with the *T* index.

[21] The *T*-index that is made independently of the Fraser index. It is reassuring that the *T*-index is highly correlated with the relevant areas of the Fraser index. This validates both indices.

Thus, the larger the government sector, the less honest the country is. The remaining four areas are all positively related to the *T*-index with substantial correlations. Thus, the more liberal a country is, the less corrupt it is. The table is made to analyze two points:

(1) The factor analyses A and B for OPEC and Others tell the same story as Table 4. Factor1 is similar for the first six variables, though most factor loadings are stronger for Others. In analysis B, Factor1 includes *V* and *P*. The two democracy indices are loading negatively in the OPEC sample, where they form Factor2 together with EFA1, the size of government. The growth rate is not part of the factors in either analysis.

(2) Analysis C uses the observation for 2018 for each country to give the between-countries pattern. C and B are the same. Thus, the pattern in B is determined by the between-countries variation that represents the long run. There are too few OPEC countries to estimate the cross-country pattern, but the pattern in B may be due to the cross-country variation as well.

Paldam (2025b) shows the paths of the four groups for EFA1, EFA3, EFA4 and EFA5. The OPEC countries are a little on the high side, so they are not particularly liberal. However, one component shows a strong picture.

3.4 EFA2. Legal quality and property rights protection

Here the 5 groups are different – with the West as the extreme case of a strong legal system where property rights are private and protected, also to land; see Soto (2000).

It requires a democratic system to have a high-quality legal system; as argued above, see the highly non-linear Figure 8b. The legal variable is similarly dependent on the political system in the range from 0 to 70, but then it bends upward. In authoritarian regimes, the legal system is integrated into the hieratical administrative system with the ruler at the apex.

Figure 8a. EFA2. Legal system

Legal quality and property rights protection

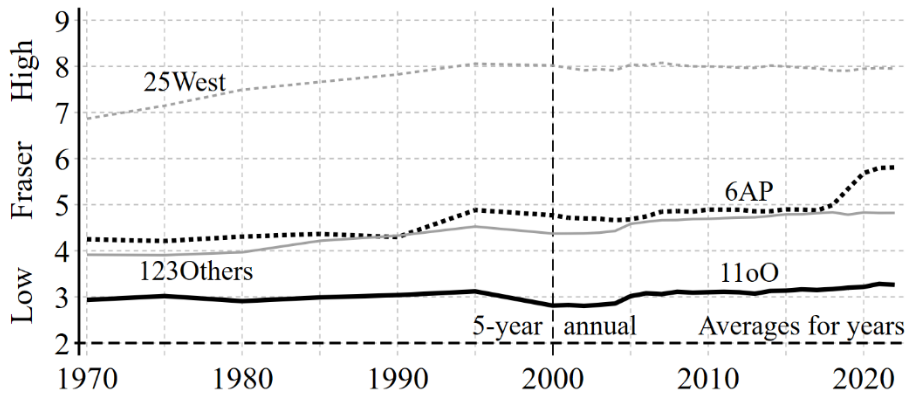
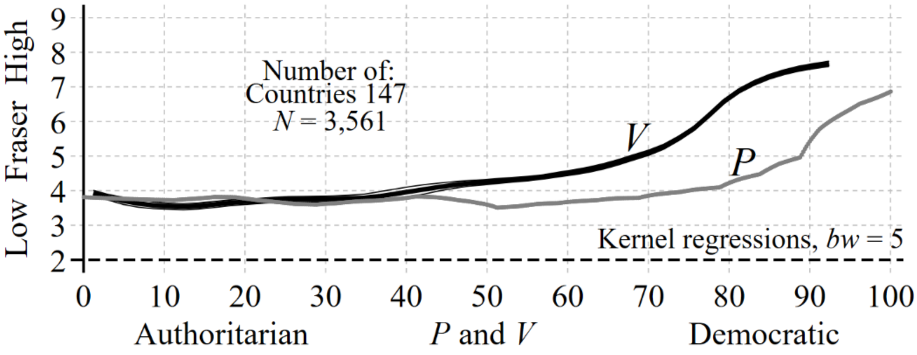


Figure 8b. The relation between the legal system and political regime

Legal system explained by two democracy indices



These observations tally with the low position of the two groups of OPEC countries on Figure 8a. Even when the 6AP countries are wealthy, they have a much lower quality legal system than the West, and the lowest curve is for the 11oO group. The legal quality variable has a typical, but late transition. It differs between the main and the OPEC sample, where the curve is lower. Above, it was shown that legal quality is strongly correlated with corruption. This is not surprising but raises the question of causality. It is also important that an – religiously justified – Arab/Muslim legal system has existed for more than a millennium.

Especially in large desert countries, private property to land is still under development. E.g., in Saudi Arabia, a new real estate registration law was enacted in May 2022 establishing a formal system of land registration. The gender legal rights adjustment in the index is also important, especially in the traditional Arab countries of the 6AP group.

4. Understanding the development of LDC oil countries

4.1 An oil sector is a small enclave producing resource rent[22]

Oil prospecting and production are capital-intensive, high-tech operations. It is available internationally, often in the form of turnkey projects built and operated by multinational firms using expatriate experts. It is unlikely that they will speak the local language. Oil installations are expensive and highly explosive, so they are heavily fenced. Especially in traditional Muslim countries, there is little socializing with local people at the family level, so most of the expat oil workers do not bring their families and have their social life elsewhere. Thus, oil sectors are small international enclaves in the country, producing little domestic employment. As time goes by, petrochemical complexes are added to the pure oil production, and some employment will result, but it takes time to build local expertise.

Oil has a world market where the OPEC Cartel dominates the price. It is much higher than the production costs, so it includes a substantial resource rent. Resource rent is easy to tax. Thus, the main effect of an oil sector is that the treasury will be awash with funds. In authoritarian systems, the treasury is under the control of the ruler. It also allows countries to acquire shares in the oil company. The large funds available to the rulers will prolong the life of regimes. Table B (Appendix) shows that the net regime changes are low in the OPEC countries, even when there are some gross movements. The regimes are subjected to the usual number of shocks, but it has an unusual amount of power, allowing it to overcome the shocks. The failure of the Arab Spring illustrated this.

4.2 An illustration: Saudi Arabia[23]

By far the largest of the 6AP countries is Saudi Arabia, where oil provides about 45% of GDP. The national oil company is Aramco. It started production 80 years ago, and has made many efforts to branch out, notably by adding downstream production, such as refineries, and other chemical plants using oil as an ingredient.

Today, Aramco employs 73,000 people out of a population of 37 million. This is 0.2 % of the population. The company employs many expatriates, so the number of indigenous employees is smaller, but the typical Saudi employee supports a family, and many firms supply and service the oil industry. The corrections to the fraction are mostly upward, but it is

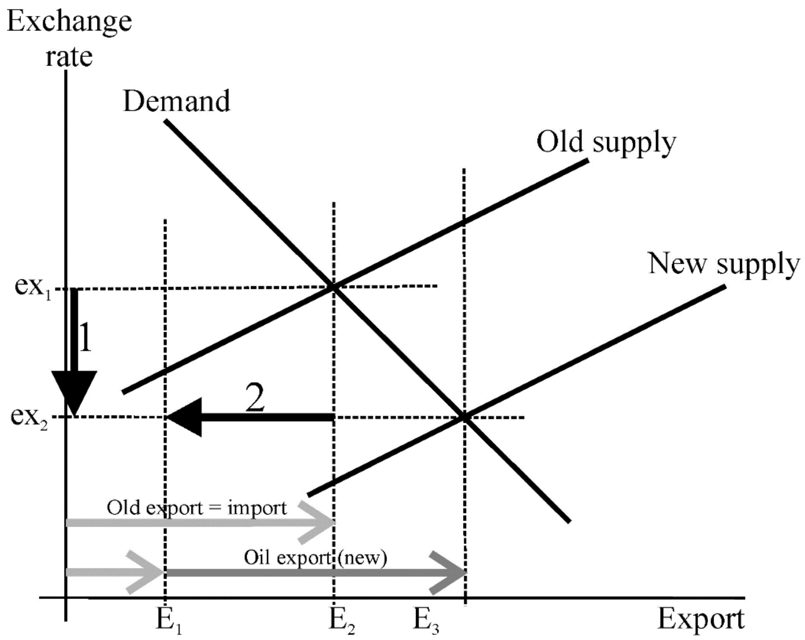
[22] For a more detailed analysis see ibid.
[23] Based on the home page of Aramco, and World Development Indicators.

challenging to reach an oil sector of 1% of the population. The enclave nature of the oil sector is even more pronounced in smaller and newer oil countries.

4.3 Labor markets in oil countries

The oil sector gives a large inflow of foreign currency, and thus an appreciation of the local currency. Thus, domestic goods become more expensive than similar foreign goods, which is a loss of competitiveness that reduces employment. This is drawn by the (textbook) graph on Figure 9. The process whereby the new equilibrium is reached is faster under floating exchange rates, but it is reached anyhow.

Figure 9. Demand and supply of foreign exchange



Oil gives a new (large) supply of foreign exchange. The gray arrows are for export, where a substantial part is the new oil export. The two black arrows are the Dutch Disease effect: Arrow 1 shows the real revaluation, while arrow 2 shows the fall in the traditional exports. As traditional production is much more labor intensive than oil production, there is likely to be a (large) fall in employment. However, there is plenty of exchange to pay for new imports replacing the missing production of traditional goods.

The oil sector generates little employment, and the currency appreciation generates a substantial loss of employment. Fortunately, the state is so rich that it can compensate its friends, and thus it gets many friends; see Beblawi (1987).

In addition, most of the OPEC countries, and particularly the 6AP countries, have a very hot and arid climate, where manual work is unpleasant. The Indigenous population can afford to employ guest workers from poor countries to do such work. Guest workers need a sponsor to obtain a temporary contract (the Kafala system), and sponsors get a nice fee paid by the worker. This makes many natives employment entrepreneurs, and it prevents the growth of an indigenous labor class and thus adds to the general conservative ideology in the countries. Once a worker is a foreigner on a temporary contract, the system of labor market regulations becomes parts of this contract. In a system with low legal quality, it is of dubious value. These effects are larger in small oil-rich countries, but less so in countries with large populations as Iran, Indonesia and Nigeria.

4.4 Political/economic power

Development is a process that takes place around a skeleton of long-run transitions, see *ibid.* The democratic transition is a typical one, with the form  in the non-OPEC countries.[24] The flat sections of the curve are at the traditional and the modern steady states. The path between the two takes a century or two. The traditional political system was based on three pillars: King, feudal aristocracy, and Church, where the aristocracy supplied the top of the King's Army and administration, and the top hierarchy of the Church, so power was concentrated in a small group of hereditary nobility. The key factors behind the democratic transition were the agricultural transition, which undermined the feudal aristocracy, and the religious transition, which greatly weakened the Church. When the two pillars crumbled, the kings lost power as well.

As shown above, the transition in oil countries is different, looking like  as seen in Figure 2. In desert countries, feudalism is a system of traditional clan/regional leaders, but they are still weakened when income rises. However, the flow of resource rent into the king's treasury increases his power. So, although development in the beginning follows the normal processes, it has a hump-shaped path with a turn, after which it becomes more authoritarian. The peak is where the power of the king comes to dominate.

Most of the oil countries – especially the ones in the MENA area – have old and strong traditions for trade organized in the form of concentrated trading areas known as bazars or souqs. A large fraction of turnover in the tertiary sector takes place here. Thus, it also contains a great deal of power that is often organized in guild-like structures that are difficult to control politically. Modern development leads to supermarkets and department stores that undermine the power of the bazar.

[24] See Mansfield and Snyder (2002), Epstein et al. (2006), Rodrik and Wacziarg (2005), and *ibid*.

The oil companies in the OPEC countries started as branches of private multinationals, but resource rent – produced by a small enclave – is easy to identify and tax, so most of the rent ended up in the treasuries of the rulers. Later, the oil companies became public. Consequently, the big agglomeration of wealth became the property of the national rulers, especially in the 6AP countries with traditional kings. In the 12oO countries the rulers were mostly military. Public ownership meant that the rulers became business leaders as well.

4.5 Market vs political capitalism

One may interpret systems where the ruler has control over most businesses as a socialist system, but this is not how most observers see the economic system of the oil countries. They claim it is a capitalist system. Often the national oil company is a limited liability company where the ruler owns most of the shares, but the international oil company that started the operation owns some too. In short, it is a striking example of political capitalism. It is a capitalist system with a high degree of collusion between economic and political elites that mutually support each other.

Political capitalism also means that insiders use their political power to increase their income. The price of oil on the world market is greatly influenced by the monopoly power of the OPEC cartel. There is much literature on the working of the cartel and the influence of the individual members on the price they obtain for their oil. However, once the oil revenue enters the producing country it is clearly a political game how it is allocated.

5. Conclusions

In the traditional steady state, countries are authoritarian, and the economic system has heavy regulations, i.e., a feudal system and tariffs on internal and external trade. The legal system is part of the rulers' administration and thus not independent.

As mentioned, most countries have a democratic transition, where the early stage may be characterized as political capitalism. This is a period where a few new companies grow dramatically, often greatly helped by rent-seeking due to the collusion of companies and politicians. In the USA, it is known as the Gilded Age, and in Northern Europe, it was the age of Gründer capitalism. During that period the agricultural transition weakened the old feudal system, which was replaced with a capitalist system. As production grew in many sectors, industrial concentration fell and trade unions emerged, so a more broad-based democratic system emerged, where political capitalism was gradually replaced by market capitalism.

In the OPEC countries the development has been different. The early development of the oil sector in LDCs was dominated by branches of foreign multinationals, which were large relative to the national economy and hence powerful. However, the power of foreign companies is always of dubious strength, and now the said branches of the oil companies have turned into firms with majority owners within the OPEC countries, so the dominating companies in the OPEC countries are controlled by the rulers and their families. This also applies to the national airlines, much real estate etc. Thus, the capitalism of these countries is highly political.

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Appendix

Table A. Variables with sources

Variables	Content
GDP, *gdp*	Real GDP/GNI in PPP prices, per capita. Using fixed 2011 US$. https://www.ggdc.net/maddison/maddison-project/home.htm
y	Income, y = ln gdp
g	Growth, $g = 100(gdp/gdp\text{-}1)$
EF	Fraser Institute Economic Freedom Index https://www.fraserinstitute.org/categories/economic-freedom-world
EFA1	Area 1: Government size
EFA2	Area 2: Legal quality and protection of human rights
EFA3	Area 3: Sound money
EFA4	Area 4: Freedom to trade internationally
EFA5	Area 5: Regulation of markets and business
T, TI	$T = 10 - TI$ corruption index. From Transparency international's corruption index, *TI*, that is scaled to measure honesty. https://www.transparency.org/en/cpi/2024
SC	State capture index: https://governanceactionhub.org/explorations/local-global-coordination-for-impact/statecapture-index/ See Kaufmann (2024).
P	Polity(2) converted to P = 5(polity + 10), which is in percentage of the range source: https://www.systemicpeace.org/polityproject.html (may not work)
V	Polyarchy converted to V = 100 Polyarchy, which is in percentage of the range Source V-Dem project: https://v-dem.net/
Other sources	
Aramco (home page), https://www.aramco.com/en	
OPEC (home page) https://www.opec.org/opec_web/en/	
US data, https://data.sfgov.org/Economy-and-Community/US-Census-Bureau-Data/d53k-r35r/about_data	
World Development Indicators, https://databank.worldbank.org/source/world-development-indicators	

Table B. The 18 OPEC countries analyzed

Country	Member	Type	Regime before oil	After	Oil %
The6AP countries on the Arab Peninsula, traditional kingdoms, strong spatial effects					
Bahrain	Associated	MENA, Arab, Muslim	Emirate (UK)	Emirate	9.1
Kuwait	Founding	MENA, Arab, Muslim	Emirate (UK)	Emirate	35.7
Oman	Associated	MENA, Arab, Muslim	Kingdom (UK)	Kingdom	19.1
Qatar	1961-2019	MENA, Arab, Muslim	Kingdom (UK)	Kingdom	13.2
Saudi Arabia	Founding	MENA, Arab, Muslim	Kingdom (UK)	Kingdom	22.7
UAE	1967	MENA, Arab, Muslim	Emirates (UK)	Emirates	13.5
The 12oO countries, for other OPEC, mostly military or other authoritarian, weak spatial effects					
Algeria	1969	MENA, Arab, Muslim	French colony	Military/autocracy	12.2
Angola	In and out	Africa, Catholic	Portuguese colony	One party/democracy	23.4
Congo Br	2018	Africa, Catholic	French colony	Mixed	24.4
Ecuador	In and out	Latin America, Catholic	Military/democracy	Military/democracy	4.5
Eq. Guinea	2017	Africa, Catholic	Spanish/authoritarian	Authoritarian	15.1
Gabon	In and out	Africa, Catholic	French colony	Autocracy	13.1
Indonesia	In and out	Asian, Muslim	Autocracy	Autocracy/democracy	0.7
Iran (Persia)	Founding	MENA, Shia, Muslim	Kingdom	Kingdom/theocracy	16.5
Iraq	Founding	MENA, Arab, Muslim	Kingdom/military (UK)	Military/democracy?	37.0
Libya	1962	MENA, Arab, Muslim	Kingdom, Italian colony	Military	10.7
Nigeria	1971	Africa, Muslim/Christian	British colony	Military/democracy	4.7
Venezuela	Founding	Latin America, Catholic	Military/democracy	Military/democracy	na

Bahrain and Oman are not OPEC members but closely associated. Equatorial Guinea often misses data, so 12Others become 11Others. Congo Br (Brazzaville) is République du Congo. Brunei is also a wealthy oil exporter, but not an OPEC member and misses most data. *Oil %* is oil rents in % of GDP, average 2015-20. The production of oil and related products (notably gas) is about twice as large. Indonesia is not oil-dependent anymore.