

ANNEX C

Table C.10. Economic assumptions

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REAL GDP¹												
Australia	%	2.6	2.9	2.6	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.1
Canada	%	2.2	2.2	1.9	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Chile	%	2.2	3.4	3.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
European Union	%	2.1	1.7	1.6	1.5	1.5	1.5	1.4	1.5	1.4	1.4	1.4
Japan	%	1.2	1.0	0.7	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3
Korea	%	2.9	2.8	2.9	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4
Mexico	%	2.4	2.5	2.8	2.8	2.8	2.8	2.8	2.9	2.9	3.0	3.1
New Zealand	%	3.3	2.8	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5
Norway	%	1.6	1.9	2.3	2.4	2.3	2.2	2.1	2.0	2.0	1.9	1.9
Switzerland	%	2.1	1.6	1.6	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0
Turkey	%	4.7	0.4	2.6	2.1	2.2	2.6	2.6	2.6	2.6	2.6	2.6
United Kingdom	%	1.6	1.4	1.1	2.9	2.9	2.8	2.7	2.7	2.6	2.6	2.5
United States	%	2.2	2.7	2.1	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4
Brazil	%	-0.4	2.1	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.7
China	%	6.7	6.3	6.0	4.9	4.6	4.4	4.2	4.0	3.9	3.7	3.6
Egypt	%	4.6	5.5	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
India	%	7.0	7.4	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Indonesia	%	5.1	5.1	5.2	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4
Iran	%	4.9	-3.6	1.1	1.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Malaysia	%	4.9	4.6	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Pakistan	%	5.2	4.0	3.5	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Russia	%	1.0	1.5	1.8	2.9	2.9	2.8	2.8	2.8	2.8	2.7	2.7
Saudi Arabia	%	1.0	2.4	1.9	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.3
South Africa	%	0.9	1.4	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Ukraine	%	2.8	2.7	3.0	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4
OECD ^{2,3}	%	2.2	2.1	1.9	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
PCE DEFLATOR¹												
Australia	%	1.2	1.6	2.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Canada	%	1.4	2.0	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Chile	%	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
European Union	%	0.6	1.7	1.8	1.6	1.8	1.8	1.7	1.7	1.7	1.7	1.7
Japan	%	0.0	0.9	1.6	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Korea	%	1.3	1.8	1.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Mexico	%	4.8	4.4	3.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
New Zealand	%	1.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Norway	%	2.4	2.1	1.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8
Switzerland	%	0.3	0.9	1.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0
Turkey	%	11.3	16.7	14.2	13.4	13.0	13.0	12.1	11.3	10.6	9.9	9.2
United Kingdom	%	1.9	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
United States	%	1.6	2.1	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Brazil	%	5.1	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
China	%	1.9	2.4	2.6	2.8	2.9	3.0	3.0	3.0	3.0	3.0	3.0
Egypt	%	18.2	14.0	10.9	7.8	7.2	7.0	7.0	7.0	7.0	7.0	7.0
India	%	4.3	4.9	4.6	4.3	4.1	4.0	4.0	4.0	4.0	4.0	4.0
Indonesia	%	3.6	3.8	3.8	3.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Iran	%	16.1	34.1	24.2	17.5	13.5	12.0	12.0	12.0	12.0	12.0	12.0
Malaysia	%	2.3	2.3	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.3
Pakistan	%	3.6	7.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Russia	%	4.5	5.1	4.8	4.8	4.8	4.6	4.6	4.6	4.6	4.6	4.6
Saudi Arabia	%	1.3	2.0	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
South Africa	%	5.5	5.3	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Ukraine	%	13.1	7.3	6.0	5.8	5.3	5.2	5.2	5.2	5.2	5.2	5.2
OECD ^{2,3}	%	1.9	3.0	3.1	3.1	3.2	3.3	3.3	3.2	3.2	3.2	3.2

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Table C.10. Economic assumptions (cont.)

Calendar year

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GDP DEFLATOR¹												
Australia	%	2.1	1.1	1.4	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Canada	%	1.6	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Chile	%	3.5	2.1	3.2	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0
European Union	%	0.0	1.7	1.8	1.6	1.8	1.8	1.7	1.7	1.7	1.7	1.7
Japan	%	0.0	0.3	1.6	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Korea	%	1.6	2.0	2.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Mexico	%	5.7	5.6	4.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
New Zealand	%	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Norway	%	2.9	3.3	2.2	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8
Switzerland	%	-0.1	1.2	1.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0
Turkey	%	10.9	15.3	12.0	12.1	12.5	12.8	12.0	11.1	10.4	9.7	9.0
United Kingdom	%	2.0	1.7	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
United States	%	1.7	2.2	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Brazil	%	5.0	4.4	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
China	%	2.7	3.0	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Egypt	%	16.9	13.8	10.7	7.7	7.2	7.0	7.0	7.0	7.0	7.0	7.0
India	%	3.7	4.3	4.1	3.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Indonesia	%	3.4	3.6	3.8	3.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Iran	%	1.7	2.2	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Malaysia	%	2.1	2.6	3.0	2.8	2.7	2.4	2.4	2.4	2.4	2.4	2.4
Pakistan	%	2.5	6.8	5.3	4.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Russia	%	6.0	5.3	3.4	3.9	3.9	4.0	4.0	4.0	4.0	4.0	4.0
Saudi Arabia	%	4.7	0.9	0.6	0.3	0.8	1.1	1.1	1.1	1.1	1.1	1.1
South Africa	%	5.7	5.3	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Ukraine	%	16.6	8.4	8.1	8.0	7.3	6.8	6.8	6.8	6.8	6.8	6.8
OECD ³	%	1.8	2.9	2.9	2.9	3.0	3.1	3.1	3.1	3.1	3.1	3.1
WORLD INPUT PRICES												
Brent crude oil ⁴	USD/barrel	56.7	58.1	59.5	60.7	62.0	63.2	64.5	65.8	67.2	68.5	69.9
Fertiliser ⁵	USD/t	247.8	249.2	251.2	254.4	257.2	260.1	262.6	266.2	270.2	274.5	278.8
EXCHANGE RATES												
Australia	AUD/USD	1.33	1.41	1.41	1.45	1.49	1.53	1.56	1.60	1.63	1.66	1.69
Canada	CAD/USD	1.31	1.31	1.31	1.33	1.35	1.36	1.37	1.38	1.39	1.40	1.41
Chile	CLP/USD	652.29	653.60	658.46	663.23	667.98	672.89	677.83	682.82	687.84	692.89	697.99
European Union	EUR/USD	0.88	0.88	0.88	0.89	0.90	0.90	0.91	0.91	0.92	0.92	0.93
Japan	JPY/USD	110.48	112.80	112.80	113.60	114.31	114.94	115.50	116.01	116.46	116.86	117.23
Korea	KRW/USD	1 131.32	1 140.60	1 140.60	1 144.61	1 149.28	1 154.60	1 160.54	1 167.06	1 174.11	1 181.66	1 189.67
Mexico	MXN/USD	18.88	19.95	19.95	20.01	20.08	20.17	20.26	20.36	20.47	20.59	20.72
New Zealand	NZD/USD	1.43	1.52	1.52	1.56	1.60	1.63	1.65	1.68	1.70	1.72	1.74
Brazil	BRL/USD	3.44	3.70	3.70	3.89	4.08	4.27	4.45	4.63	4.82	5.00	5.18
China	CNY/USD	6.68	6.97	6.97	7.02	7.08	7.14	7.20	7.26	7.31	7.37	7.43
Egypt	EGP/USD	13.53	17.86	18.39	19.84	21.29	22.12	22.99	23.88	24.81	25.78	26.78
India	INR/USD	67.14	71.24	72.54	73.73	74.90	76.10	77.31	78.54	79.79	81.07	82.36
Indonesia	'000 IDR/USD	13.80	15.09	14.96	15.19	15.38	15.56	15.75	15.94	16.13	16.33	16.52
Malaysia	MYR/USD	4.19	4.10	4.11	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
Pakistan	PKR/USD	103.10	108.22	111.21	114.16	117.53	120.90	124.38	127.95	131.62	135.40	139.28
Russia	RUB/USD	62.65	65.59	65.59	65.51	65.57	65.76	66.06	66.46	66.95	67.53	68.19
Saudi Arabia	SAR/USD	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
South Africa	ZAR/USD	13.69	13.60	13.94	14.38	14.80	15.26	15.74	16.24	16.75	17.28	17.82
Ukraine	UAH/USD	26.41	28.66	29.92	31.17	32.22	33.23	34.27	35.34	36.45	37.59	38.76
United Kingdom	GBP/USD	0.76	0.79	0.79	0.80	0.81	0.82	0.83	0.83	0.84	0.85	0.85

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Table C.10. Economic assumptions (cont.)

Calendar year

		2018est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
POPULATION¹												
Australia	%	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0
Canada	%	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7
Chile	%	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
European Union	%	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Japan	%	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
Korea	%	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Mexico	%	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9
New Zealand	%	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Norway	%	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Switzerland	%	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Turkey	%	1.5	1.3	1.1	0.8	0.6	0.5	0.4	0.4	0.5	0.5	0.5
United Kingdom	%	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
United States	%	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Argentina	%	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
Brazil	%	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5
China	%	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0
Egypt	%	1.9	1.8	1.8	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.4
India	%	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8
Indonesia	%	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7
Iran	%	1.0	1.0	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5
Malaysia	%	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.0
Pakistan	%	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5
Russia	%	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
Saudi Arabia	%	1.9	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.1
South Africa	%	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.8
Ukraine	%	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
OECD ³	%	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
World	%	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9

		Average 2016-18est	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REAL GDP PER CAPITA¹												
Australia	%	1.3	1.6	1.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Canada	%	1.3	1.3	1.0	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3
Chile	%	1.4	2.6	2.4	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5
European Union	%	1.9	1.7	1.6	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3
Japan	%	1.4	1.2	1.0	1.3	1.4	1.5	1.6	1.6	1.7	1.7	1.8
Korea	%	2.5	2.4	2.5	2.7	2.6	2.6	2.5	2.4	2.3	2.2	2.2
Mexico	%	1.1	1.3	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.1	2.2
New Zealand	%	2.3	1.9	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Norway	%	0.6	1.0	1.4	1.5	1.3	1.2	1.2	1.1	1.1	1.1	1.0
Switzerland	%	1.2	0.8	0.9	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4
Turkey	%	3.1	-0.9	1.5	1.3	1.6	2.2	3.0	3.7	4.4	5.0	5.6
United Kingdom	%	1.0	0.8	0.6	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1
United States	%	1.5	2.0	1.4	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7
Brazil	%	-1.2	1.4	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.2
China	%	6.3	5.9	5.7	4.6	4.4	4.2	4.0	3.9	3.8	3.7	3.6
Egypt	%	2.6	3.6	4.1	4.2	4.3	4.3	4.4	4.4	4.4	4.5	4.5
India	%	5.8	6.3	6.6	6.6	6.7	6.7	6.7	6.8	6.8	6.8	6.9
Indonesia	%	3.9	4.1	4.1	4.3	4.3	4.4	4.4	4.5	4.5	4.5	4.6
Iran	%	2.0	-6.6	-2.3	-1.3	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2
Malaysia	%	3.5	3.3	3.5	3.5	3.5	3.5	3.6	3.6	3.7	3.7	3.8
Pakistan	%	3.2	2.1	1.6	1.6	1.2	1.3	1.3	1.4	1.4	1.4	1.5
Russia	%	1.0	1.5	1.8	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Saudi Arabia	%	-1.0	0.7	0.2	0.5	0.7	0.8	0.9	1.0	1.0	1.1	1.1
South Africa	%	-0.4	0.2	0.6	0.7	0.8	0.8	0.8	0.9	0.9	0.9	1.0
Ukraine	%	3.3	3.2	3.5	3.8	3.8	4.0	4.0	4.0	4.0	4.0	4.0
OECD ³	%	1.6	1.7	1.4	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7

ANNEX C

Note: For OECD member countries, as well as Brazil, China and Russia, historical data for real GDP, private consumption expenditure deflator and GDP deflator were obtained from the OECD Economic Outlook No. 104, November 2018. For other economies, historical macroeconomic data were obtained from the IMF, World Economic Outlook, October 2018. Assumptions for the projection period draw on the recent medium term update of the OECD Economics Department, projections of the IMF, and for population, projections from the United Nations World Population Prospects Database, 2017 Revision (medium variant). Data for the European Union are euro area aggregates except for population. The price index used is the private consumption expenditure deflator. Average 2016-18est and 2018est: Data for 2018 are estimated.

1. Annual per cent change.
2. Annual weighted average real GDP and CPI growth rates in OECD countries are based on weights using purchasing power parities (PPPs).
3. Excludes Iceland but includes all EU member countries
4. Short-term update for crude oil price from the OECD Economic Outlook N°104 (November 2018). For 2018, the annual average monthly spot price is used, while the average daily spot price for December 2018 is used as the oil price value for the year 2019 and oil prices during the projection period are expected to remain flat in real terms.
5. World Bank. Data for 2018 are estimated, projections by OECD and FAO Secretariats.

Source: OECD/FAO (2019), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database). doi: dx.doi.org/10.1787/agr-outl-data-en