

Convergence analysis

Instructions to create a custom dataset, and how to download an indicator from Eurostat and feed it to the app. [correct as of 27/10/2023]

1. It needs to be a .csv file
2. The word “**time**” needs to be in small caps.
3. With time and country arranged this way:

time	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	L
2000	36.6	40.7	43.2	34.2	38.1	40.5	38.6	42.1	38.4	38.5		39.1	39.3	42.5	39.4	
2001	36.4	41.1	41.4	34.6	37.9	40.2	38.3	42.2	38.3	38.1		39.2	38.8	43.1	39	
2002	36.6	41.2	41.4	35.1	37.5	40.4	37.7	42	38.5	37.6	40.9	35.7	38.4	42.5	38.6	
2003	36.4	40	41.5	34.3	37	39.9	37.2	42.1	37.7	36.8	40.9	38.9	38.2	42.2	37.8	
2004	36.2	40.7	42.2	33.8	37	40.1	37	42.1	38.3	36.7	40.8	38.4	38.8	41.1	38	
2005	36.7	40.7	41.8	35.3	37	40.1	37.3	41.9	38.7	36.8	40.2	38.1	39.4	41.5	38.2	
2006	36.8	41.1	41.6	35	36.2	40.1	37.1	41.5	38.6	36.8	40.3	38	39.3	41.4	38.2	
2007	37	41.2	41.4	35.1	36.2	39.9	36.5	41.2	38.4	36.7	40.5	38	39.1	40.8	38.6	
2008	36.8	41.1	41.4	35.1	36.1	39.3	36	41	38.3	36.7	40.1	37.6	39.1	39.6	39.3	
2009	36.7	40.4	40.7	34.7	35.5	37.8	35	40.8	37.9	36.5	39.9	37.2	38.6	39	38.7	
2010	37	40.5	40.6	35.1	35.7	38.7	35	40.8	37.7	36.8	39.8	37.3	39	38.5	38.5	
2011	36.9	40.3	40.4	35.3	35.8	38.8	34.9	40.9	37.6	36.8	39.6	37.1	38.8	38.6	38.4	
2012	36.7	40.2	40.1	35.1	35.8	38.6	35	40.8	37.2	36.6	39.5	36.4	38.9	38.4	38.2	
2013	36.9	40	39.5	35.1	35.5	38.4	35.1	40.9	37.2	35.9	39.2	36.3	38.3	38.5	38.2	

4. If there are any missing values, the cell should be empty.

time	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	L
2000	36.6	40.7	43.2	34.2	38.1	40.5	38.6	42.1	38.4	38.5		39.1	39.3	42.5	39.4	
2001	36.4	41.1	41.4	34.6	37.9	40.2	38.3	42.2	38.3	38.1		39.2	38.8	43.1	39	
2002	36.6	41.2	41.4	35.1	37.5	40.4	37.7	42	38.5	37.6	40.9	35.7	38.4	42.5	38.6	
2003	36.4	40	41.5	34.3	37	39.9	37.2	42.1	37.7	36.8	40.9	38.9	38.2	42.2	37.8	
2004	36.2	40.7	42.2	33.8	37	40.1	37	42.1	38.3	36.7	40.8	38.4	38.8	41.1	38	
2005	36.7	40.7	41.8	35.3	37	40.1	37.3	41.9	38.7	36.8	40.2	38.1	39.4	41.5	38.2	
2006	36.8	41.1	41.6	35	36.2	40.1	37.1	41.5	38.6	36.8	40.3	38	39.3	41.4	38.2	
2007	37	41.2	41.4	35.1	36.2	39.9	36.5	41.2	38.4	36.7	40.5	38	39.1	40.8	38.6	
2008	36.8	41.1	41.4	35.1	36.1	39.3	36	41	38.3	36.7	40.1	37.6	39.1	39.6	39.3	
2009	36.7	40.4	40.7	34.7	35.5	37.8	35	40.8	37.9	36.5	39.9	37.2	38.6	39	38.7	
2010	37	40.5	40.6	35.1	35.7	38.7	35	40.8	37.7	36.8	39.8	37.3	39	38.5	38.5	
2011	36.9	40.3	40.4	35.3	35.8	38.8	34.9	40.9	37.6	36.8	39.6	37.1	38.8	38.6	38.4	
2012	36.7	40.2	40.1	35.1	35.8	38.6	35	40.8	37.2	36.6	39.5	36.4	38.9	38.4	38.2	
2013	36.9	40	39.5	35.1	35.5	38.4	35.1	40.9	37.2	35.9	39.2	36.3	38.3	38.5	38.2	

CONVERGEU APP – Getting an indicator from Eurostat manually (you can also use the R package convergEU if you use R)

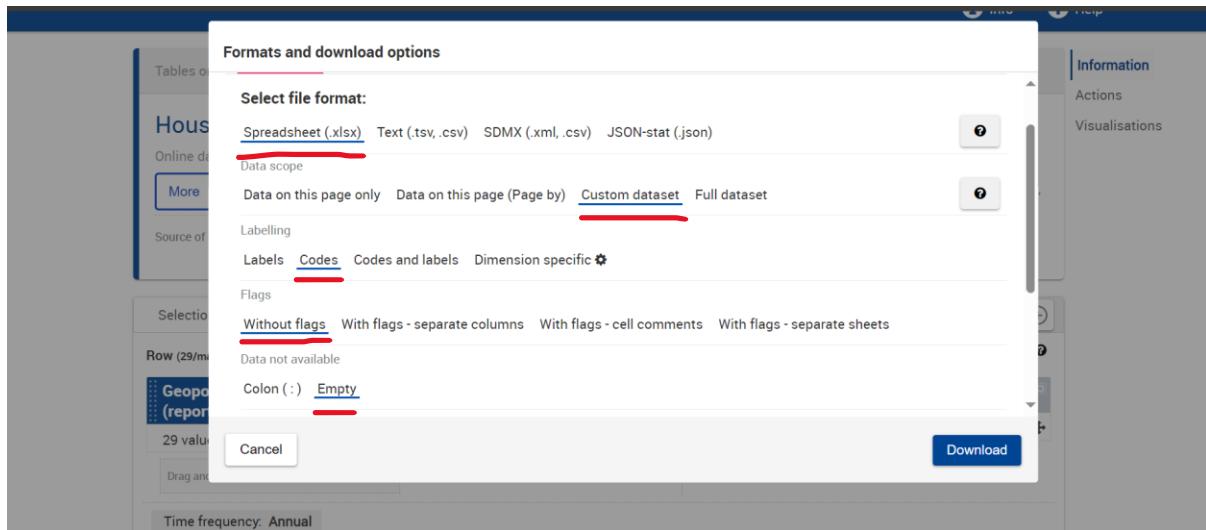
1. After selecting countries and variables we like, we go to **Download**

The screenshot shows the Eurostat EC data browser interface. At the top, there's a navigation bar with links to 'Tables on EU policy', 'Macroeconomic imbalance procedure indicators', 'House price indices', and 'Annual data'. On the right side, there are 'Information', 'Actions', and 'Visualisations' buttons. The main content area displays the 'House price index - annual data' page, which includes a 'More' button, a note about the source of data being Eurostat, and a detailed breakdown section with dropdown menus for 'Geopolitical entity (reporting)', 'Time', and 'Unit of measure'. Below this is a 'Page' section with a 'Unit of measure' dropdown set to 'Percentage change (t/t-3)'. In the top right corner of the main content area, there is a 'Download' button with a downward arrow icon, which is circled in red.

2. We click on **Options and other formats**

This screenshot is similar to the previous one, showing the 'House price index - annual data' page in the Eurostat EC data browser. The 'Download' button is still circled in red. In this version, however, a new dropdown menu has appeared in the top right corner of the main content area, titled 'Options and other formats'. This menu lists several options: 'Data on this page only', 'Spreadsheet (.xlsx)', 'SDMX-CSV 1.0', 'TSV', 'Custom dataset [tipsho20Defaultview]', 'Spreadsheet (.xlsx)', 'SDMX-CSV 1.0', 'TSV', and 'Full dataset [tipsho20]'. The 'Spreadsheet (.xlsx)' option is highlighted with a blue background.

3. IMPORTANT DATA STYLE TO SELECT: Labelling = **Codes**, Flags = **Without flags**, Data not available = **Empty**



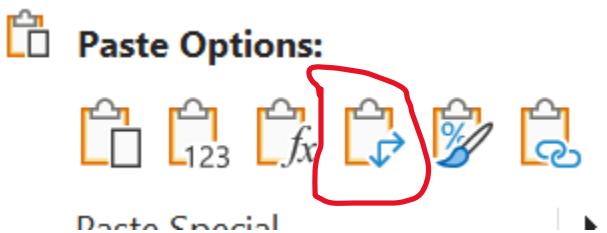
4. This is how the dataset looks like. We only want the table now, so we delete all the rows that we don't care about.

A1 Data extracted on 25/10/2023 16:18:41 from [ESTATI] House price index - annual data (tipsho20__custom_8096792)

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Data extracted on 25/10/2023 16:18:41 from [ESTATI]												
2	Dataset: House price index - annual data (tipsho20__custom_8096792)												
3	Last updated: 03/10/2023 11:00												
4													
5	FREQ												
6	UNIT												
7													
8	TIME	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
9	Code												
10	BE	98.30	98.35	100.00	102.64	106.37	109.42	113.78	118.60	127.06	134.19		
11	BG	95.92	97.29	100.00	107.02	116.30	123.96	131.42	137.41	149.33	163.92		
12	CZ	93.90	96.20	100.00	107.20	119.70	130.00	141.90	153.90	184.20	215.30		
13	DK	90.09	93.49	100.00	105.22	110.00	114.81	117.51	123.48	137.98	137.33		
14	DE	92.60	95.50	100.00	107.50	114.10	121.70	128.70	138.70	154.70	162.90		
15	EE	82.29	93.58	100.00	104.75	110.51	117.07	125.27	132.79	152.78	186.76		
16	IE	76.93	89.72	100.00	107.46	119.14	131.33	134.41	134.82	145.98	163.96		
17	EL	113.82	105.32	100.00	97.62	96.63	98.38	105.48	110.22	118.61	131.72		
18	ES	96.24	96.54	100.00	104.62	111.10	118.58	124.71	127.50	132.19	141.98		
19	FR	102.93	101.36	100.00	101.04	104.24	107.29	110.86	116.62	123.98	131.82		
20	HR	104.63	102.98	100.00	100.89	104.75	111.14	121.10	130.38	139.91	160.69		
21	IT	109.10	104.00	100.00	100.30	99.20	98.60	98.50	100.40	103.00	106.90		
22	CY	103.29	101.47	100.00	100.27	102.52	104.32	108.20	107.98	104.33	107.71		
23	LV	97.62	103.48	100.00	108.49	118.01	129.30	140.88	145.77	161.65	184.01		
24	LT	90.65	96.47	100.00	105.40	114.80	123.18	131.61	141.18	163.84	195.05		
25	LU	90.89	94.88	100.00	106.01	111.96	119.86	131.99	151.12	172.15	188.60		
26	HU	84.87	88.43	100.00	113.38	127.24	145.50	170.17	178.58	208.04	254.35		
27	MT	92.16	94.51	100.00	105.45	111.03	117.45	124.65	128.86	135.44	144.45		
28	NL	95.75	96.53	100.00	105.02	112.93	123.61	132.62	142.75	164.21	186.29		
29	AT	92.10	95.33	100.00	108.53	114.26	119.64	126.60	136.31	153.26	170.77		
30	PL	97.54	98.50	100.00	101.86	105.78	112.74	122.52	135.36	147.77	165.21		
31	PT	93.03	97.04	100.00	107.12	117.02	123.03	141.88	154.33	168.84	190.17		
32	RO	99.26	97.22	100.00	105.95	112.36	118.62	122.69	128.44	134.09	143.70		
33	SI	106.21	99.20	100.00	103.25	111.79	121.55	129.69	135.66	151.32	173.65		
34	SK	93.59	94.91	100.00	106.70	112.99	121.32	132.39	145.06	154.33	175.47		
35	FI	100.35	100.00	100.00	101.29	102.39	103.34	103.77	105.60	110.45	111.75		
36	SE	80.79	88.40	100.00	108.24	115.43	114.35	117.19	122.11	134.46	139.25		
37													
38	Special value												
39		not available											
40													

5. We change **TIME** into **time**, and then we flip the table so that years are rows. Copy the table and then paste it with the transposed table, then delete the previous table and start the transposed table to A1.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	time	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022			
2	BE	98.90	98.35	100.00	102.64	106.37	109.42	113.78	116.60	127.06	134.19			
3	BG	95.32	97.29	100.00	107.02	116.30	123.96	131.42	137.41	149.33	169.92			
4	CZ	93.90	96.20	100.00	107.20	119.70	130.00	141.90	153.90	184.20	215.30			
5	DK	90.09	93.43	100.00	105.22	110.00	114.81	117.51	123.48	137.98	137.33			
6	DE	92.60	95.50	100.00	107.50	114.10	121.70	128.70	138.70	154.70	162.90			
7	EE	82.23	93.58	100.00	104.75	110.51	117.07	125.27	132.79	152.78	186.76			
8	IE	76.99	89.72	100.00	107.46	119.14	131.33	134.41	134.82	145.98	163.96			
9	EL	113.82	105.32	100.00	97.62	96.63	98.38	105.48	110.22	118.61	131.72			
10	ES	96.24	96.54	100.00	104.62	111.10	118.58	124.71	127.50	132.19	141.98			
11	FR	102.93	101.36	100.00	101.04	104.24	107.29	110.86	116.62	123.98	131.82			
12	HR	104.63	102.98	100.00	100.88	104.75	111.14	121.10	130.38	139.91	160.69			
13	IT	109.10	104.00	100.00	100.30	99.20	98.60	98.50	100.40	103.00	106.90			
14	CY	103.29	101.47	100.00	100.27	102.52	104.32	108.20	107.98	104.33	107.71			
15	LV	97.62	103.48	100.00	108.49	118.01	129.30	140.88	145.77	161.65	184.01			
16	LT	90.65	96.47	100.00	105.40	114.80	123.18	131.61	141.18	163.84	195.05			
17	LU	90.89	94.88	100.00	106.01	111.96	119.86	131.99	151.12	172.15	188.60			
18	HU	84.87	88.43	100.00	113.38	127.24	145.50	170.17	178.58	208.04	254.35			
19	MT	92.16	94.51	100.00	105.45	111.03	117.45	124.65	128.86	135.44	144.45			
20	NL	95.75	96.53	100.00	105.02	112.93	123.61	132.62	142.75	164.21	186.23			
21	AT	92.10	95.33	100.00	108.53	114.26	119.64	126.60	136.31	153.26	170.77			
22	PL	97.54	98.50	100.00	101.86	105.78	112.74	122.52	135.36	147.77	165.21			
23	PT	93.09	97.04	100.00	107.12	117.02	123.03	141.88	154.33	168.84	190.17			
24	RO	99.26	97.22	100.00	105.35	112.36	118.62	122.69	128.44	134.09	143.70			
25	SI	106.21	99.20	100.00	103.25	111.79	121.55	129.69	135.66	151.32	173.65			
26	SK	93.53	94.91	100.00	106.70	112.99	121.32	132.39	145.06	154.33	175.47			
27	FI	100.35	100.00	100.00	101.29	102.39	103.34	103.77	105.60	110.45	111.75			
28	SE	80.79	88.40	100.00	108.24	115.43	114.35	117.19	122.11	134.46	139.25			
29														
30														
31														
32														
33														
34														



6. This is how it looks at the end. Watch out for missing values. They have to be blank. If you download the datasets with ":" as missing values by mistake, make sure to change them before uploading the dataset in the app.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD						
1	time	2013	BE	BG	CZ	DK	DE	EE	ES	FR	HR	IT	M	CY	N	P	Q	R	S	NL	T	U	PL	V	W	X	Y	SK	Z	FI	AA	AB	AC	AD		
2	2013	88.30	95.32	33.50	90.09	92.60	82.23	76.99	103.82	96.24	102.33	104.63	103.29	97.62	90.85	84.87	32.16	35.75	32.10	37.54	33.03	33.26	106.21	33.53	100.35	80.79										
3	2014	88.35	97.29	36.20	93.49	95.59	93.58	89.72	105.32	96.54	101.36	102.36	104.00	101.47	93.48	96.47	94.88	88.43	94.51	96.53	95.33	98.50	97.04	97.22	99.20	94.91	100.00	88.40								
4	2015	90.09	101.36	36.20	93.49	95.59	93.58	89.72	105.32	96.54	101.36	102.36	104.00	101.47	93.48	96.47	94.88	88.43	94.51	96.53	95.33	98.50	97.04	97.22	99.20	94.91	100.00	88.40								
5	2016	102.64	107.02	107.20	105.22	107.50	104.75	107.46	107.62	104.82	101.04	100.89	100.27	108.43	105.40	108.01	111.39	105.45	105.02	108.53	101.96	107.12	105.95	102.25	106.70	101.29	108.24									
6	2017	106.37	116.30	119.70	110.00	114.10	110.51	119.14	96.63	111.10	104.24	104.75	95.20	102.52	118.01	111.96	127.24	111.03	112.93	114.26	105.78	117.02	112.36	111.79	112.99	102.39	115.43									
7	2018	102.12	123.39	120.40	119.42	127.70	125.27	134.41	105.48	124.71	120.96	127.10	106.59	106.20	140.30	131.61	131.39	107.45	125.81	122.45	122.80	122.52	121.03	122.52	121.93	122.89	123.63	122.29	123.29	117.39						
8	2019	103.78	112.42	124.90	117.51	128.70	125.27	134.41	105.48	124.71	120.96	127.10	106.59	106.20	140.30	131.61	131.39	107.45	125.81	122.45	122.80	122.52	121.03	122.52	121.93	122.89	123.63	122.29	123.29	117.39						
9	2020	108.60	137.41	153.90	125.46	138.70	132.79	134.82	110.22	127.50	116.62	130.38	100.40	107.98	145.77	141.98	175.58	128.86	142.75	138.31	135.36	154.33	128.44	135.66	145.06	105.60	122.11									
10	2021	127.06	149.33	164.20	137.96	154.70	152.78	145.98	116.61	132.19	123.93	130.91	123.00	161.05	163.04	172.15	204.04	155.44	164.21	147.77	166.64	134.05	151.32	110.45	134.46											
11	2022	134.13	163.52	205.30	137.33	162.90	166.76	163.93	131.72	149.00	131.62	160.03	126.93	127.71	184.01	195.05	169.60	254.35	144.45	169.29	170.77	165.21	160.17	143.70	173.65	175.47	111.75	133.25								
12																																				
13																																				

7. Save it as csv: **File > Save As > CSV UTF-8 (Comma delimited) (*.csv)**.