



Seasonal Adjustment of Balance of Payments Statistics

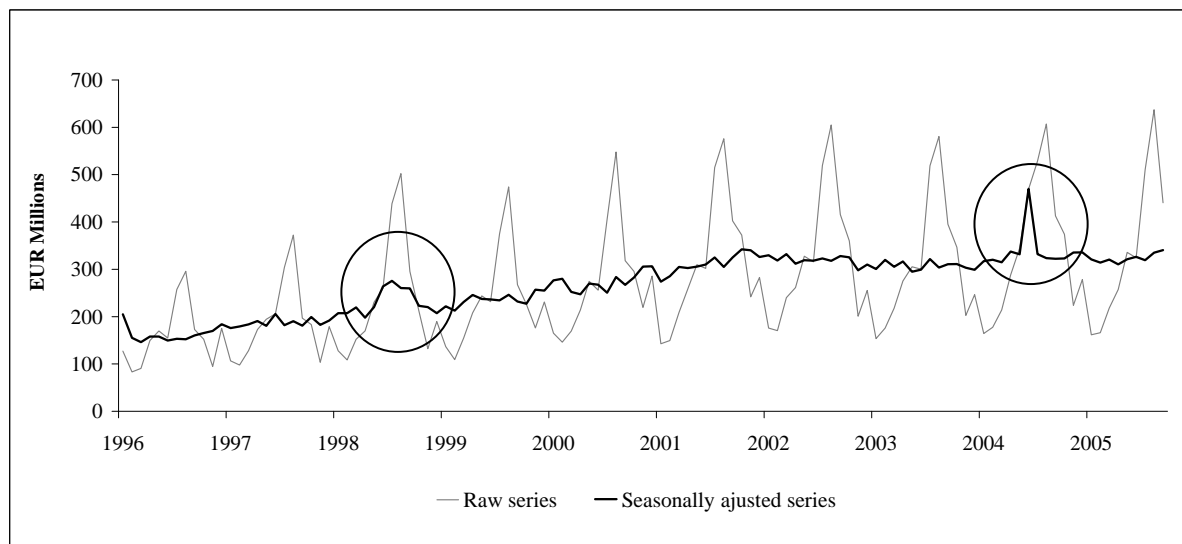
In this month's Banco de Portugal Statistical Bulletin, there will be found, for the first time, a new table with seasonally adjusted Balance of Payments statistics, regarding the Current and Capital Accounts' main items. This table, under the heading "C.1.0.2 – Current and Capital Accounts – Seasonally Adjusted Series" (see Annex), will be included in Chapter C.1 – "Current and Capital Accounts" and will be released monthly.

Several items of the Balance of Payments statistics reveal that its monthly evolution is strongly perturbed by more or less regular and periodic fluctuations, i.e., of a seasonal nature, which can hinder the detection of other short-term and trend movements and, consequently, affect the underlying economic analysis. With the purpose of improving the disclosed information and of providing an additional analytical tool to users, the Banco de Portugal has developed a study to establish a methodology for the removal of seasonal effects from statistical time series, notably, from the current and capital accounts. A description of the methodological concepts followed as well as a brief presentation of the findings can be found in Supplement no.4 of 2005 to the Statistical Bulletin.

The application of the aforementioned methodology to the Balance of Payments series in the period between January of 1996 and September of 2005, confirmed the existence of seasonality in several of those series, mainly in current account's items. As for the capital account, due to the lack of stability of its seasonal component, the original values were kept.

To illustrate the importance of this new analytical tool, the chart of both the raw series and the seasonally adjusted series of the "Travel" balance is presented below.

Balance of the "Travel" item



Typically, the raw series shows higher values in July and August than in the adjacent months. However, this evolution is mainly due to seasonal fluctuations and, consequently, is not a very informative measure of the series movement direction. The seasonal adjustment gives a more precise idea of the series trend. Moreover, due to the seasonal pattern the impact of events such as EXPO 98 and EURO 2004 can hardly be perceived with a naïve inspection of the raw series. On the other hand, the observation of the seasonally adjusted series reveals the presence of a transient enhancement in the net exports of this type of service during those periods. This is bound to draw the analyst's attention to the specific effects of these events.

The following table displays the information available for 2005, establishing a comparison between raw and adjusted series. The data is presented according to the quarter ending in each month, in order to soothe the natural irregularity associated with monthly information.

Current and Capital Accounts in 2005
Values of the quarter ending in each month

	EUR Millions													
	Raw data							Seasonally adjusted data						
	Mar	Apr	May	Jun	Jul	Aug	Sep	Mar	Apr	May	Jun	Jul	Aug	Sep
Current and capital accounts	-3 082	-3 031	-3 657	-3 469	-2 458	-1 995	-2 106	-2 957	-2 798	-3 073	-3 018	-2 904	-2 950	-2 964
Current account	-3 395	-3 395	-3 986	-3 750	-2 862	-2 374	-2 478	-3 270	-3 162	-3 402	-3 299	-3 308	-3 329	-3 336
Credit	12 814	13 149	13 430	13 569	14 279	13 959	14 027	13 237	13 375	13 370	13 428	13 480	13 540	13 744
Debit	16 208	16 543	17 416	17 319	17 142	16 333	16 506	16 506	16 537	16 772	16 727	16 788	16 869	17 080
Goods	-3 790	-4 040	-4 435	-4 263	-3 926	-3 890	-3 933	-4 131	-4 165	-4 305	-4 174	-4 125	-4 064	-4 085
Credit	7 518	7 628	7 747	7 777	7 936	7 298	7 392	7 432	7 399	7 413	7 472	7 521	7 663	7 817
Debit	11 307	11 668	12 182	12 040	11 862	11 188	11 325	11 562	11 564	11 718	11 646	11 647	11 727	11 902
Services	536	650	838	957	1 255	1 532	1 692	971	1 011	1 032	1 021	1 018	982	1 046
Credit	2 434	2 612	2 878	3 006	3 300	3 674	3 836	2 959	3 015	3 056	3 059	3 066	3 059	3 126
Debit	1 897	1 963	2 040	2 048	2 045	2 142	2 144	1 988	2 004	2 024	2 038	2 048	2 077	2 080
Income	- 668	- 801	-1 049	-1 059	- 991	- 750	- 737	- 760	- 755	- 790	- 783	- 820	- 810	- 828
Credit	1 391	1 415	1 412	1 425	1 435	1 411	1 419	1 385	1 411	1 413	1 427	1 436	1 408	1 412
Debit	2 059	2 216	2 461	2 484	2 425	2 161	2 157	2 145	2 166	2 203	2 211	2 255	2 218	2 240
Current transfers	527	797	661	615	799	734	500	649	746	661	638	619	563	531
Credit	1 472	1 493	1 393	1 361	1 608	1 576	1 380	1 461	1 550	1 489	1 470	1 457	1 410	1 389
Debit	945	696	733	746	809	842	880	811	804	828	832	838	847	859
Capital account	313	364	329	281	404	379	372	313	364	329	281	404	379	372

As expected, seasonally adjusted data are less volatile than raw data. Nevertheless, it should be noted that the seasonally adjusted combined balance of Current and Capital Accounts, which reflects the net external borrowing requirements, evolves around €3 billion in each quarter, revealing stability throughout the period for which information is already available. On the contrary, the raw series deficit worsens until May and then improves progressively until August. Therefore, this evolution can be attributed to fluctuations of a seasonal nature. From August to September, in both cases, a small widening of the deficit occurs.

ANNEX | New Table Released in the Statistical Bulletin |



Annex

C.1.0.2 BALANÇAS CORRENTE E DE CAPITAL
Séries ajustadas de sazonalidade ⁽¹⁾

CURRENT AND CAPITAL ACCOUNTS
Seasonally adjusted series⁽¹⁾

Fonte / Source: Banco de Portugal

10⁶ euros

	1	2	3	4	5	6	
	Abr	Mai	Jun	Jul	Ago	Set	
1 Balança corrente e de capital	-1 037	-1 112	-870	-923	-1 157	-884	Current and capital accounts 1
2 Balança corrente	-1 077	-1 170	-1 052	-1 086	-1 190	-1 059	Current account..... 2
3 Crédito	4 469	4 483	4 477	4 521	4 543	4 681	Credit..... 3
4 Débito	5 546	5 652	5 529	5 607	5 733	5 741	Debit..... 4
5 Bens	-1 436	-1 409	-1 329	-1 388	-1 348	-1 350	Goods..... 5
6 Crédito	2 460	2 516	2 496	2 510	2 657	2 650	Credit..... 6
7 Débito	3 897	3 925	3 825	3 897	4 005	4 000	Debit..... 7
8 Serviços	336	352	332	334	316	396	Services..... 8
9 Crédito	1 003	1 036	1 020	1 010	1 029	1 086	Credit..... 9
10 Débito	666	684	687	676	714	690	Debit..... 10
dos quais:							of which:
11 Transportes	19	24	10	1	-39	26	Transportation..... 11
12 Crédito	210	215	202	195	197	224	Credit..... 12
13 Débito	191	191	192	194	236	198	Debit..... 13
14 Viagens e turismo	310	321	326	319	335	341	Travel..... 14
15 Crédito	507	527	531	519	536	538	Credit..... 15
16 Débito	197	206	204	200	201	198	Debit..... 16
17 Rendimentos	-203	-310	-270	-239	-300	-288	Income..... 17
18 Crédito ⁽²⁾	504	453	470	512	426	474	Credit ⁽²⁾ 18
19 Débito	707	764	740	751	726	762	Debit..... 19
20 Transferências correntes	226	198	214	207	142	182	Current transfers..... 20
21 Crédito	502	477	491	489	430	471	Credit..... 21
22 Débito	276	280	277	282	288	288	Debit..... 22
23 Balança de capital ⁽³⁾	40	58	183	164	33	175	Capital account ⁽³⁾ 23
24 Crédito	65	76	204	193	67	200	Credit..... 24
25 Débito	25	18	22	29	34	25	Debit..... 25

	1	2	3	4	5	6	
	Apr	May	Jun	Jul	Aug	Sep	

(1) Vide Suplemento 4/2005 ao Boletim Estatístico. / Please refer to the Supplement 4/2005 to the Statistical Bulletin.

(2) Correção do efeito de dias úteis. / Working days effect adjustment.

(3) Devido a instabilidade na componente sazonal, mantiveram-se os valores originais. / Due to lack of stability in the seasonal component, the raw series were kept.