March 4th - 2026

The economic system of oil countries:

Authoritarian political capitalism

Martin Paldam, Aarhus University[1]
Jamel Saadaoui, Paris 8 University[2]

For Miklós, R., Vahabi, M., eds. *Handbook of Political Capitalism*. Cambridge U.P., 2026.

Abstract

The paper is an empirical study of 18 OPEC countries that were low-income countries when oil was found. Oil has given the countries an easy but skew 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, 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.

Acknowledgement: The paper was presented at the Conference on Political Capitalism, Corvinus University of Budapest in May 2025, where the participants made a big effort to clarify the concepts. This has strongly influenced the paper. We are grateful to the organizers Miklós Rosta and Mehrdad Vahabi, and the participants, notably Pranab Bardhan for pointing to the state capture index, and Chenggang Xu for the institutional genes concept. The paper was also presented at the PEDD conference in Münster February 2026, we want to thank Jonas Willibald Schmid. We also want to thank the referees.

[1] Department of Economics and Business, Fuglesangs Allé 4, DK-8210 Aarhus V. Phone: 45-87175545, email mpaldam@econ.au.dk, home page http://www.martin.paldam.dk.
[2] Dionysian Economics Lab, 2 rue de la Liberté, Saint-Denis, 93526, France, email: jamelsaadaoui@gmail.com, home page https://www.jamelsaadaoui.com.

1. Introduction

The paper is an empirical study of 18 oil countries that were LDCs (less developed countries) when oil was found. Compared to other LDCs they have become wealthy, but their economic system has diverged, giving different institutional outcomes.

1.1 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 acquired by the political insiders using their power*. Some political capitalism is found in all countries – it is small in NW Europe, while it is large in OPEC countries; see Paldam and Saadaoui (2026b). Political capitalism is an encompassing term that covers *state capture* and *crony capitalism*, *ibid*. For oil countries the term *petrostates* is sometimes used.[3]

The paper also uses another encompassing term: *Institutional genes,*[4] which covers the historical roots of culture, religion, and institutions, including the legal system. Ten of the 18 OPEC countries are in the MENA region (Middle East and North Africa), where institutional genes have developed by more than a millennium of Arab/Muslim culture and institutions. It gives institutional inertia, and in addition, oil countries are slower to adjust institutions as wealth reduces the pressures for reform and gives rulers extra power to resist changes.

Most of the 18 countries were oil exporters before the formation of OPEC in 1960.[5] Few have data before 1950, which gives about 1,000 observations for the series discussed. Most OPEC 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 large inflow of foreign exchange gives Dutch disease, see section 4.

[3] The literature on *petrostates* was started by Karl (1997). Burgess and Correles (2024) is a new contribution.
[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.
[5] On the Arabian Peninsula oil was discovered just before World War II, but oil export became substantial only in the 1950s. Before that the countries were traditional LICs (low-income countries).

1.2 Classifying economic systems

Cross-country empirics require simple and robust definitions. All countries have a mixed system with a public and a 'private' sector making private goods and services. The next distinction deals with the ownership of the real capital in the 'private' sector: *Socialism* is public or collective ownership. *Capitalism* is private ownership. The preference for public vs. private ownership is the main dimension in the political spectrum from *socialist*, *liberal*, *conservative*, to *libertarian*.[6] In OPEC, only Venezuela and perhaps Iran are socialist.[7] The other 16 OPEC countries are, in principle, liberal-conservative capitalist systems.

Capitalism has two versions: *Political capitalism* as defined above and *market capitalism,* where the capitalists are private companies in fair competition. The best measure for political capitalism is the ***S* index** of state capture, while the ***E* index** (the Fraser index of economic freedom) is a measure of market capitalism. In theory, capitalist systems have *S* and *E* shares adding to 1. So, if the measures were perfect the correlation r(S, E) between *S* and *E* should be -1, but r(*S*, *E*) = -0.70 in Table 3 below.

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 and mutual trust, but such ties may develop into a collusion aimed at generating rents.

In an autocracy it is easy and thus tempting for the top people to develop dubious ties and become rich.[8] The media and opposition have a big role in pointing to collusion, and the legal system should keep ties clean. For political capitalism to thrive the political insiders must have some controls over media, opposition, and the legal system. Such controls (further) limit democracy. The key method to make money from political influence is rent seeking, using the 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, which in the public sector is the people in the last resort. Corruption is measured by the ***T* index**. It is $T = 10 - TI$, where *TI* is Transparency Internationals honesty/corruption index.

[6] 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.
[7] Till recently Venezuela was 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).
[8] Some dictators care about power only, but most become rich – sometimes very rich.

Section 2 is a brief survey of prior research on the development of the political system in the OPEC countries. Section 3 studies the economic system, using the three indices *E*, *S,* and *T* as proxies for market capitalism, political capitalism, and corruption. Section 4 discusses the logic of the economic systems in the countries, and section 5 concludes. Appendix Table A covers the variables, while Table B lists the OPEC countries. Several background papers, see section two of references, provide (more) documentation for claims made. A parallel study looks at the development of their political system, which has turned more authoritarian with wealth in contrast to other countries, *ibid.*[9]

The 18 OPEC countries are the present and past members of the Organization of Petroleum Exporting Countries, see Table B of the Appendix. The data are divided into two samples. The countries in the **OPEC sample** falls into two groups: **6AP** is the six rich oil countries on the Arab Peninsula, and **12oO** is the twelve other OPEC countries. It is compared with the **Main sample** where the countries also fall into two groups: **25Western** and **124Others**. The figures showing the paths or scatter for the four groups use the graphical conventions of Table 1.

Table 1. Legend to figures with the two samples and four country groups

OPEC sample: Gray		Main sample: Black	
6AP	12oO	26West	124Others
Dashed thick lines	Solid thick lines	Solid medium lines	Dashed medium lines
Large diamonds	Large circles	Small circles	Small hollow circles

[9] The analysis refers to (Paldam, 2021, 2024, 2025a and b) and Paldam and Saadaoui (2026) as *ibid*.

2. Income and the political system

Income, *y*, 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 1960-22 using the graphical conventions from Table 1, while Figure 1b reports the real oil price that has a clear connection to the gray OPEC curves.

Figure 1a. Income in the OPEC countries comparatively

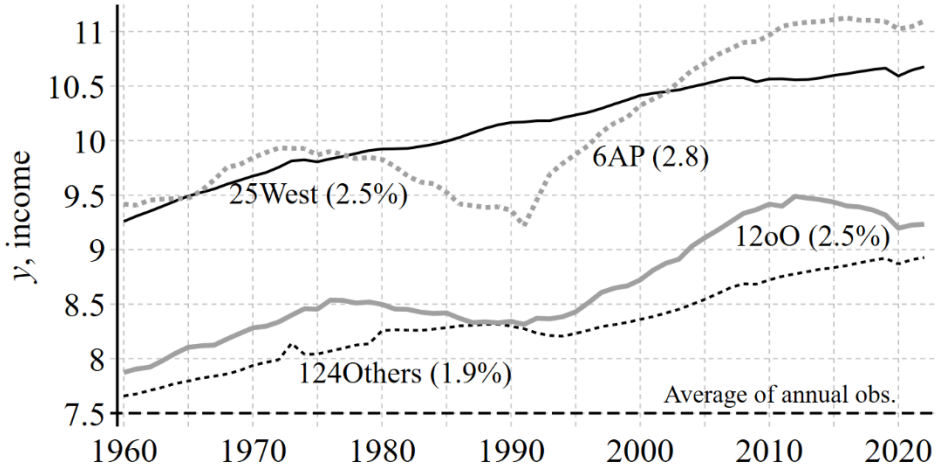
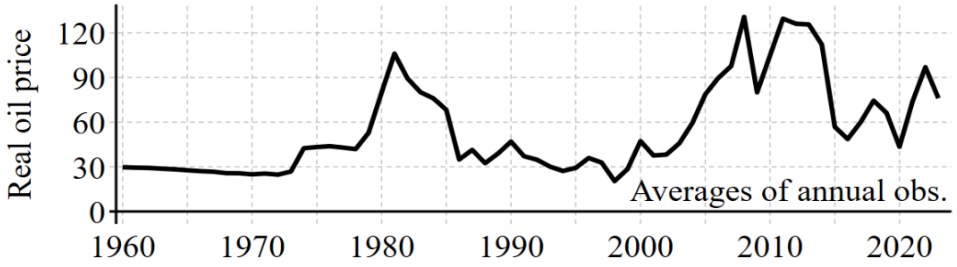


Figure 1b. Index for the real price of oil



Parenthesis holds growth rates. Figure 1b is the US oil prices divided by the consumer price index.

The difference of average income in non-OPEC versus OPEC countries 1960/22 is as follows: For MENA it is 0.99 log point (or 2.7 times for *gdp*); for Sub Saharan Africa it is 0.84 log points (or 2.32 times for *gdp*); and for Latin America it is 0.37 log points (or 1.45 times for *gdp*). Thus, oil countries are substantially wealthier, and Figure 1 shows they also grow marginally faster.

2.2 Political system: The missing democratic transition

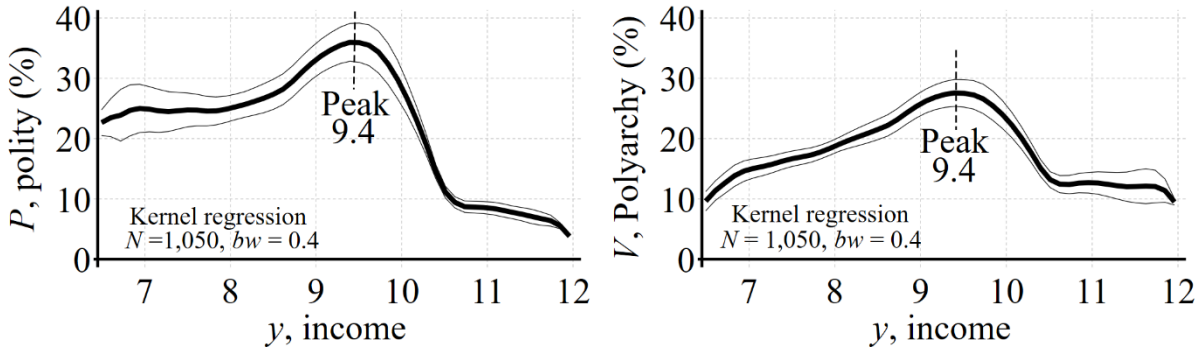
Democracy indices are problematic, so the analysis uses two indices, Polity and Polyarchy see Table A, Appendix. They aggregate somewhat different indicators but give pictures that mainly differ as regards the scales. The two indices are made comparable by conversions to percentages of the range; see Table B, Appendix.[10]

Figures 2, 3, 5, and 8b are done by kernel regression, on unified data, *ibid*. That is, the panel X_{it} is stacked to become 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*, *ibid*. 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 sample

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



The two indices are rescaled to a percent of their ranges. The bold black kernel curves are surrounded by thin 95% confidence intervals. The two graphs only use the authoritarian part of the scale below 50.

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.

[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.

2.3 Political system stability

Table 2 reports gross and net changes in panels A and B. Gross changes are the sum of the numerical changes. Some changes are in zigzag. Net changes cancel out movements that counteract each other, so gross changes are larger than net changes. Income rises over time, so the two democracy indices should increase over time as they do in the 125Other group. The gross changes for the two OPEC groups are typical. However, they 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.[11]

Table 2. 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.

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

Figure 3a. Polity

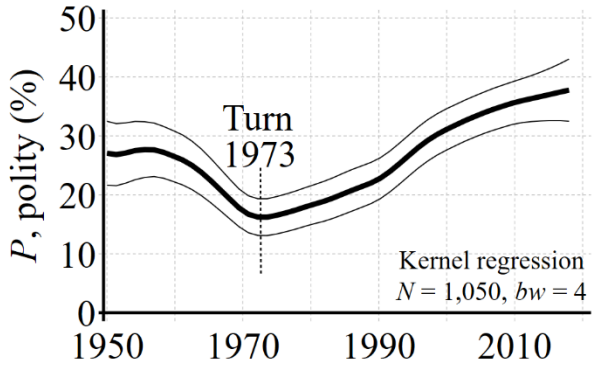
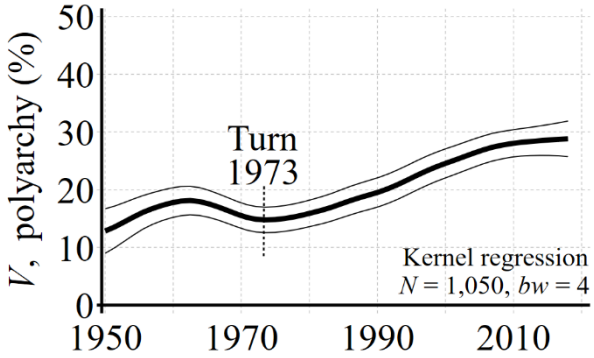


Figure 3b. Polyarchy



[11] Table 2 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. Fortunately, most countries in the group have already progressed some of the way.

Figure 3 shows the small net rise from Table 2. As in Figure 2 both curves remain in the bottom half of the range. The confidence intervals in Figure 2 are narrower, so Figure 2 is better determined.[12]

2.4 Big money inflow to an authoritarian political system

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

(i) A flypaper effect. Even when the flow of resource tax to the treasury finances public goods such as schools, hospitals, infrastructure, defense, etc., some of the flow is diverted to finance the luxury consumption of the ruler: palaces, wives, luxury cars, yachts, airplanes, etc.

(ii) A low tax effect, as the oil tax replaces (most) other taxes, so people feel that they receive public goods and transfers from the ruler. Even when they know where the money comes from, they still receive it from the ruler, who has the option to give or not to give.

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

3. The economic system: political vs. market capitalism

Section 3.1 and 3.2 consider the *S* and *T* indices as measures for political capitalism, while section 3.3 looks at the *E* index of market capitalism. Table 3 shows the correlation (r) between these indices. The *E* grows with *y*, while the *S* and *T* indices fall. This explains the signs. The correlations are considerably larger for the main sample than for the OPEC sample, but the signs are the same. The largest difference is for r(*S*, *T*) that will be discussed.

Table 3. The correlations, r, of the three indices and income

A: OPEC countries, $N = 126$				
	S	*T*	*E*	*y*
S	1			
T	0.10	1		
E	-0.48	-0.27	1	
y	-0.42	-0.54	0.51	1

B: Other countries, $N = 1{,}051$				
	S	*T*	*E*	*y*
S	1			
T	0.84	1		
E	-0.70	-0.77	1	-0.
y	-0.68	-0.77	0.76	1

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

3.1 The similar transition in S state capture and T corruption [13]

Table 4 shows the averages of the two series for the four country groups. They have roughly the same pattern where the West is an outlier. State capture is rather high in the OPEC countries, while corruption is closer to the average in the world.

Table 4. Averages for the *S* and the *T* indices

	S, 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
Observations *N*	54	108	225	1,152	126	276	702	3,135

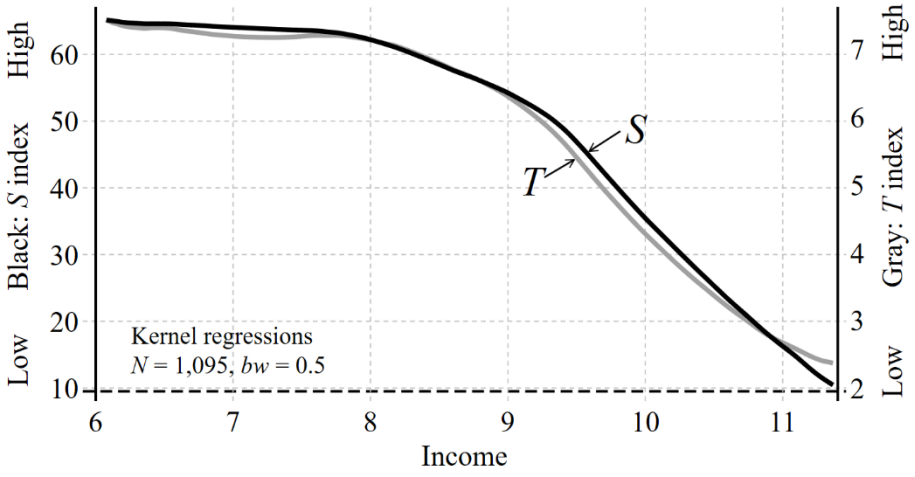
Both Table 4 and Figure 4 demonstrate that the two indices fall with development. LDCs have small economies, with few large firms. Thus, they become relatively important, and business and political leaders often meet and may form alliances. Also, LDCs have more

[13] 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 *S* index.

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.

Figure 4 is calculated on the Main sample. It shows that both variables have neat transitions that are virtually the same. This is one explanation of their high correlation, r(*S*; *T*) = 0.84.[14] The correlation suggests that they measure something similar, which we take to be political capitalism. The two indices are related also because both are relative, so they are calibrated to have a constant cross-country average that is the same for *S* and almost the same for *T* every year.

Figure 4. The transitions of the *S*, state capture and *T*, corruption indices on the Main sample



Both curves are calculated for the 1,095 non-OPEC observations where the *S*, *T*, and *y* data are available. The correlation is r(*S, T*) = 0.84; from Table 3B. The OPEC sample is included in Figure 6.

Figure 4 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. For the causal interpretation of the relations between income and institutions it is important to note that the transitions in *S* and *T* are late relative to the development in *y*, *ibid*.[15]

3.2 S state capture and T corruption as measures of political capitalism

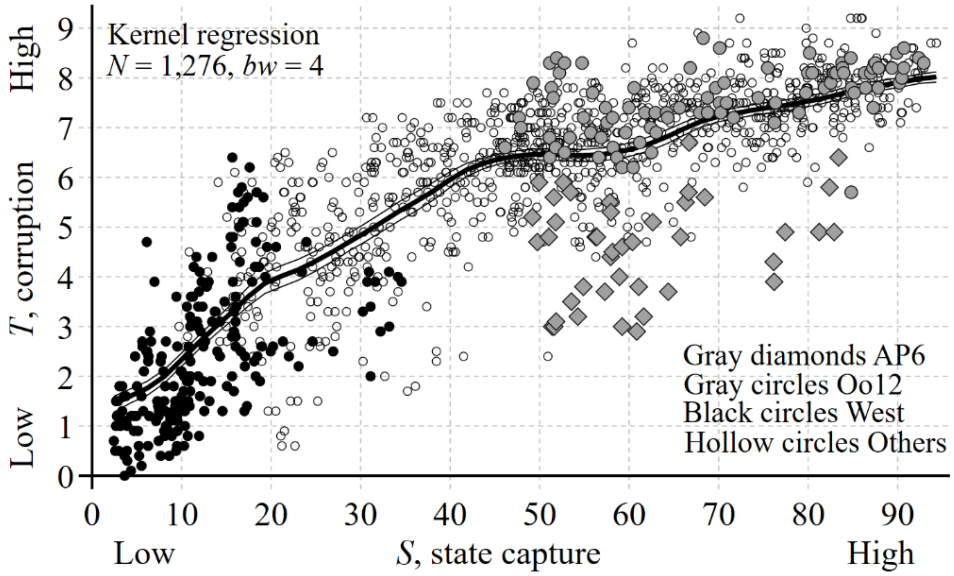
As suggested by Figure 4 the kernel curve in Figure 5 is rather linear. Two groups of countries

[14] The high correlation is not by construction. The indices are made by independent NGOs. They aggregate different indicators.

[15] It is a major discussion if good institutions cause growth, or high income cause good institutions. The late transition of the bad institutions *S* and *T* support the latter possibility, *ibid*.

deviate from the curve: The Western countries are below the curve, and so are some of the OPEC countries.[16] 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. This explains the low r(*T*, *S*) = 0.10 for the OPEC group. We shall return to this point several times below.

Figure 5. The position of West and the OPEC countries in the (*T*, *S*)-scatter



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.[17] The only OPEC country covered is Iran. It has a large business sector owned by semi-independent public foundations.

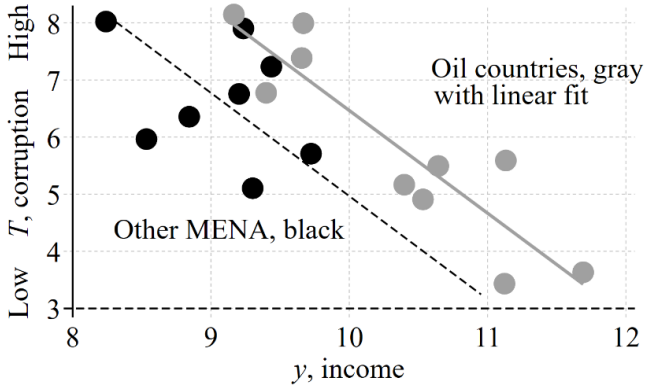
Figure 6 tries to sort out the two explanations by a crude assessment. The figure looks at the 18 MENA countries. The points are eight black non-oil and ten gray oil country points. They show that with rising income, corruption falls as predicted. The line through the oil points

[16] 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.

[17] 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.

is to the right of the non-oil points. The dashed black line shows how much the gray 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) may contribute equally to explaining the excess corruption in the OPEC countries.

Figure 6. 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 black line shows how much the grey line should move to be in the middle of the black points.

3.3 The E index of economic freedom as a measure of market capitalism

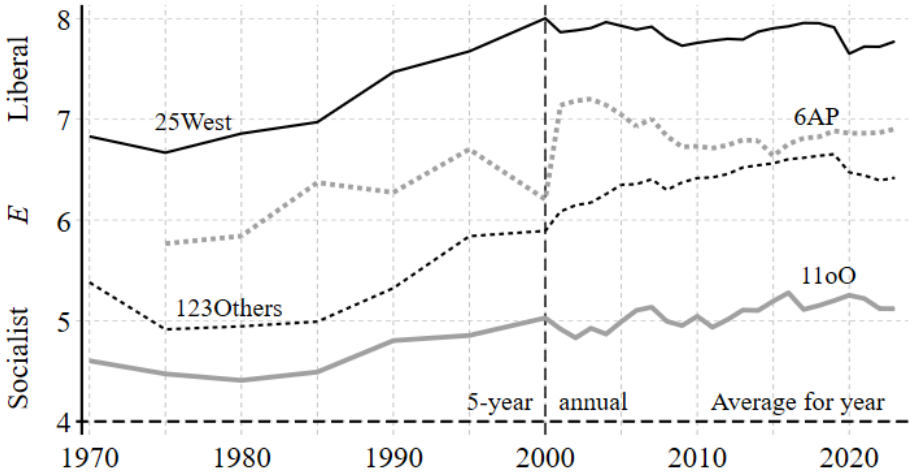
E is the Fraser Institute index for economic freedom.[18]. It measures the freedom to run a private business on a scale from 0 to 10. The libertarian philosophy behind its construction is explained in several reports, available from the Fraser Institute home page (references). The index gives low scores to countries with a socialist economic system or without law and order, and vice versa. This is close to measuring the degree of market capitalism.[19] Apart from Venezuela (and Iran?), the OPEC countries are capitalist.[20]

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

[18] It 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.
[19] 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.
[20] 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. 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.

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 to explain capitalism in these countries.

Figure 7. *E*, economic freedom for the four country groups



The *E* index has no data for Equatorial Guinea, so 12oO becomes 11oO.

Figure 7 shows the patterns in the *E* 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.

3.4 The five components of the E index

The Fraser index has five components: E_1 to E_5. Table 5 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 bolding gives the clusters of high intercorrelation. Note that Others have one cluster of all variables except E_1 and growth, while OPEC has two separate clusters, where the *V*, *P* and E_1 form a separate cluster, while growth is different. Thus, E_1, for government size, is uncorrelated with the other four areas of the Fraser index, which are positively and substantially intercorrelated.

Table 5. 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 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	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
E_2, legal	**0.83**	0.32	**0.86**	0.06	**0.95**	0.07
E_4, free trade	**0.76**	0.41	**0.84**	-0.07	**0.84**	0.14
E_5, regulation	**0.85**	0.33	**0.82**	0.37	**0.87**	0.21
E_3, 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
E_1, public size	-0.06	**0.64**	0.00	-0.01	-0.22	0.04
Growth	0.02	0.14	-0.18	0.39	0.03	0.28

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

T is weakly negatively correlated with E_1. Thus, the larger the government sector, the less honest the country is. The remaining four areas are all positively related to *T* 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 5. 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 E_1, the size of government. The

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

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.

B(2025 and 26c) shows the paths of the four groups for E_1, E_3, E_4 and E_5. The OPEC countries are a little on the high side, so they are not particularly liberal. However, E_2 shows a clear picture.

3.5 E_2. Legal quality and property rights protection

For E_2 the four country 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).

Figure 8a. E_2, legal quality and property rights protection

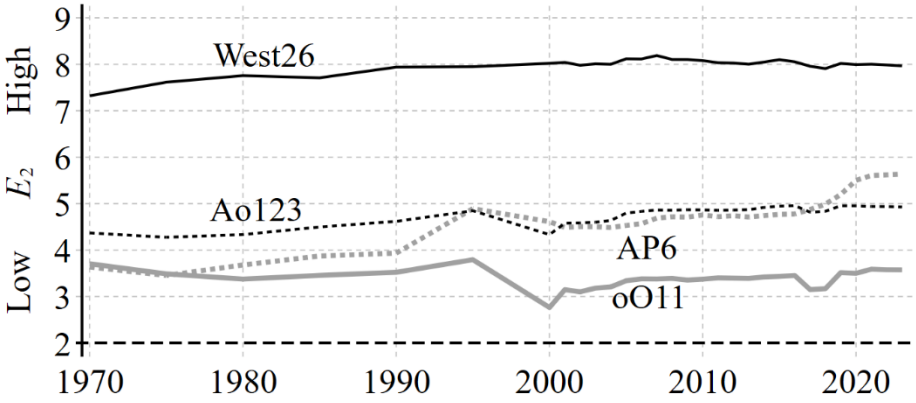
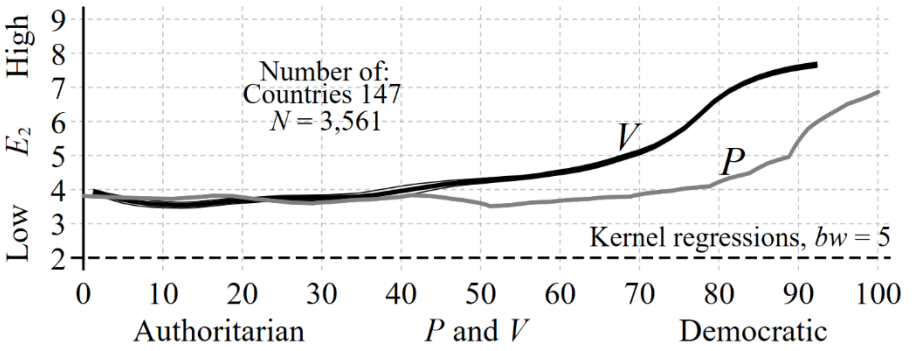


Figure 8b. The relation between the legal system and political regime



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 independent 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.

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

Oil is an extreme case of a resource producing almost only rents. The large literature on Dutch disease discusses this case. It was started by Corden (1984).[22] The discussion has reemerged as the resource curse literature debating whether abundant resources are a blessing or a curse; see Ploeg (2011) and Paldam (2013). Section 2.1 showed the big income effect which suggest it is a blessing, but the long run political dynamics in oil countries are less favorable as has appeared in the two oldest oil countries Iran and Venezuela.

4.1 An oil sector is a small enclave producing resource rent [23]

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 rulers 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.

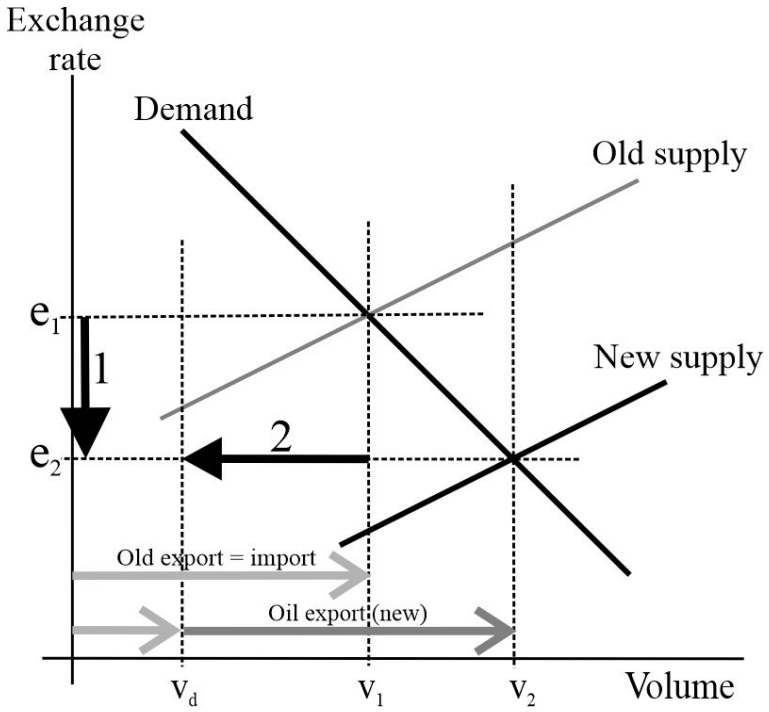
4.2 The mechanics of Dutch disease: a stylized illustration

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

[22] Before Corden it was known as the transfer problem after World War I, but it has longer roots; see Vahabi (2018).
[23] For a more detailed analysis see ibid.

loss of competitiveness that reduces employment. This is drawn by the graph on Figure 9. The process whereby the new equilibrium is reached is faster under floating exchange rates, but it is reached anyhow. In addition, capital movements may delay the effects.

Figure 9. Demand and supply of foreign exchange



The figure assumes that the volume of exchange is determined by import = export. Before oil the volume was v_1. It increases to v_2, but the domestic part is only v_d. 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: Arrow 1 shows the real revaluation, while arrow 2 shows the fall in the traditional exports caused by the revaluation. These effects are hard to prevent once an oil sector starts to produce large amounts of resource rent.

4.3 The labor market and an illustration: Saudi Arabia[24]

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, the new wealth can pay for increased production of non-tradables such as public works and other construction projects.

[24] Based on the home page of Aramco, and World Development Indicators.

Most of the OPEC countries, notably 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 large countries as Indonesia, Iran, and Nigeria.

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 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.

4.4 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.[25] 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 royal 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.

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

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.

The oil companies in the OPEC countries started as branches of private multinationals, but resource rent is easy to identify and tax, so most of the rent ended up in the treasuries of the rulers. Later, the oil companies went from branches to separate companies, where nationals acquired majority shares. The wealthiest nationals being the rulers, they became the dominating capitalists, especially in the 6AP countries. In the 12oO countries the rulers were mostly military. Here oil was often nationalized, but then a national company was formed to run the monopoly.

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. When the national oil company is a limited liability company, it is a capitalist system even when the ruler is the biggest capitalist. In short, it is a striking example of political capitalism. It is system where the collusion between economic and political elites is internalized.

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. Later, 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 domestic majority owners, so the dominating companies in the OPEC countries are controlled by the rulers and their associates. This also applies to the national airlines, much real estate etc. Thus, the capitalism of these countries is highly political.

References:

Babali, H., 1987. The Rentier State in the Arab World. *Arab Studies Quarterly* 9(4), 383- 98

Bjørnskov, C., Paldam, M., 2012. The spirits of capitalism and socialism. A cross-country study of ideology. *Public Choice* 150, 469-98

Burgess, K., Corrales, J., 2024. Petro-states, oil shocks, and regime Change; Venezuela and Ecuador, 2013 2023. *Environment and Security* 2(3), 474-98

Corden, W.M., 1984. Booming sector and Dutch Disease economics: Survey and Consolidation. *Oxford Economic Papers* 36, 359–380

Diwan, I., Malik, A., Atiya's, I., eds., 2019. *Crony Capitalism in the Middle East – Business and Politics from Liberalization to the Arab Spring*. Oxford U.P., Oxford

Epstein, D.L., Bates, R., Goldstone, J., Kristensen, I., O'Halloran, S., 2006. Democratic transitions. *American Journal of Political Science* 50, 551-69

Harris, K., 2019. Iran's Commanding Hights. Privatization and Conglomerate Ownership in the Islamic Republic. Chapter 14 in Diwan et al. (2019)

Karl, T.L., 1997. *The Paradox of Plenty: Oil Booms and Petro-states.* University of California Press, Berkley

Kaufmann, D., 2024. State Capture Matters: Considerations and empirics toward a worldwide measure. On home page of *S* index

Krueger, A.O., 1974. The political economy of the rent-seeking society. *American Economic Review* 64(3), 291-303

Mansfield, E.D., & Snyder, J., 2002. Democratic transitions, institutional strength, and war. *International organization* 56, 297-337

O'Reilly, C., Murphy, R.H., 2025. Freedom from unit roots? The time series properties of democracy and economic freedom. *Journal of Comparative Economics,* https://doi.org/10.1016/j.jce.2025.02.003

Paldam, M., 2013. The political economy of Dutch Disease: A survey. Chapter 10, p 179-196 in Cabrillo, F., Puchades-Navarro, M.A., eds., *Constitutional Economics and Public Institutions*. Elgar, Cheltenham

Paldam, M., 2021. *The Grand Pattern of Development and the Transition of Institutions*. Cambridge UP, New York[26]

Paldam, M., 2024. Income, Growth, and Democracy. Looking for the main causal directions in the nexus. *European Journal of Political Economy* 83, 102532

Paldam, M., 2025a. Explaining the Path of the Democratic Transition. *Kyklos* 78(3), 1142-57

Paldam, M., 2025b. The OPEC/MENA/Arab nexus and the missing democratic transition. *European Journal of Political Economy* 90 (2025) 102731

Paldam, M., Saadaoui, J., 2026. The development of the economic system in the long run: From political to market capitalism. Working paper available from http://martin.paldam.dk/Papers/GT-Main2/Nr9-S-paper.pdf

Ploeg, van der, F., 2011. Natural Resources: curse or Blessing? *Journal of Economic Literature* 49(2), 366–420

Pryor, F. L., 2009. The Political Economy of a Semi-industrialized Theocratic State: The Islamic Republic of Iran. Chapter 11 in Ferrero, M., Wintrobe, R., eds. The Political Economy of Theocracy. Palgrave, New York

[26] Paldam (2021, 2024, 2025a and b) and Paldam and Saadaoui (2026) are referred to as *ibid*.

Rodrik, D., Wacziarg, R., 2005. Do democratic transitions produce bad economic outcomes? *American Economic Review* 95, 50-5

Roy, D., Cheatham, A., 2024. *Venezuela: the Rise and Fall of a Petrostate*. Council on Foreign Relations, available from https://www.cfr.org/backgrounder/venezuela-crisis

Soto, de H., 2000. *The Mystery of Capital. Why Capitalism Triumph in the West and Fails Everywhere Else.* Bantam Press, London

Takriti, A.T., Safieddine, H., 2022. *Arab Socialism*. Chapter 21 pp 474-516 in Linden, van der, M., *The Cambridge History of Socialism* vol II. Cambridge UP, Cambridge U.K.

Vahabi, M., 2018. The resource curse literature as seen through the appropriability lens: a critical survey. *Public Choice* 175(3-4), 393-428

Vahabi, M., 2024. Islamic revolution and Anfal. *Public Choice 200*, 383-401

World Development Indicators: https://databank.worldbank.org/source/world-development-indicators

Xu, C. (Chenggang), 2025. *Institutional Genes: Origins of China's Institutions and Totalitarianism.* Cambridge UP, New York

Backgound papers Available from http://www: martin.paldam/GT-Main2

B(2025). Net Appendix

B(2026a). Constancy spells for the polyarchy democracy index

B(2026b). Looking for causality of state capture and other institutions.

B(2026c). Looking for causality of economic freedom and income.

Appendix

Table A. Variables with sources

Variable	Content
gdp	Real GDP/GNI in PPP prices per capita. Fixed 2011 US$. Source: https://www.ggdc.net/maddison/maddison-project/home.htm
y	Income, y = ln gdp
g	Growth, $g = 100(gdp/gdp\text{-}1)$
E	Fraser Institute Economic Freedom Index, with five areas:
E_1	Area 1: Government size
E_2	Area 2: Legal quality and protection of human rights
E_3	Area 3: Sound money
E_4	Area 4: Freedom to trade internationally
E_5	Area 5: Regulation of markets and business
	Source: https://www.fraserinstitute.org/categories/economic-freedom-world
T, TI	$T = 10 - TI$ corruption index. From Transparency international's corruption index, *TI*, which is scaled to measure honesty. Source: https://www.transparency.org/en/cpi/2024
S	State capture index. Source: https://governanceactionhub.org/explorations/local-global-coordination-for-impact/statecapture-index/ See Kaufmann (2024).
P	Polity(2) converted to $P = 5(\text{polity} + 10)$, 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, and the dependency of Ecuador and Nigeria is weak, so the core countries of OPEC are in the MENA area.