

Release of new purchasing power parities for the Arab region

Real sizes of Arab economies







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The Economic and Social Commission for Western Asia (ESCWA) just released a new series of regional purchasing power parities (PPPs) extending until 2021. This again places the Arab region as the leading region in providing such recent PPP estimates providing valuable up-to-date information for researchers and policymakers about economic assessments and challenges.

The release provides results of regional PPPs and price level indices (PLIs) for 2020 and estimates for 2021, for 13 Arab countries namely: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Morocco, Oman, the State of Palestine, Qatar, Saudi Arabia, the Sudan and the United Arab Emirates. It also provides revised results of PPPs and PLIs for 2018 and 2019, which were updated based on revised official expenditure data. The regional PPP results were computed against the Omani rial (OMR) and, for ease of reference, a preliminary PPP conversion to United States dollars is provided for the interim period extending from 2018 to 2021 at the gross domestic product (GDP) and household consumption (HHC) levels, which otherwise cannot be linked until all other regional PPPs are computed and linked by the World Bank into a set of global PPPs. The results denominated in United States dollars should not be considered final, as they will undergo revision and updating once the global PPPs are produced. ESCWA made additional efforts to include Lebanon in the comparison, especially with the ongoing economic crisis combining inflation with currency devaluation. Through successful collaboration with the Central Administration of Statistics of Lebanon (CAS), which conducted the required national

surveys and provided all the necessary data, ESCWA was able not only to produce recent PPP estimates for Lebanon, but also to backcast and produce PPP estimates of the Lebanese pound (LBP) back to 2017.

According to the PPP results, the purchasing power of the Lebanese pound at the GDP level has taken a dive against the United States dollar in 2020, with PPP jumping from LBP 659 per \$1 in 2019 to LBP 1,304 in 2020, and is expected to hit LPB 3,639 in 2021, implying a loss of half of the local currency's purchasing power by 2020, and an expected total loss of 82 per cent of its purchasing power between 2019 and 2021. The results reveal a deeper dive of the purchasing power of the Lebanese pound at the HHC level, indicating that households in 2021 would require 5.5 times the amount of Lebanese pounds they used to pay in 2019 to get the same equivalence in United States dollars. The Sudan reflects a similar scenario at the GDP level, with the Sudanese pound losing more than half of its purchasing power against the United States dollar between 2019 and 2020, and is expected to lose 87 per cent of its purchasing power between 2019 and 2021.

A temporal assessment of the price level index (PLI) results, which highlight the price level differences that market exchange rate conversions do not reflect, shows that in 2021, the price levels in most of the featured countries are expected to slightly decline against the price level of the United States when compared to 2019. This opposes the earlier movement in the price level index from 2017 to 2019 (figure 1). Lebanon and the Sudan move in the opposite direction to the majority of countries.

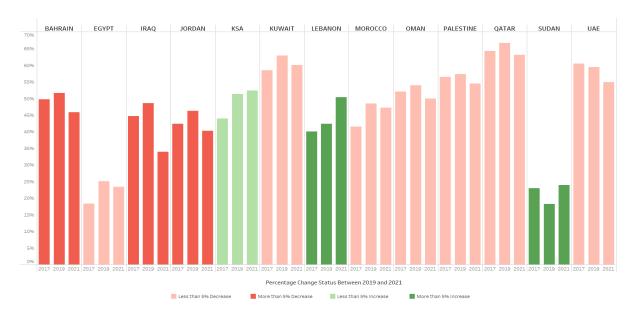


Figure 1. Price level index (at GDP level; USA=100)

Observing the PLI of Lebanon, which is witnessing high inflation in 2021 alongside parallel market exchange rates, the depreciation of the Lebanese pound against the United States dollar counteracts the increasing price movement but cannot overshadow the excessive inflation. Consequently, expensiveness in Lebanon between 2019 and 2021 is expected to rise from 42 to 50 per cent, whereas it is expected to increase beyond 55 per cent at the HHC level. The price level for Lebanon, expressed as expensiveness, reflects the denomination of PPP of the Lebanese pound by a weighted average exchange rate, which accounts for the multiple parallel exchange rates of the Lebanese pound.1 The Sudan,2 however,

which adopted a managed floating exchange rate regime in February 2021, estimates a 33 per cent jump in its price level and is also expected to witness a higher increase at the HHC price level. Saudi Arabia is expected to maintain its price level, with a slight increase, whereas the other countries are expected to witness decreased price levels in the postpandemic period. On the other end of the spectrum, the striking decrease in the price level of Iraq is a result of the expected outweighing effect of the appreciation in the purchasing power of the Iraqi dinar against its market exchange rate depreciation to the United States dollar. Egypt is expected to have the lowest price level in 2021, whereas Qatar remains the most expensive.

¹ The price level index is the ratio of PPP to the market exchange rate. In the case of Lebanon, owing to the existence of three parallel exchange rates since August 2019, a weighted monthly average exchange rate was computed by the World Bank for each month up to May 2021. The annual average exchange rate for 2021 was forecasted by ESCWA, relying on a similar methodology.

² Exchange rates for the Sudan are equivalent rates, which reflect parallel market exchange rates.

2017 12.26% 3.72% 5.06% 2.66% 5.19% 3.91% 30.86% 1.90% 7.24% 0.51% 25.28% 1.40%
2020 12.60% 3.07% 4.43% 2.87% 4.92% 3.51% 26.16% 2.05% 7.80% 0.59% 30.59% 30.58% 1.44%

Figure 2. Structure of country expenditure shares between 2017 and 2020 (PPP-based expenditures)

Observing the total expenditure of the 12 countries, excluding Lebanon,³ total expenditure in PPP terms declines by 3 per cent from 2017 to 2020, down from OMR 1,019 billion in 2017 to OMR 991 billion in 2020. The biggest expenditure share in 2020 is dominated by

Egypt, rising from 25 to 31 per cent, replacing the dominance of Saudi Arabia whose expenditure share fell from 36 down to 26 per cent (figure 2). The smallest share in 2020 is that of the State of Palestine, with 0.59 per cent of the total GDP for all the countries.

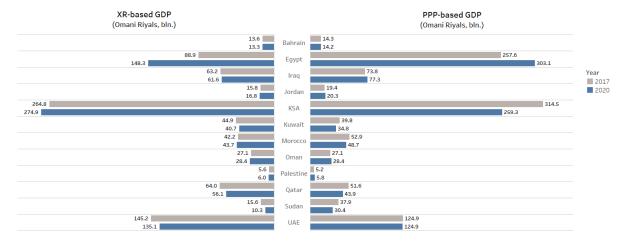


Figure 3. Nominal versus real sizes of Arab economies

 $\textbf{Source:} \ \textbf{Nominal values are official GDP figures from national statistical offices.} \ \textbf{Real values are ESCWA calculations.}$

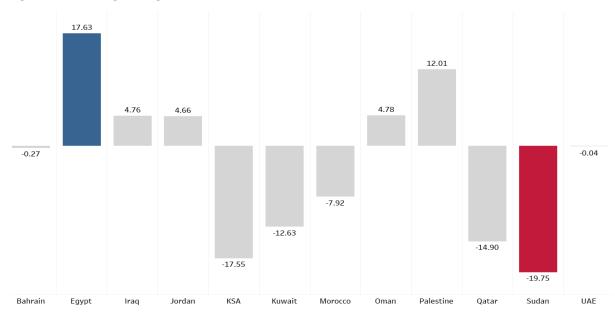


Figure 4. Percentage change of PPP-based GDP between 2017 and 2020

A comparison between exchange rate (XR) versus PPP-based GDP unveils the real sizes of economies and corrects for price level differences between countries. In 2020, Saudi Arabia, the largest economy in XR terms, diminished and became the second largest in PPP terms, whereas the economic size of Egypt more than doubled (figure 3). In observing the real economic performance of countries by comparing their PPP-based GDP between 2017 and 2020, the Sudan witnessed the highest percentage change in real GDP value with a 20 per cent decrease, whereas Bahrain and United Arab Emirates maintained the same real GDP level with less than 1 per cent change. Egypt scored the highest increase (figure 4).

An overview of the PPP-adjusted per capita income of the 12 countries under consideration

reveals interesting results when compared, for each year, with the average per capita of this group of countries as a whole. Although Qatar remains the richest among all 12 countries in both 2017 and 2021, its per capita income witnesses a significant drop from 5.15 to 4.51 relative to the total average per capita, whereas the United Arab Emirates, the second richest in the group, sees an increase in its relative per capita income (figure 5). Egypt, a relatively low per capita income country, however, witnesses the highest percentage increase of 13 per cent. Kuwait followed by Saudi Arabia feature the highest percentage change in per capita income with respective declines of 24 and 23 per cent between 2017 and 2020 (figure 6). The Sudan remains as the country with the lowest per capita income.

Figure 5. Index of PPP-based per capita expenditures (avg per capita =1)

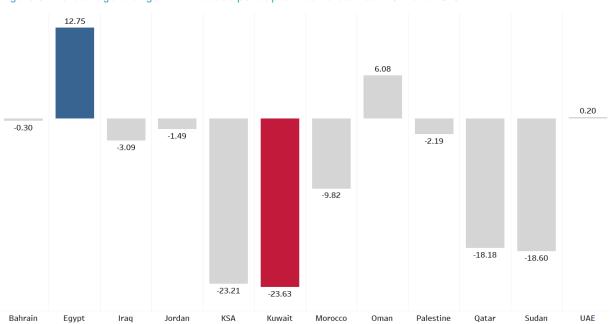


Figure 6. Percentage change in PPP-based per capita income between 2017 and 2020

Source: ESCWA calculations.

This release of new PPPs follows the release by ESCWA of the online regional report entitled "Purchasing power parities and the real size of Arab economies", 4 and complements the annual PPP series that starts from 2011, providing estimates extending until 2021. The release updates the ESCWA database, 5 not only with PPPs and PLIs up to 2021,

but also provides real values of expenditures and per capita income data for the years up to 2020. The online PPP converter has also been updated and can be accessed on the ESCWA website. The release provides access to new results of PPPs and related economic indicators in much more detail than in the following sample table.

Excerpt of the results at the GDP level

		BAHRAIN						
	OMR		Oman=100	US	SD	USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	0.935	0.978	96%	0.187	0.376	50%		
2018	0.957	0.978	98%	0.209	0.376	56%		
2019	0.936	0.978	96%	0.194	0.376	52%		
*2020	0.914	0.978	93%	0.176	0.376	47%		
**2021	0.898	0.978	92%	0.173	0.376	46%		

		EGYPT						
	01	ИR	Oman=100	U:	SD	USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	16.33	46.42	35%	3.27	17.85	18%		
2018	18.52	46.34	40%	4.05	17.82	23%		
2019	20.37	43.73	47%	4.22	16.81	25%		
*2020	19.23	39.24	49%	3.70	15.09	25%		
**2021	19.09	40.80	47%	3.67	15.69	23%		

		IRAQ						
	OMR		Oman=100	US	SD	USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	2803	3267	86%	561	1256	45%		
2018	2775	3150	88%	607	1211	50%		
2019	2818	3127	90%	584	1202	49%		
*2020	2574	3225	80%	495	1240	40%		
**2021	2603	3828	68%	500	1472	34%		

		JORDAN							
	OMR		Oman=100	USD		USA=100			
	PPP	XR	PLI	PPP	XR	PLI			
2017	1.501	1.841	82%	0.300	0.708	42%			
2018	1.588	1.841	86%	0.347	0.708	49%			
2019	1.579	1.841	86%	0.327	0.708	46%			
*2020	1.531	1.841	83%	0.294	0.708	42%			
**2021	1.482	1.841	80%	0.285	0.708	40%			

		KUWAIT						
	01	OMR		USD		USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	0.887	0.789	112%	0.177	0.303	59%		
2018	0.897	0.785	114%	0.196	0.302	65%		
2019	0.923	0.791	117%	0.191	0.304	63%		
*2020	0.934	0.797	117%	0.180	0.306	59%		
**2021	0.943	0.784	120%	0.181	0.302	60%		

		LEBANON						
	OMR		Oman=100	US	SD OS	USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	3015	3919	77%	603	1507	40%		
2018	3052	3919	78%	668	1507	44%		
2019	3177	4042	79%	659	1554	42%		
*2020	6779	9246	73%	1304	3555	37%		
**2021	18938	18770	101%	3639	7217	50%		

		MOROCCO							
	OMR		Oman=100	USD		USA=100			
	PPP	XR	PLI	PPP	XR	PLI			
2017	20.11	25.20	80%	4.02	9.69	42%			
2018	22.11	24.41	91%	4.84	9.39	52%			
2019	22.47	25.01	90%	4.66	9.62	48%			
*2020	22.38	24.91	90%	4.30	9.58	45%			
**2021	21.97	23.23	95%	4.22	8.93	47%			

		OMAN						
	OMR		Oman=100	USD		USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	1	1	100%	0.200	0.385	52%		
2018	1	1	100%	0.219	0.385	57%		
2019	1	1	100%	0.207	0.385	54%		
*2020	1	1	100%	0.192	0.385	50%		
**2021	1	1	100%	0.192	0.385	50%		

		PALESTINE						
	OMR		Oman=100	US	SD	USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	10.18	9.36	109%	2.04	3.60	57%		
2018	9.95	9.35	106%	2.18	3.59	61%		
2019	9.85	9.27	106%	2.04	3.56	57%		
*2020	9.31	8.95	104%	1.79	3.44	52%		
**2021	9.24	8.48	109%	1.78	3.26	54%		

		QATAR							
	OMR		Oman=100	USD		USA=100			
	PPP	XR	PLI	PPP	XR	PLI			
2017	11.73	9.49	124%	2.35	3.65	64%			
2018	12.03	9.49	127%	2.63	3.65	72%			
2019	11.75	9.49	124%	2.44	3.65	67%			
*2020	12.15	9.49	128%	2.34	3.65	64%			
**2021	11.99	9.49	126%	2.30	3.65	63%			

		SAUDI ARABIA							
	OMR		Oman=100	USD		USA=100			
	PPP	XR	PLI	PPP	XR	PLI			
2017	8.24	9.75	85%	1.65	3.75	44%			
2018	9.01	9.75	92%	1.97	3.75	53%			
2019	9.28	9.75	95%	1.92	3.75	51%			
*2020	10.14	9.75	104%	1.95	3.75	52%			
**2021	10.22	9.75	105%	1.96	3.75	52%			

		SUDAN						
	OMR		Oman=100	USD		USA=100		
	PPP	XR	PLI	PPP	XR	PLI		
2017	23.1	52.4	44%	4.6	20.1	23%		
2018	37.1	108.0	34%	8.1	41.5	20%		
2019	60.2	178.4	34%	12.5	68.6	18%		
*2020	148.1	438.2	34%	28.5	168.5	17%		
**2021	511.9	1070.5	48%	98.4	411.6	24%		

	UAE					
	OMR		Oman=100	USD		USA=100
	PPP	XR	PLI	PPP	XR	PLI
2017	11.11	9.55	116%	2.22	3.67	60%
2018	11.03	9.55	115%	2.41	3.67	66%
2019	10.53	9.55	110%	2.18	3.67	59%
*2020	10.58	9.55	111%	2.03	3.67	55%
**2021	10.50	9.55	110%	2.02	3.67	55%

- Preliminary estimates
- Forecasts
- 4 http://icp.unescwa.org/.
- 5 https://data.unescwa.org/.
- 6 http://escwa.unescwa.org/ppp/.

As for the 2021 results, PPPs were calculated from the extrapolation of 2020 prices using the estimated consumer price index (CPI) for 2021, while borrowing country expenditure weight structures from 2020. Linking the regional results to the United States dollar at the GDP level was facilitated through the extrapolation of PPP of the currency of the region's base country, Oman, to the United States dollar using GDP deflators, whereas linking at the HHC level was facilitated through the extrapolation using CPI. It is thus crucial to restate that linking to the United States dollar for 2018 to 2021 is preliminary and that the final United

States dollar-linked results will be released once the global 2021 International Comparison Programme cycle is concluded and global results are published by the World Bank. As for regional results with Oman as the reference country, 2018 and 2019 results can now be considered final regional results, while 2020 results are preliminary and subject to revision as soon as expenditure data are finalized by all participating countries. For 2021 results, as previously stated, they are estimates and thus should be used and interpreted carefully, as they are based on multiple estimations conducted by ESCWA according to available national data.



