



DEPARTMENT OF LABOR AND EMPLOYMENT

Manila, Philippines

Vol. 3 No. 20 November 1999

# Seasonally Adjusted Labor Force Time Series Data

PHILIPPINES: January 1988 - July 1999

### Background

Most time series data exhibit seasonal variations, that is, the combined effects of climatic and institutional events that occur regularly each year. As this phenomenon is non-economic in nature, it cannot be modified or controlled by policy makers.

**Seasonal adjustment** is a means of removing the estimated effect of seasonal variation from the series so that the effects of other influences, that is, trend cycle, and irregular fluctuations can be clearly recognized. Thus, seasonally adjusted series provides a more accurate information in the analysis of current economic conditions. It further allows the users to compare data on a month-on-month, quarter-to-quarter or year-to-year basis.

The Philippine Statistical System (PSS) in an effort to provide government with quality statistics, embarked in 1992 on a project that would equip major statistical agencies to compile and publish, on a regular basis, seasonally adjusted time series through a technical assistance from the Asian Development Bank (ADB). Since then, a number of key time series have already been seasonally adjusted using the X-11 ARIMA method developed by Statistics Canada namely: the national accounts (National Statistical Coordination Board, NSCB), palay production and prices (Bureau of Agricultural Statistics, BAS) and monetary aggregates (Bangko Sentral ng Pilipinas, BSP). Lately, consumer price index from the National Statistics Office (NSO) and labor force, employment and unemployment by the Bureau of Labor and Employment Statistics (BLES) in collaboration with NSO have been seasonally adjusted.

This report features the seasonally adjusted labor force, employment and unemployment data of the NSO's labor force survey covering the period January 1988 to July 1999 conducted four times a year during the months of January, April, July and October. This was also presented to the media and other data users in the recently held "Briefing on Seasonally Adjusted Philippine Time Series" last October 13, 1999

## Unemployment

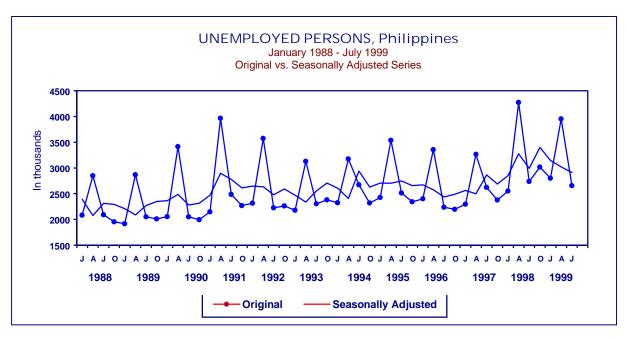
The total number of unemployed persons in the country as of July 1999 was estimated at 2.910 million.

This figure is lower compared to that recorded in April at 3.021 million and January at 3.144 million. (Table 1)

As a proportion to the labor force, the country's unemployment rate for the month of July was 9.0 percent, down from 9.4 percent in April and 9.9 percent in January.

Data on quarter-to-quarter changes of unemployed persons over the last two years showed negative growths interspersed only by high increases in April and October of 1998 at 14.7 percent and

13.6 percent, respectively. These positive growths can likewise be attributed to irregular factors such as the effects of the lingering drought in the first quarter, the series of strong typhoons that hit the country in the last quarter of 1998, as well as establishments closures and/or retrenchment policies adopted by establishments due to weak consumer market.



Source of Data: National Statistics Office, (NSO).

Bureau of Labor and Employment Statistics. (BLES).

## **Employment**

Employment level in July 1999 posted little increase (+ 7,000) from 29.154 million in April 1999. This is in sharp contrast to the 609,000 increment posted in April.

❖ Employment in the agriculture, fishery and forestry sector rebounded in April this year by 3.8 percent (+ 436,000) from a severe contraction of 8.1 percent (-900,000) in April last year. However, for the month of July 1999, employment in

this sector was eroded by 0.5 percent (-64,000). (Table 2)

- ❖ Industry employment improved by 1.6 percentage points (+ 42,000) from -0.7 percent recorded in April 1999. This can be attributed to the considerable increase in manufacturing at 2.2 percent (+ 59,000) and construction at 0.3 percent (+ 4,000)
- ❖ Employment gain of 1.1 percent (+142,000) was registered in the services sector in the July survey

round. Over the past twelve years, this sector has been exhibiting positive increases except in April 1988, July 1991, January 1993, October 1993, October 1995 and July 1998. (Table 2)

Due to the twin effects of the prolonged drought which adversely affected the agricultural sector, and the Asian

financial crisis that hit the Philippine economy, quarter-to-quarter changes on employment exhibited a decline of 0.3 percent in January and 1.3 percent in April 1998. Thereafter, positive growths were noted culminating in April 1999 when it recorded a 2.1 percent increase from the preceding quarter. (Table 3).



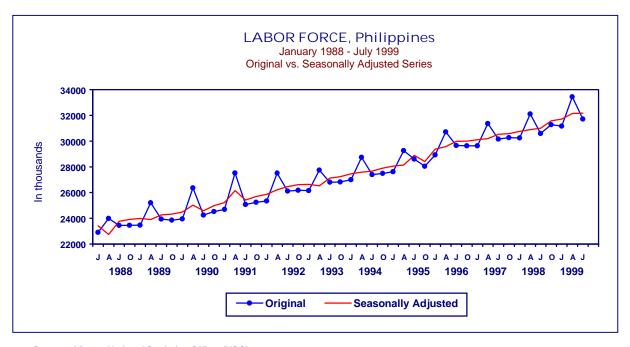
Source of Data: National Statistics Office, (NSO).

Bureau of Labor and Employment Statistics. (BLES).

#### Labor Force

The country's labor force or the economically active population 15 years old and over increased by 32,000 in July 1999 from 32.146 million of April. This represents however, a slower growth of 0.1 percent compared to 1.4 percent growth of the preceding quarter. (Table 1).

In January 1996, labor force grew by 3.4 percent. Thereafter, the quarter-to-quarter changes exhibited positive growths. (Table 3).



Source of Data: National Statistics Office, (NSO).

Bureau of Labor and Employment Statistics. (BLES).

#### FOR INQUIRIES:

Regarding this report contact **Technical Services Division** at **527-9309**Regarding other statistics and technical services contact **BLES Databank** at **527-3577**Or write to BLES c/o **Databank**, **3/F DOLE Bldg.**, **Gen. Luna St.**, **Intramuros**, **Manila 1002**FAX **527-3579** E-mail: **Issd@manila-online.net** Website: <a href="http://www.manila-online.net/bles">http://www.manila-online.net/bles</a>

## Table 1. LABOR FORCE, EMPLOYED AND UNEMPLOYED PERSONS

Philippines: January 1988 – July 1999 (Original vs. Seasonally Adjusted Series) (In thousands)

		In the Labor Force		Employed	d Persons	Unemployed Persons	
Year	Survey Rounds	Original	Seasonally Adjusted	Original	Seasonally Adjusted	Original	Seasonally Adjusted
1988	January	22907	23413	20827	21037	2080	2393
	April	23990	22743	21141	20709	2849	2075
	July	23447	23769	21356	21447	2091	2310
	October	23451	23919	21497	21642	1954	2292
1989	January	23469	23988	21551	21764	1918	2208
	April	25213	23907	22344	21896	2869	2087
	July	23939	24268	21889	21979	2050	2272
	October	23858	24325	21849	21994	2009	2350
1990	January	23954	24482	21900	22108	2054	2364
	April	26368	25018	22952	22502	3416	2486
	July	24252	24585	22203	22297	2049	2280
	October	24525	24988	22532	22676	1993	2316
1991	January	24681	25215	22533	22736	2148	2469
	April	27524	26149	23560	23116	3964	2895
	July	25073	25419	22586	22681	2487	2777
	October	25246	25693	22979	23119	2267	2612
1992	January	25345	25863	23032	23229	2313	2646
	April	27511	26211	23936	23503	3575	2635
	July	26122	26461	23898	24000	2224	2478
	October	26180	26616	23917	24051	2263	2591
1993	January	26149	26639	23972	24165	2177	2470
	April	27740	26526	24610	24189	3130	2335
	July	26805	27120	24504	24611	2301	2554
	October	26822	27240	24443	24558	2379	2707
1994	January	26997	27454	24673	24865	2324	2608
	April	28738	27589	25562	25151	3176	2407
	July	27398	27676	24725	24835	2673	2938
4005	October	27483	27890	25166	25265	2317	2630
1995	January	27619	28059	25194	25375	2425	2707
	April	29259 28602	28149	25724	25350	3535	2702 2746
	July October	28040	28889	26090	26193 25787	2512 2342	
1996	January	28924	28418 29380	25698 26527	26706	2342	2656 2671
1990	April	30713	29570	27358	26992	3355	2575
	July	29657	29979	27419	27519	2238	2437
	October	29637	29993	27442	27526	2195	2490
1997	January	29631	30111	27335	27511	2296	2563
1007	April	31368	30191	28105	27749	3263	2499
	July	30154	30525	27531	27635	2623	2864
	October	30265	30582	27888	27956	2377	2689
1998	January	30240	30750	27689	27863	2551	2853
. 555	April	32111	30887	27837	27501	4274	3274
	July	30593	31008	27856	27962	2737	2991
	October	31278	31572	28262	28316	3016	3399
1999	January	31168	31711	28368	28545	2800	3144
	April	33444	32146	29492	29154	3952	3021
	July	31713	32178	29055	29161	2658	2910

Source of data: National Statistics Office Bureau of Labor and Employment Statistics

## Table 2. EMPLOYED PERSONS BY SECTOR

Philippines: January 1988 – July 1999 (Original vs. Seasonally Adjusted Series) (In thousands)

Year	Survey Rounds	Agriculture		Industry		Services	
		Original	Seasonally	Original	Seasonally	Original	Seasonally
			Adjusted		Adjusted	ŭ	Adjusted
1988	January	9974	10206	3077	3081	7775	7794
	April	10089	9795	3250	3169	7801	7690
	July	9891	9949	3358	3378	8105	8164
	October	9920	9934	3348	3410	8227	8267
1989	January	9650	9872	3541	3546	8360	8380
	April	10205	9915	3544	3456	8584	8465
	July	9896	9949	3493	3516	8483	8541
	October	9852	9868	3446	3507	8539	8581
1990	January	9750	9963	3491	3496	8643	8665
	April	10372	10096	3632	3541	8936	8815
	July	10008	10050	3387	3413	8793	8844
	October	10185	10206	3386	3441	8946	8994
1991	January	9999	10201	3493	3501	9033	9054
	April	10538	10285	3719	3624	9287	9171
	July	10219	10250	3628	3660	8728	8767
	October	10403	10423	3686	3740	8882	8936
1992	January	10297	10484	3778	3792	8944	8959
	April	10873	10652	3879	3778	9169	9069
	July	10867	10875	3820	3854	9189	9215
	October	10869	10893	3816	3869	9210	9273
1993	January	10919	11097	3783	3803	9252	9258
	April	11224	11033	3869	3768	9508	9422
	July	11219	11205	3771	3797	9501	9517
	October	11194	11227	3793	3844	9444	9505
1994	January	11153	11313	3864	3894	9648	9651
	April	11790	11618	4036	3932	9729	9656
	July	10951	10928	3923	3940	9837	9846
	October	11249	11282	3970	4022	9939	9998
1995	January	10854	10997	4115	4162	10221	10226
	April	11043	10890	4302	4185	10371	10300
	July	11367	11357	4130	4141	10580	10594
	October	11323	11343	4008	4059	10344	10390
1996	January	11485	11634	4256	4320	10781	10792
	April	11975	11805	4299	4176	11080	11005
	July	11668	11682	4598	4605	11151	11173
4007	October	11451	11451	4567	4624	11419	11455
1997	January	11407	11559	4466	4542	11455	11475
	April	11601	11427	4741	4602	11756	11674
	July	10987	11022	4656	4661	11883	11919
4000	October	11260	11248	4659	4714	11964	11982
1998	January	11020	11168	4569	4652	12097	12131
	April	10434	10268	4803	4662	12590	12499
	July	11006	11064	4520	4524	12327	12367
4000	October	11272	11244	4442	4493	12539	12550
1999	January	11306	11459	4447	4529	12612	12653
	April	12090	11895	4633	4497	12757	12663
	July	11756	11831	4533	4539	12761	12805

Source of data: National Statistics Office Bureau of Labor and Employment Statistics

## Table 3. QUARTER-TO-QUARTER CHANGES

Philippines: January 1988 – July 1999 (Seasonally Adjusted Series) (In Percent)

	Survey Rounds	Labor Force	Total Employed	Employed			
Year				Agriculture	Industry	Services	Unemployed
1000	lanuari						
1988	January	-	- -1.6	-4.0	2.9	-1.3	-
	April July	-2.9 4.5	3.6	-4.0 1.6		6.2	-13.3
					6.6		11.3
4000	October	0.6	0.9	-0.2	0.9	1.3	-0.8
1989	January	0.3	0.6	-0.6	4.0	1.4	-3.7
	April	-0.3	0.6	0.4	-2.5	1.0	-5.5
	July	1.5	0.4	0.3	1.7	0.9	8.8
4000	October	0.2	0.1	-0.8	-0.2	0.5	3.4
1990	January	0.6	0.5	1.0	-0.3	1.0	0.6
	April	2.2	1.8	1.3	1.3	1.7	5.2
	July	-1.7	-0.9	-0.5	-3.6	0.3	-8.3
	October	1.6	1.7	1.5	0.8	1.7	1.6
1991	January	0.9	0.3	0.0	1.8	0.7	6.6
	April	3.7	1.7	0.8	3.5	1.3	17.2
	July	-2.8	-1.9	-0.3	1.0	-4.4	-4.1
	October	1.1	1.9	1.7	2.2	1.9	-6.0
1992	January	0.7	0.5	0.6	1.4	0.3	1.3
	April	1.3	1.2	1.6	-0.4	1.2	-0.4
	July	1.0	2.1	2.1	2.0	1.6	-6.0
	October	0.6	0.2	0.2	0.4	0.6	4.6
1993	January	0.1	0.5	1.9	-1.7	-0.2	-4.7
	April	-0.4	0.1	-0.6	-0.9	1.8	-5.5
	July	2.2	1.7	1.6	0.8	1.0	9.4
	October	0.4	-0.2	0.2	1.2	-0.1	6.0
1994	January	8.0	1.2	0.8	1.3	1.5	-3.7
	April	0.5	1.2	2.7	1.0	0.0	-7.7
	July	0.3	-1.3	-5.9	0.2	2.0	22.1
	October	8.0	1.7	3.2	2.1	1.5	-10.5
1995	January	0.6	0.4	-2.5	3.5	2.3	2.9
	April	0.3	-0.1	-1.0	0.6	0.7	-0.2
	July	2.6	3.3	4.3	-1.1	2.9	1.6
	October	-1.6	-1.5	-0.1	-2.0	-1.9	-3.3
1996	January	3.4	3.6	2.6	6.4	3.9	0.5
	April	0.6	1.1	1.5	-3.3	2.0	-3.6
	July	1.4	2.0	-1.0	10.3	1.5	-5.4
	October	0.0	0.0	-2.0	0.4	2.5	2.2
1997	January	0.4	-0.1	0.9	-1.8	0.2	2.9
	April	0.3	0.9	-1.1	1.3	1.7	-2.5
	July	1.1	-0.4	-3.5	1.3	2.1	14.6
	October	0.2	1.2	2.0	1.2	0.5	-6.1
1998	January	0.5	-0.3	-0.7	-1.3	1.2	6.1
	April	0.4	-1.3	-8.1	0.2	3.0	14.7
	July	0.4	1.7	7.8	-3.0	-1.1	-8.6
	October	1.8	1.3	1.6	-0.7	1.5	13.6
1999	January	0.4	0.8	1.9	0.8	0.8	-7.5
	April	1.4	2.1	3.8	-0.7	0.1	-3.9
	July	0.1	0.0	-0.5	0.9	1.1	-3.7

Source of data: National Statistics Office Bureau of Labor and Employment Statistics