

## The distribution of the Fraser Index of Economic Freedom

As listed in Table 1 there are 3,941 observations for the Fraser EF index from 1970 to 2021. The index measures the economic freedom to run a private business, i.e., it values a stable economic system with a high legal quality, well protected property rights, and free trade. It is measured on a scale ]0, 10[, where the extremes cannot be reached.

The index started in 1970 for  $N_c = 93$  countries, and now  $N_c = 165$ . From 1970 to 2000 the index was published every 5<sup>th</sup> year. Since then, it has been annual. Table 1 gives descriptive statistics for 7 country groups and two sub-groups (shaded). The OPEC countries are not included in the other groups.

The observations are distributed as shown on Figure 1a. The distributed has a fat top, and it is a bit skewed, but it is not so non-normal that it may affect regression analysis. The distributions for five of the groups deviate moderately and as expected, see Figure 4 at the end. Two groups deviate substantially as shown as Figure 1b and 1c.

The distribution for the West is narrow and has a high peak in the bins from 7.5 to 8.5. There is small tail to the left due to three countries that in 1970 were middle-income countries with socialist policies. They have turned into normal high-income countries, see Figure 2.

Table 1. Descriptive statistics for the Fraser EF index

	Count	Countries	Average	St dev	Min	Max
Africa SS	852	39	5.668	0.861	2.25	7.62
Asia	590	25	6.601	1.260	1.87	9.28
Latin America	649	24	6.660	0.937	2.31	8.17
MENA	191	8	5.869	1.249	2.74	7.40
Post Socialist	563	27	6.901	0.925	2.88	8.25
West	700	25	7.769	0.685	4.24	8.92
OPEC	396	17	5.676	1.213	2.47	7.44
Arab Peninsula	133	6	6.802	0.466	4.51	7.44
Other OPEC	263	11	5.107	1.068	2.47	7.29
All	3,941	165	6.531	1.221	1.87	9.28

The OPEC group are mostly MENA countries, but it also covers two Latin American countries and five African, but the index has no data for Equatorial Guinea. Bahrain and Oman are included in the OPEC group. Cyprus, Israel and Malta are West. Mauritius, Seychelles, and Fiji are Asia, while Comoros, and Cape Verde is Africa.

Figure 1. The frequency distributions in per cent

Figure 1a. All

$N = 3,941$

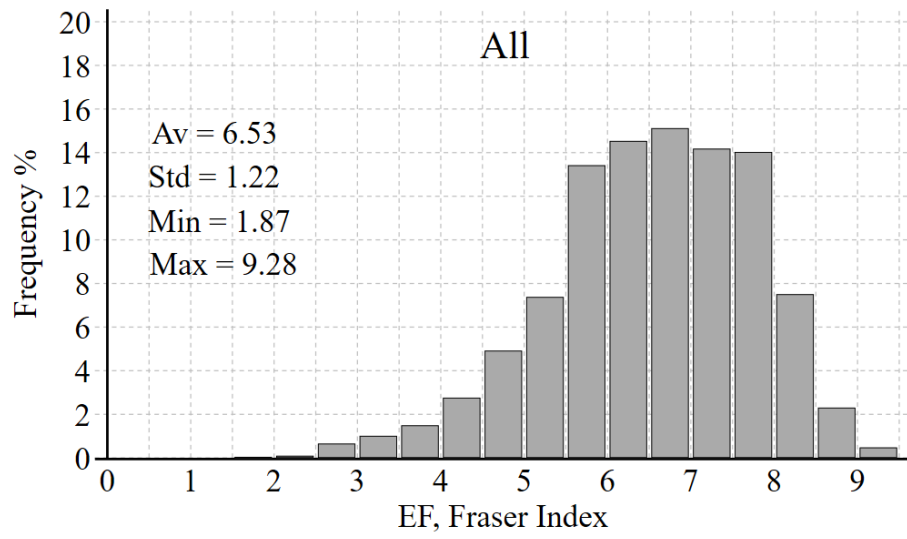


Figure 1b. West

$N = 700$

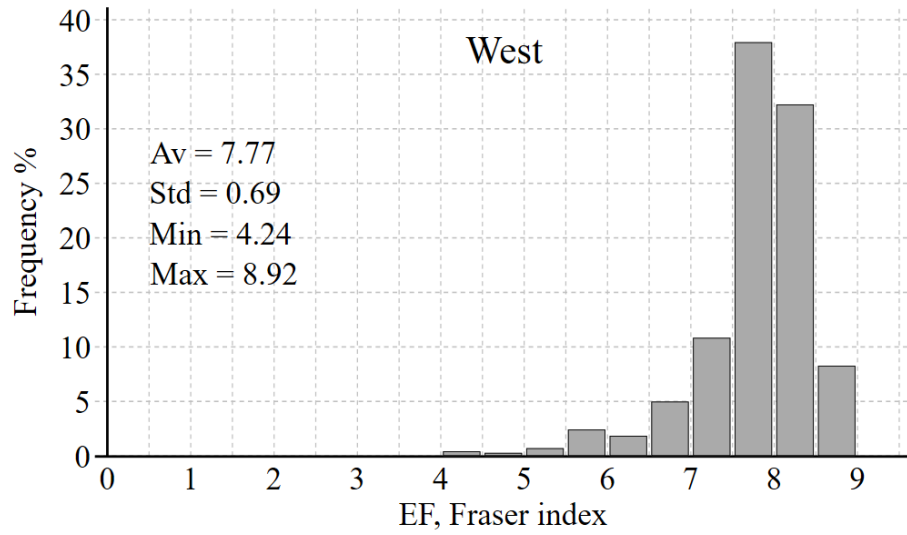


Figure 1c. OPEC

$N = 396$

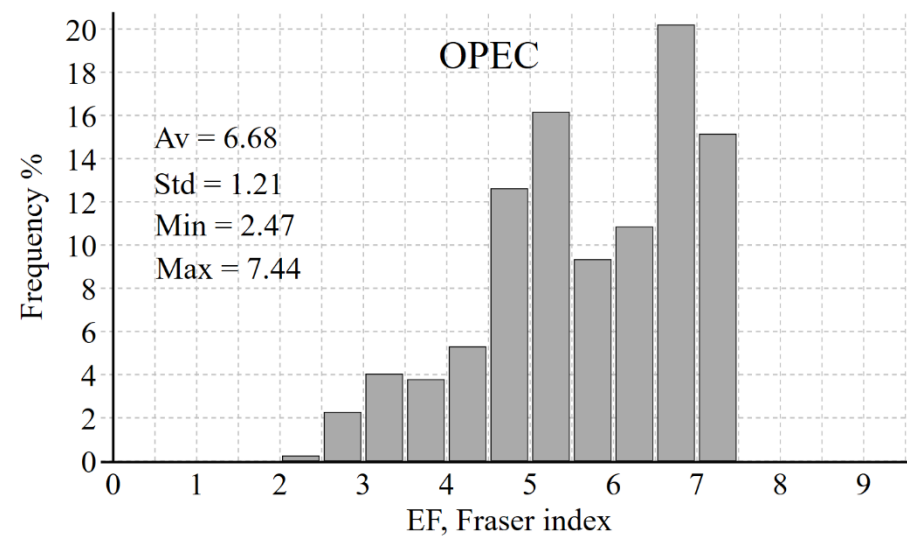
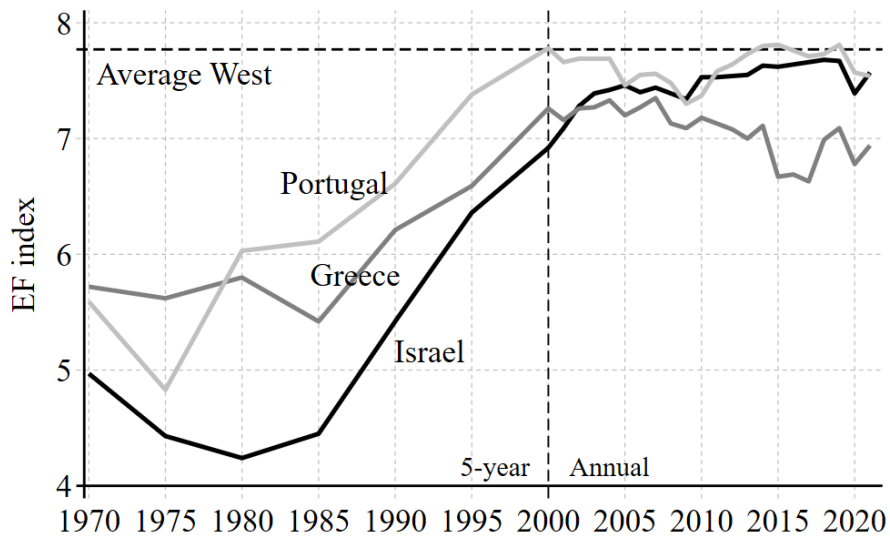


Figure 2. The story of Greece, Israel, and Portugal as told by the EF index



The OPEC sample gives a skew distribution, which appears truncated at 7.5. This reflects the fact that the largest company in all OPEC countries is the national oil company that is owned by the state. In addition, the component of the index that measures legal quality and protection of property rights are low in the OPEC countries.

The two shaded rows in Table 1 show a division of the OPEC countries into 6 countries on the Arabian Peninsula and 11 others. Figure 3 is the same graph as Figure 1c, but with the observations divided into two groups. The difference is very visible. The truncated look of Figure 1c is due to the 6 countries on the Arab Peninsular.

Figure 3. The frequency distribution of the OPEC Countries divided into two sub-groups

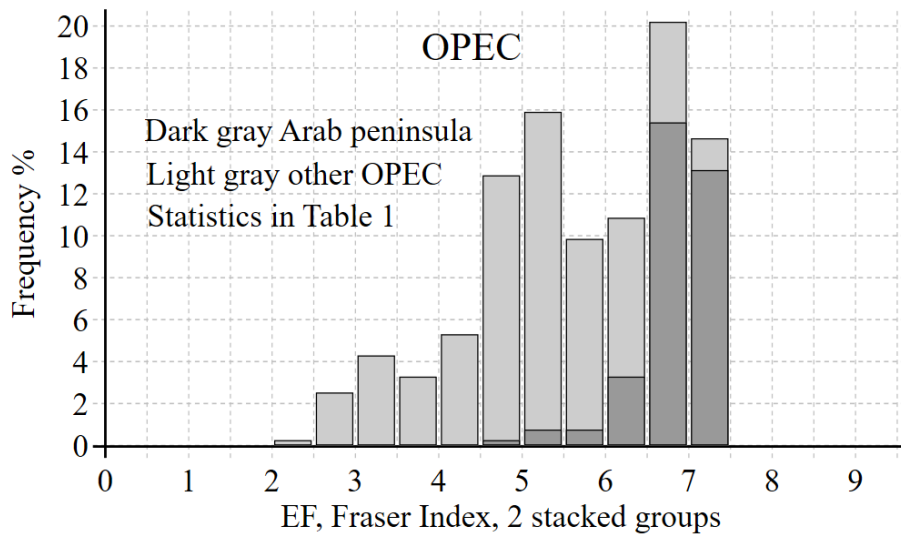
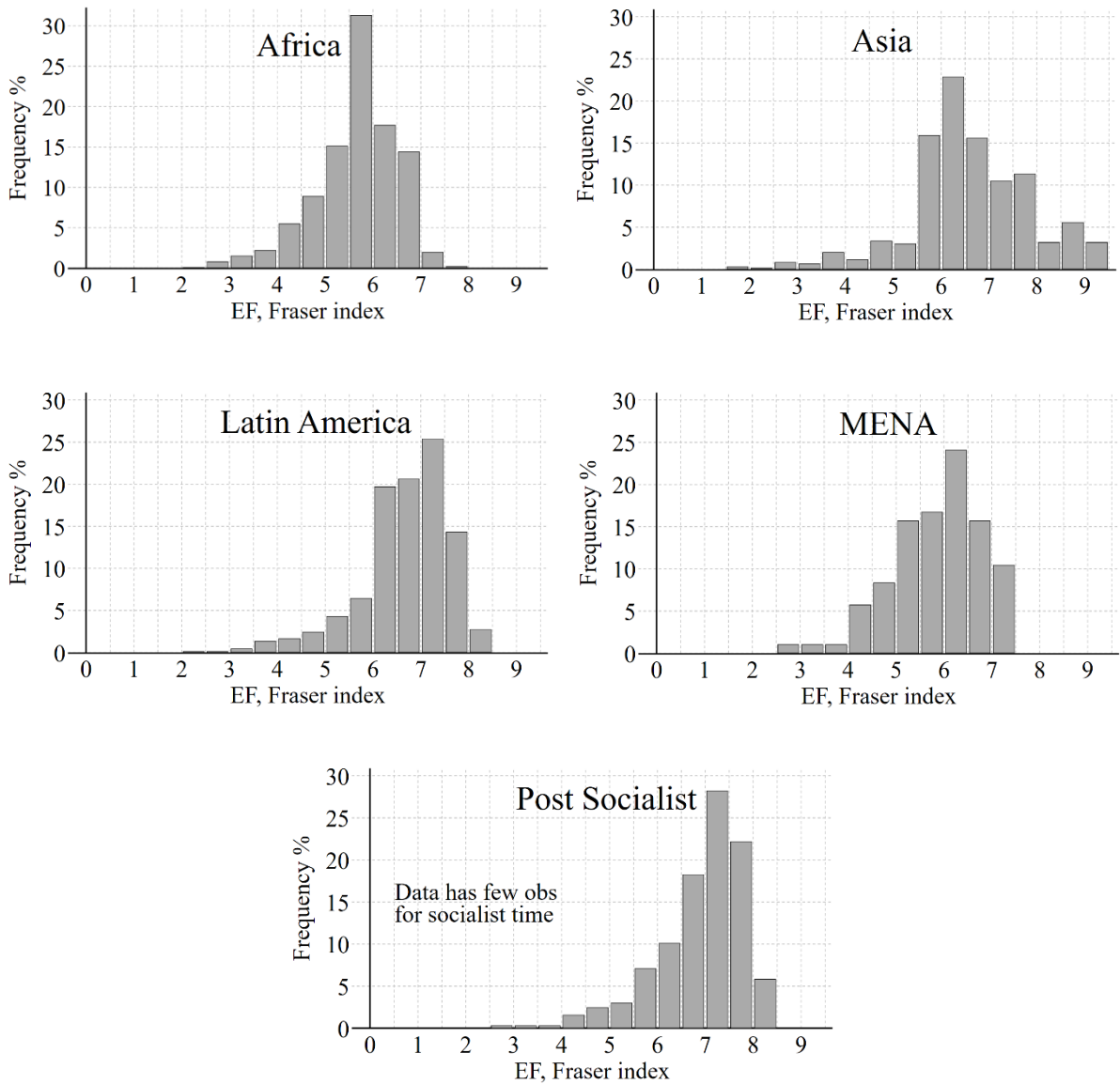


Figure 4. The distributions for the remaining 5 groups

Descriptive statistics are in Table 1



The 5 remaining groups show that the fat top on Figure 1a is due to the difference in the top for the different country groups. All five distributions have a tail to the left, generated by the socialist policies pursued by some countries in the group, mainly before 1990. The Asian group has a very wide distribution indicating that it is the least homogeneous group, including both Myanmar and Hong Kong. The MENA curve may have the same truncated look as the OPEC group.