Appendix 2: Example Calculation of Instantaneous Inflation

CPI All Items, Urban Consumers					
(A)	(B)	(C)	(D)	(E)	(F)
		CPI All			
Eeckhout Factors	Line	Date	Index	M/M-1	Instantaneous
0.000198	4	1/1/2022	282.39		
0.003163	5	2/1/2022	284.54	0.00760	
0.016011	6	3/1/2022	287.55	0.01061	
0.050601	7	4/1/2022	288.76	0.00421	
0.123538	8	5/1/2022	291.36	0.00899	
0.256169	9	6/1/2022	295.00	0.01248	
0.474584	10	7/1/2022	294.98	-0.00006	
0.809620	11	8/1/2022	295.21	0.00079	
1.296854	12	9/1/2022	296.34	0.00383	
1.976610	13	10/1/2022	297.86	0.00514	
2.893955	14	11/1/2022	298.65	0.00264	
4.098699	15	12/1/2022	298.81	0.00055	
	16	1/1/2023	300.36	0.00517	4.02
	17	2/1/2023	301.51	0.00384	4.22
	18	3/1/2023	301.74	0.00078	3.11
	19	4/1/2023	303.03	0.00427	3.76
	20	5/1/2023	303.37	0.00110	2.93
	21	6/1/2023	304.00	0.00210	2.76
	22	7/1/2023	304.63	0.00206	2.63
	23	8/1/2023	306.19	0.00512	3.80
	24	9/1/2023	307.29	0.00360	4.02
	25	10/1/2023	307.53	0.00079	3.01
	26	11/1/2023	308.02	0.00160	2.62
	27	12/1/2023	308.74	0.00233	2.65
	28	1/1/2024	309.69	0.00305	2.97
	29	2/1/2024	311.05	0.00442	3.77
	30	3/1/2024	312.23	0.00378	4.07
	31	4/1/2024	313.21	0.00313	4.01
	32	5/1/2024	313.23	0.00006	2.69

As shown above, column A lists the Eeckhout weighting factors. Column C shows the date of the index values in column D. Column E shows the calculation of dividing the current month index by the previous month and subtracting 1. Column F shows Eeckhout's instantaneous inflation estimates and may be calculated with an Excel function, which is used for column F as shown below.

Column F row 16 = (SUMPRODUCT(E5:E16,$A$4:$A$15))*100. The result of this example month is the instantaneous inflation percent for January 2023, which is 4.0 percent stated as an annual rate. The remaining values can be computed by scrolling.