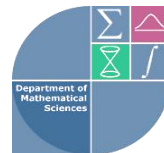


APPENDICES



APPENDIX I: REQUEST LETTER

June 29, 2017

MR. EDDIE E. NASOL

Director II, Philippine Statistics Authority

Region X -Northern Mindanao

1st Floor B4 Pride Rock Business Park

Gusa Highway, Cagayan de Oro City

Misamis Oriental, 9000

Dear Sir:

I am Celmar P. Bacasma, a 4th year Bachelor of Science in Applied Mathematics (BS-AM) student of University of Science and Technology of the Southern Philippines (USTP) and currently working on my undergraduate thesis study entitled "*A Multidimensional Scaling Analysis of Statistical Index Construction using Major Economic Indicators in the Philippines*" in partial fulfillment of the requirements for the degree that I am taking. Moreover, my study will need some important information about the Regional QuickStat Editions Report. Specifically, my study will need the following data: annual Gross Domestic Product (GDP), purchasing power of the peso, inflation rate, labor force participation rate, employment rate, unemployment rate, underemployment rate, population, birth rate, and death rate of every region in the Philippines from year 2006 to 2015.

In line with this, may I have a copy of the above-mentioned data for my study? Rest assured that the data obtained from your office will be kept confidential and will be used solely for academic purposes.

A positive response regarding this matter would be greatly appreciated. Thank you and God bless!

Respectfully yours,

CELMAR P. BACASMA

BSAM Student

With conformity of:

RHEGIE M. CAGA-ANAN

Thesis Adviser

DENNIS A. TAREPE, Ph.D

Chairman, Department of Mathematical Sciences

APPENDIX II: STANDARDIZATION

Table 1: NCR

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.2855699149	-0.0827447753	-0.1583125090	-1.2500393695	-0.7604215970	0.7604215970	0.7446800917	-1.6384019006	0.9070798726	0.6227019419
2008	-1.0336450939	-0.6447358941	2.1504115809	-1.3492488432	-1.1659797820	1.1659797820	-0.1250192855	-1.3932664706	1.8624088303	1.2569326463
2009	-0.9074426887	-0.7625727415	-0.0923489636	-1.1508298957	-1.0645902358	1.0645902358	0.2554741920	-0.6834952580	0.6963049906	-1.3566086458
2010	-0.5673934090	-1.1083138215	0.5013229452	-0.2579446318	-0.4055581851	0.4055581851	-0.0706630744	-0.3758743261	0.6723710371	-0.5436015012
2011	-0.3404999956	-1.4320414245	0.6992135815	0.3373122108	-0.3041686388	0.3041686388	1.3969546246	-0.0682533943	-0.3319704950	-0.5803145201
2012	0.0085230632	1.3740294380	-0.0263854182	0.4365216846	0.0506947731	-0.0506947731	1.2882422024	0.4124043118	-0.2808246770	0.2326926245
2013	0.4624947774	1.2121656365	-0.8839115087	0.8333595796	0.2027790925	-0.2027790925	0.0380493478	0.7488647060	-0.4560628410	0.7817916907
2014	0.8331797125	0.8767838399	0.1715052181	1.7262448435	0.2534738657	-0.2534738657	-0.6685813962	1.0837229079	-0.6584608392	1.4122978860
2015	1.1871998545	0.7472927987	-1.2137292358	0.2381027370	1.1152850089	-1.1152850089	-1.1034310848	0.8482006319	-1.0731425991	-0.5717440559
2016	1.6431536944	-0.1798630562	-1.1477656904	0.4365216846	2.0784856984	-2.0784856984	-1.7557056177	1.0660987920	-1.3377032793	-1.2541480665

Table 2: CAR

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.7636655570	0.3553350215	-0.1920150878	-0.1774190409	1.6601957716	-1.6601957716	-0.1675119706	-1.1376551229	0.4150107478	-1.6754477399
2008	-1.4967330139	-0.4770085126	2.2578325844	-0.9377863588	0.4743416490	-0.4743416490	1.4508240162	-0.7069171031	1.2120694616	-1.0253465471
2009	-0.5479190714	-0.8553464827	0.0066212099	-0.8110584725	0.4743416490	-0.4743416490	0.0596229048	-1.0869800618	0.1366288165	-0.2452251158
2010	-0.0425646669	-1.2578980828	0.6687422024	0.2027646181	-0.7115124735	0.7115124735	-0.4798224241	-0.7702609295	0.8429710303	-0.8720391017
2011	0.2591859248	-1.5605684589	-0.1920150878	1.5967713677	-0.2371708245	0.2371708245	-0.7637410183	-0.4535417973	0.3603038508	-0.2898589290
2012	0.1129590860	1.5660165256	0.0728333092	1.3433155951	-1.8973665961	1.8973665961	-0.5366061430	0.0405400489	0.6857752631	0.9385412353
2013	0.4928099788	0.2297268154	-0.1258029886	-0.1774190409	0.4743416490	-0.4743416490	-0.9340921748	0.3952654770	0.2211128852	0.8919668215
2014	0.8588017620	0.7715067885	0.0728333092	0.7096761634	-0.9486832981	0.9486832981	-1.1896189096	0.7373221398	-0.5170839775	1.4838499970
2015	0.9527110321	0.7593999735	-1.4500449735	-0.1774190409	0.0000000000	0.0000000000	0.9681624061	1.2947478125	-1.4796483669	0.2488099986
2016	1.1744145254	0.4688364125	-1.1189844773	-1.5714257905	0.7115124735	-0.7115124735	1.5927833133	1.6874795364	-1.8771397109	0.5447493810

Table 3: **ILOCOS REGION (R1)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.4880589888	0.2151957000	-0.3964381688	0.0165561502	-0.4457730063	0.6567807448	-0.5549378483	-0.3649549454	1.5294812587	-2.2050138493
2008	-1.2367727363	-0.5896246793	2.3219949886	0.1158930514	0.0153714830	-1.5324884045	-0.3136605230	0.2634022650	1.2391112309	-0.9046618204
2009	-0.7503095262	-0.9271299997	0.4530721929	0.3476791542	-0.1383433468	-0.8027320214	-0.2533411916	-1.4566462605	0.9481510201	-0.2422841113
2010	-0.4108461631	-1.1550182075	-0.3964381688	0.4470160555	-0.5994878360	1.3865371279	-1.4597278185	-1.1075589214	-0.1309002010	0.2998197507
2011	-0.1886564452	-1.4795425540	0.3398041447	0.6788021583	-0.5994878360	1.3865371279	0.6514487785	-0.7648186248	0.0978940689	-0.0278829054
2012	0.1234311128	0.8036665150	-0.8495103617	0.2152299526	-0.1383433468	-0.8027320214	1.3752807546	-0.2062788822	-0.2831674107	0.5046339107
2013	0.4851339961	1.5493513468	-0.5097062170	0.2814545534	-0.2920581765	-0.0729756383	1.6768774113	0.1491554994	-0.7222635502	0.4462400864
2014	0.8839623290	0.0709626571	0.7362423135	0.4139037551	-0.1383433468	-0.8027320214	-1.0978118304	0.4982428386	-1.1285061704	1.3848990241
2015	1.0429844373	0.8757830364	-0.9061443858	0.2814545534	-0.4457730063	0.6567807448	-0.1930218603	1.2916231548	-1.5243222245	0.8827349416
2016	1.5391319846	0.6363561852	-0.7928763376	-2.7979893842	2.7822384184	-0.0729756383	0.1688941278	1.6978338766	-0.0254780219	-0.1384850270

Table 4: CAGAYAN VALLEY (R2)

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.3718956199	0.7996290348	-0.7854862661	1.2518528804	0.2742848850	-0.2742848850	0.7773708864	-1.1247216472	-0.3147126165	-0.9937993813
2008	-1.0676933295	-0.2738586313	2.4205801261	-0.7173538978	-0.6399980650	0.6399980650	1.9593383159	-0.6805438458	1.0429114896	-0.5854850644
2009	-0.7410615743	-0.8575178512	0.4435058509	0.5485647454	1.1885678350	-1.1885678350	0.5500694576	-1.1167899007	0.2966240980	-0.3653695297
2010	-0.7011382983	-1.1883110875	0.4435058509	-0.8580115248	-1.5542810150	1.5542810150	0.3227680288	-0.7915882961	0.2458907607	-0.0949942812
2011	-0.3577176355	-1.6797298858	0.1763336516	1.3925105074	0.8838068517	-0.8838068517	0.5046091718	-0.4584549451	0.3148880994	-0.0128178149
2012	0.0287540419	1.1829038904	-0.8389207060	-0.5766962708	1.1885678350	-1.1885678350	-0.6318979720	0.0571085745	0.4051934398	0.2711312249
2013	0.5625215365	0.8250746684	-0.3580107471	0.2672494913	-0.0304760983	0.0304760983	-0.4955171147	0.4061054185	-0.4075546237	0.4167743371
2014	1.1567497683	0.3479690390	0.0160303320	0.2672494913	-1.5542810150	1.5542810150	-1.0865008295	0.7471705160	-1.0670880085	0.3888930360
2015	1.0874087484	1.0381818495	-0.9992240256	0.2672494913	-0.0304760983	0.0304760983	-1.3138022582	1.2865292749	-1.9848540802	-1.3359634881
2016	1.4040723623	-0.1943410264	-0.5183140667	-1.8426149139	0.2742848850	-0.2742848850	-0.5864376862	1.6751848511	1.4687014416	2.3116309614

Table 5: **CENTRAL LUZON (R3)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.5243402841	0.8022453261	-0.5784082852	-1.3579331701	-1.5296451671	1.5296451671	-0.6654956091	-1.5168690043	0.8938939369	-1.6318545510
2008	-1.2553821606	-0.4590824622	2.3999627357	-1.3579331701	-0.6678732420	0.6678732420	-1.0858086253	-1.1889983381	0.8811411066	-1.1754513625
2009	-0.7669142538	-0.8710140746	0.5870412447	-0.9736124616	-0.6678732420	0.6678732420	-1.4010433875	-0.8373443075	1.0442631294	-0.1046884746
2010	-0.4162666231	-1.2114534237	-0.4489138930	-0.2049710445	-0.1292657888	0.1292657888	-0.9457042866	-0.5094736414	-0.5020651241	0.1165518952
2011	-0.0785774169	-1.6506201841	0.5870412447	-0.0768641417	0.0861771925	-0.0861771925	-0.2451825928	-0.1816029752	-0.1933324275	0.3643714856
2012	0.1870654674	1.3129043498	-0.1467603112	0.4355634697	-0.4524302607	0.4524302607	0.4203130162	0.2668833246	1.1131664810	0.8759581987
2013	0.4140808619	0.9877847714	-0.4920786904	0.8198841782	-0.1292657888	0.1292657888	0.9457042866	0.6049468613	-0.2603323715	0.9379763802
2014	0.9177475914	0.5622355850	-0.1035955138	1.5885255952	0.5170631551	-0.5170631551	0.8756521172	0.9447092096	-0.4287839353	1.4158960805
2015	1.0350708115	0.4056334844	-1.1395506515	0.1793496640	0.8402276270	-0.8402276270	0.5954434397	1.0687224668	-0.4653293593	0.2437304136
2016	1.4875160063	0.1213666280	-0.6647378800	0.9479910810	2.1328855147	-2.1328855147	1.5061216415	1.3490264042	-2.0826214361	-1.0424900657

Table 6: CALABARZON (R4A)

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.7107328858	0.2689012077	-0.1282056784	-1.1996232325	-0.1896946267	0.1896946267	-1.5977823967	-1.6459092832	-0.0594646975	-1.6764246790
2008	-1.6044562307	-0.6855649603	1.9361230418	-1.7122827336	-0.9884088443	0.9884088443	-0.8488218983	-1.4296836811	-1.4985876393	-1.5298534505
2009	-0.4937651533	-0.7294943655	0.4693631616	-0.7894956317	-1.3877659531	1.3877659531	-0.5159505656	-0.6218648316	0.9870409657	-0.4667863450
2010	-0.0707652019	-1.0955727424	0.3607142816	-0.3793680308	-0.4892124583	0.4892124583	0.2330099329	-0.3381768417	-1.8638460668	-0.1581877619
2011	0.0877191696	-1.4510015665	0.7953098017	0.7484828716	-0.6888910127	0.6888910127	0.6490990987	-0.0536239493	0.0428645118	-0.0359795794
2012	0.3486869527	1.9102635302	-0.4541523184	0.4408871709	0.1098232049	-0.1098232049	0.6490990987	0.3494205730	0.7363107157	0.2559840207
2013	0.5582205171	0.7893980999	-0.5084767584	0.5434190711	-0.1896946267	0.1896946267	0.6490990987	0.6668397569	0.2497732254	0.6894104687
2014	0.8439493137	0.4126701703	0.2520654016	1.5687380733	1.0083766997	-1.0083766997	1.2316239308	0.9894483552	-0.1057734022	1.0277424467
2015	0.9368155913	0.3567600182	-1.2690189185	0.5434190711	1.0083766997	-1.0083766997	0.8987525982	0.9263104794	0.2350870889	1.2742128942
2016	1.1043279272	0.2236406084	-1.4537220145	0.2358233705	1.8070909173	-1.8070909173	-1.3481288972	1.1572394224	1.2765952983	0.6198819856

Table 7: **MIMAROPA (R4B)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.5710610718	-0.0312651657	-0.3054712985	0.3751115604	0.2742848850	-0.2742848850	0.8088533069	-0.6528678778	-1.6514361883	-1.6195779585
2008	-0.6553587049	-0.6202605460	2.1483145419	0.6509288842	-0.0304760983	0.0304760983	1.6889527600	-0.1420494954	-0.6821932853	-1.1554548854
2009	-0.9629434529	-0.6041236863	-0.0050077262	1.1474000670	-0.9447590484	0.9447590484	1.1860387868	-1.2476564053	-0.6051673592	-0.5689464177
2010	-0.7839341195	-1.1084005529	0.6960739425	0.6509288842	-0.9447590484	0.9447590484	0.1802108404	-0.9397658734	-0.1398023892	-0.2479201135
2011	-0.2222025945	-1.5622497329	0.6459966804	1.1474000670	0.5790458683	-0.5790458683	-0.6579791149	-0.6248778295	0.0086329891	0.3395297803
2012	0.2445989391	1.5985576673	-0.4557030846	0.2096211661	-0.3352370817	0.3352370817	-0.2388841373	-0.2050271042	1.3252949128	0.5937148305
2013	0.3927609060	1.2294270009	-0.7060893949	-0.9488115939	-0.0304760983	0.0304760983	0.0963918449	0.1098609398	0.4619626582	1.0484236425
2014	1.3588321792	0.5900039340	0.2453785840	-0.2868500167	-0.9447590484	0.9447590484	-1.4961690702	0.4177514717	0.1731154354	1.4071069911
2015	0.9729792526	0.3882931873	-1.3070165394	-1.3901193119	2.4076117684	-2.4076117684	-0.9932550971	1.4183957003	1.7393092655	0.8395245098
2016	1.2263286667	0.1200178943	-0.9564757051	-1.5556097062	-0.0304760983	0.0304760983	-0.5741601194	1.8662364739	-0.6297160389	-0.6364003791

Table 8: **BICOL REGION (R5)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.1197780490	1.1059730887	-0.0098858728	0.8440029780	0.8931977372	-0.8931977372	0.7925420848	-0.9429619696	-1.3021780221	-1.4084407417
2008	-0.7002424329	0.0490416201	2.0167180515	1.4383712723	0.2841992800	-0.2841992800	0.4690555196	-0.5536147151	-0.5322051714	-1.5523674511
2009	-1.0728397137	-0.4160082260	0.6326958593	0.6062556602	-0.1217996914	0.1217996914	0.6307988022	-1.0616201804	-0.6416507618	-0.5327654424
2010	-0.7675000160	-0.8235610003	-0.0098858728	0.3685083425	-0.3247991772	0.3247991772	0.8734137261	-0.7909311369	1.1279765307	-0.5322808407
2011	-0.4933637992	-1.1769988834	0.2866903112	0.4873820014	-0.7307981486	0.7307981486	0.3073122370	-0.5202420933	1.2062070055	0.2178826144
2012	-0.0259360117	1.8246864874	-0.6030382409	0.2496346836	-0.7307981486	0.7307981486	-0.0970459696	-0.0938141480	1.2925302881	0.2740964133
2013	0.4215862245	0.3737309673	-0.2570326928	-0.1069862930	-1.5427960916	1.5427960916	1.0755928294	0.1954152410	0.8824946959	0.6070177916
2014	0.8491418602	-1.1905276062	0.6326958593	-1.4145965406	-0.1217996914	0.1217996914	-1.0675056652	0.4772284919	-0.6416507618	1.3348895678
2015	1.1880861060	0.6832005013	-1.2950493370	-0.8202282462	0.2841992800	-0.2841992800	-1.2292489479	1.4302022480	-0.8582297118	1.2955360592
2016	1.7208458317	-0.4295369488	-1.3939080650	-1.6523438583	2.1111946516	-2.1111946516	-1.7549146163	1.8603382624	-0.5332940913	0.2964320296

Table 9: **WESTERN VISAYAS (R6)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-0.1824829218	1.0466201134	-0.7625797656	-0.0296463531	-0.2621112170	0.2621112170	0.7559062956	-0.8248848047	0.0439571489	-2.3787790384
2008	0.5500839777	-0.2189257633	2.5056192298	-0.0296463531	-0.7863336510	0.7863336510	0.4063542514	-0.2824523357	0.5081583347	-0.4072754023
2009	-1.4660222144	-1.4343359690	0.2773017329	0.7115124735	-0.7863336510	0.7863336510	1.1491523453	-1.2937014387	-0.2479746423	0.0630362792
2010	-1.2223512027	-0.9284214709	-0.4159525994	1.1562077695	-0.9173892595	0.9173892595	1.5860924005	-0.9488693691	0.5151972992	-0.3375092504
2011	-0.7815942245	-1.3203912622	0.1782653997	1.4526713001	-0.3931668255	0.3931668255	0.0131082017	-0.6079118171	0.5600243890	-0.3184821181
2012	-0.2971158421	1.4021275986	-0.0198072666	-0.4743416490	-0.2621112170	0.2621112170	-0.5112198646	-0.0577303128	1.6247603889	0.3245373802
2013	0.0651761594	0.9585028735	-0.1683617664	-1.8084275369	-0.6552780425	0.6552780425	-0.1616678204	0.2987253097	0.7556335079	0.9387722423
2014	0.5718357458	0.4768965795	0.2773017329	0.2668171776	0.7863336510	-0.7863336510	-0.7296898922	0.6551809323	-1.0063304502	1.1680735808
2015	1.0856757039	0.2110255970	-0.9111342654	-1.2155004756	1.3105560850	-1.3105560850	-0.7733838978	1.3215979657	-1.1704494648	0.7532845887
2016	1.6767948186	-0.1930982964	-0.9606524320	-0.0296463531	1.9658341275	-1.9658341275	-1.7346520193	1.7400458704	-1.5829765112	0.1943417380

Table 10: CENTRAL VISAYAS (R7)

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.1187411176	0.2676128280	-1.0694113366	-1.3652899825	0.0490552455	-0.0490552455	-0.1920487791	-1.2920585461	1.0301220136	-1.6355561952
2008	-0.8672206329	-0.5837535390	1.9119778442	-0.9515657454	-0.5641353234	0.5641353234	-0.8490577604	-0.8890421467	1.6169285780	-0.8706212912
2009	-1.1066848853	-0.8803128235	-0.5509088704	-1.1998002877	-1.1773258923	1.1773258923	-1.0006752176	-1.0243834748	-1.2936513240	-0.5112082915
2010	-0.6936108862	-1.1513311170	-0.4212832538	0.2068621186	-1.2999640061	1.2999640061	-0.1920487791	-0.6935491171	-0.3968793638	-0.1905149489
2011	-0.4024269842	-1.4833640001	0.2268448290	0.7033312031	-0.1962209821	0.1962209821	0.8187342690	-0.3657223445	-0.4215411972	-0.3380043295
2012	0.0511779015	1.6028390803	0.7453472952	0.1241172711	-0.6867734372	0.6867734372	1.9811347743	0.1455671174	0.9991738306	-0.1210560221
2013	0.4160922396	1.0948571480	0.5509088704	-0.7033312031	0.2943314731	-0.2943314731	-0.8490577604	0.5034697407	-0.0496794353	0.4638768121
2014	0.8927068205	0.5868752157	0.6157216786	0.7033312031	0.9075220420	-0.9075220420	0.4649602021	0.8613723640	0.4358201861	0.7174757872
2015	1.1358927084	0.3853851755	-1.4582881862	1.5307796774	0.7848839282	-0.7848839282	0.8187342690	1.1952143068	-0.5852280716	0.4299803988
2016	1.6928148362	0.1611920322	-0.5509088704	0.9515657454	1.8886269522	-1.8886269522	-1.0006752176	1.5591321003	-1.3350652164	2.0556280802

Table 11: EASTERN VISAYAS (R8)

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.8319085725	1.5423743177	-0.5947847041	0.9523328454	0.8372344585	-0.8372344585	0.2223639350	-0.5258279954	-1.5316863848	-0.8333422186
2008	-1.3376977638	0.0898228846	2.3453442309	0.3226912947	1.5349298405	-1.5349298405	0.1927154103	-0.0442389900	-0.4958530211	-0.6096139786
2009	-0.2596273913	-0.7020665260	0.3176691033	1.3458588146	-0.5581563057	0.5581563057	-0.1630668857	-1.2314118869	-1.2231536280	-0.2275493324
2010	-0.1013377044	-1.1161115607	-0.4934009477	-0.2282450621	-0.7907214330	0.7907214330	-1.7937357423	-0.9570181513	-0.1557348770	-0.3667825064
2011	0.1879024222	-1.5301565954	0.0135178342	0.7949224577	-0.0930260509	0.0930260509	-0.8449829530	-0.6826244157	-0.1199659947	0.1295341639
2012	-0.0060594177	1.0514028832	-0.4934009477	-0.7004762251	-0.0930260509	0.0930260509	-0.5781462310	-0.2458343876	0.0415169126	0.3793456634
2013	0.3810635760	0.4857675899	-0.0540713367	0.1652809071	-0.3255911783	0.3255911783	-0.5484977063	0.0397590923	-0.0923549276	1.6408937358
2014	0.5514565855	0.6939213778	0.8583824707	0.4013964886	-1.4884168151	1.4884168151	1.2600622983	0.3141528279	0.5625712157	0.2588483519
2015	0.7760677236	-0.7948307141	-0.8651413878	-1.2514125820	-0.5581563057	0.5581563057	1.4379534463	1.4341272589	1.4720630302	-1.7281393153
2016	1.6401405425	0.2798763431	-1.0341143151	-1.8023489388	1.5349298405	-1.5349298405	0.8153344283	1.8989166478	1.5425976748	1.3568054361

Table 12: **ZAMBOANGA PENINSULA (R9)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.3266473071	1.2323712282	-0.2766735795	0.8425919705	-0.0507818527	0.0507818527	0.4613876540	-1.3322778146	-1.0570679892	-1.7164093382
2008	-0.8810324322	-0.2912877449	2.5912842566	0.3297099015	0.4570366741	-0.4570366741	0.5018602552	-0.9755624565	-0.4699028942	-1.1738813313
2009	-0.9412461043	-0.6946092377	-0.6140803837	1.1356674385	-0.0507818527	0.0507818527	0.4613876540	-0.9269194531	-2.0245244353	-0.5941010892
2010	-0.6646926626	-1.0226440519	-0.2766735795	0.4762476355	-0.5586003795	0.5586003795	-0.4694821743	-0.6188470984	0.2192143329	-0.4342551346
2011	-0.3844525104	-1.5765389022	0.4656213899	0.3297099015	1.4726737277	-1.4726737277	-0.2266465669	-0.3053699656	0.3081007549	0.4096773206
2012	0.1309377974	1.5155925432	-0.6815617446	0.8425919705	-1.5742374331	1.5742374331	2.1207643044	0.1162027303	0.4395497175	0.5668140217
2013	0.3909702073	-0.0672202488	-0.1417108578	-0.1099033005	0.9648552009	-0.9648552009	-0.2671191681	0.4296798631	0.1340892517	1.0544796459
2014	0.8316641071	0.2769474251	0.2969179877	-0.6960542365	0.4570366741	-0.4570366741	-0.9551533890	0.7377522178	0.6533522471	0.8079375803
2015	1.2210407641	0.9491499132	-0.8165244663	-2.0148938425	0.4570366741	-0.4570366741	-1.6027150086	1.2620156986	0.1346831477	-0.2656388923
2016	1.6234581406	-0.3217609243	-0.5465990229	-1.1356674385	-1.5742374331	1.5742374331	-0.0242835607	1.6133262785	1.6625058669	1.3453772173

Table 13: **NORTHERN MINDANAO (R10)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.1066826946	0.9109059921	-0.0393715705	1.3754977038	-1.6132030174	1.6132030174	1.8893937758	-1.4782506144	-1.2505616552	-1.8326825872
2008	-0.5521446710	-0.2876083454	2.4016658015	0.6772755191	0.9758882451	-0.9758882451	-0.6995714563	-1.1189245747	-0.4023064161	-0.9674620668
2009	-1.2097409930	-0.8140421686	0.1181147115	0.6772755191	0.5775665124	-0.5775665124	0.2368627766	-0.8765884084	-1.3095508336	-0.3062648221
2010	-0.7463625515	-1.1369215801	-0.1574862821	0.2583422083	0.3784056461	-0.3784056461	0.5122846098	-0.5465098371	-0.1007299578	-0.3218700018
2011	-0.3613600493	-1.7212631239	0.3149725641	0.3979866453	1.3742099778	-1.3742099778	0.0165253100	-0.2164312658	-0.4967348295	0.3243000328
2012	-0.0512819939	1.4671710652	-0.1181147115	0.1885199899	0.9758882451	-0.9758882451	0.8427908096	0.2306371790	0.2577779169	0.9704700674
2013	0.2663361049	0.8968677568	-0.0393715705	-0.7889910687	-1.0157204184	1.0157204184	-0.7546558230	0.5690721698	0.5305457067	1.3744708314
2014	0.8046126642	0.3985104042	0.0000000000	0.3281644268	-0.6173986857	0.6173986857	-1.3054994894	0.9075071607	0.1800402400	1.1981900974
2015	1.1410446347	0.2230324631	-1.2205186860	-1.1381021610	-0.8165595520	0.8165595520	-1.1953307561	1.1080612293	0.4114241488	-0.3603840912
2016	1.8155795495	0.0633475367	-1.2598902565	-1.9759687826	-0.2190769530	0.2190769530	0.4572002431	1.4214269616	2.1800956799	-0.0787674599

Table 14: **DAVAO REGION (R11)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.2646048515	0.6189569373	-0.6559406834	0.3809876850	-0.3312945782	0.3312945782	0.0658164735	-1.5118857997	-1.6368730861	-1.8922319746
2008	-0.8930921185	-0.0751764374	2.3783427500	0.9005163464	0.0000000000	0.0000000000	0.9433694540	-1.2827115462	-0.7711123963	-1.2083293617
2009	-0.8969244558	-0.4273658803	0.3703610661	0.4675757952	-0.1656472891	0.1656472891	1.3821459442	-0.6848656676	-0.2889323678	-0.6706337772
2010	-0.5463899548	-0.7577836122	0.3257392509	-0.1385409764	-0.4969418673	0.4969418673	1.0164988690	-0.4224777542	0.1033849463	-0.2406696872
2011	-0.2618699391	-1.7183002747	0.7273355877	1.4200450078	0.6625891564	-0.6625891564	-1.4699012422	-0.1600898408	-0.0619874104	0.1565901991
2012	-0.1290327535	1.3130903120	-0.8344279442	0.2943995748	-0.3312945782	0.3312945782	-0.4460894317	0.1986176863	0.2966313857	0.8376071469
2013	0.2191402055	1.0351808243	-0.5220752378	-0.8312458582	-1.8221201802	1.8221201802	-0.8848659219	0.4643269657	-0.7380379250	0.8097123849
2014	0.7540735004	0.7047630925	-0.3435879770	0.3809876850	0.3312945782	-0.3312945782	0.4314635487	0.7333576111	0.1591331118	0.7553656935
2015	1.1615032115	0.4806425379	-0.7898061290	-0.8312458582	0.0000000000	0.0000000000	0.2852047186	1.1750992881	0.8967562271	1.1976762205
2016	1.8571971556	-1.1740074993	-0.6559406834	-2.0434794014	2.1534147585	-2.1534147585	-1.3236424122	1.4906290573	2.0410375148	0.2549131558

Table 15: SOCCSKSARGEN (R12)

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.1720367901	0.2264185121	-0.5591569652	0.4628760361	-1.3865371279	1.0625256786	1.0907688725	-1.5108934915	-1.3734555554	-1.4961287775
2008	-0.6812463942	-0.0547685187	2.3213486129	0.4628760361	-0.9000328725	0.6103870920	0.7271792483	-1.2216950934	-0.9203357374	-1.1704636898
2009	-1.2266412368	-0.6129457588	0.4998524385	1.2343360964	0.0729756383	-0.2938900813	-0.9453330228	-0.7778091800	-1.0265190202	-0.8328227803
2010	-0.7252592150	-1.1732214095	0.2456901817	0.2057226827	-0.6567807448	0.3843177986	-1.0907688725	-0.4785224657	-0.4525957086	-0.5778536725
2011	-0.3102856759	-1.6810367934	0.2880505578	0.7200293896	0.8027320214	1.2885949719	-1.3089226470	-0.1825985235	-0.4551569135	-0.2351906443
2012	-0.0807022820	1.6596330045	-0.7709588459	0.8486060663	-0.1702764894	-0.0678207880	0.6544613235	0.2276596692	0.3777682347	0.5188998080
2013	0.4922043532	1.1707033167	-0.3473550844	-0.3085840241	-0.6567807448	0.3843177986	0.2908716993	0.5437602439	1.0006745883	1.2641049731
2014	1.0060399214	0.4173738837	0.2880505578	-0.5657373775	1.5324884045	-1.6503058413	-1.1634867974	0.8632235906	0.4816037465	0.9303272320
2015	1.0891502243	0.2075328160	-1.2792833597	-0.9514674076	1.5324884045	-1.6503058413	0.6544613235	1.1154314960	0.6267386858	0.4139094439
2016	1.6087770951	-0.1596890525	-0.6862380936	-2.1086574980	-0.1702764894	-0.0678207880	1.0907688725	1.4214437544	1.7412776797	1.1852181075

Table 16: **CARAGA (R13)**

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-0.9024747842	2.1369071281	-0.2485081547	1.1733743661	-1.4751883956	1.4751883956	-0.1546309583	-1.7931551267	-1.4624713813	-1.5684989425
2008	-0.7909800429	-0.1453441680	2.6059774058	0.2550813839	0.4489703813	-0.4489703813	0.0927785750	-1.6945594587	-1.1087058389	-1.1267904852
2009	-1.2223719221	-0.5355501550	0.0537314929	0.3571139375	0.0213795420	-0.0213795420	0.7731547915	-0.0548706326	-0.7950108273	-0.8892268906
2010	-0.8448490832	-0.9015573211	-0.3492547039	-0.2550813839	-1.4751883956	1.4751883956	-2.1339072244	0.0415816513	-0.2843977791	-0.6044411747
2011	-0.4950247617	-1.4172946916	0.3223889574	0.2550813839	-0.4062112973	0.4062112973	0.2164833416	0.1380339352	-0.0806105088	0.0908137490
2012	0.0720913605	1.0903081242	-0.2485081547	-0.4591464911	0.2351749616	-0.2351749616	-0.9587119414	0.2902142053	0.1872896106	0.3276508494
2013	0.3687511870	-0.1453441680	-0.3828368869	0.9693092590	-0.4062112973	0.4062112973	0.8968595581	0.3930966415	0.0659331463	0.7846156843
2014	1.0644067329	0.1949517509	0.0873136760	0.7652441518	1.3041520599	-1.3041520599	-0.4020404916	0.4959790776	0.4784688003	1.4239305567
2015	1.2167174211	-0.0440116055	-0.8529874498	-0.8672767054	0.2351749616	-0.2351749616	0.3401881082	0.9911008016	1.2298866566	1.0412037826
2016	1.5337338926	-0.2330648938	-0.9873161821	-2.1936999019	1.5179474795	-1.5179474795	1.3298262413	1.1925789057	1.7696181216	0.5207428710

Table 17: ARMM

YEAR	GDP	PESO	INFLATION	LABOR	EMPLOY -MENT	UNEMPLOY -MENT	UNDER -EMPLOY -MENT	POPULA -TION	BIRTH	DEATH
2007	-1.7103978811	0.7815980614	-0.6091848266	1.2675653731	-0.3677190066	0.3480439541	2.3595517927	1.6873006054	1.1180252852	1.8113544277
2008	-1.3452326837	-0.3135862459	2.3777859360	0.6639628145	1.2310592830	-1.2339740191	1.0296226005	1.8971290674	0.7479302131	1.7294770895
2009	-0.8950099251	-0.8100087003	0.2947668516	0.6639628145	1.8705705988	-1.8667812084	-0.3432075335	-0.8837974818	-1.0748641397	-0.3945173909
2010	-0.1352756441	-1.2422780991	0.4126735922	0.5968958635	-0.5275968356	0.6644475488	-0.0429009417	-0.7914729585	-1.7954007684	-1.1916173603
2011	0.1135225047	-1.7127338406	0.7270915672	-0.3420414499	-0.0479633487	0.0316403595	-0.1287028251	-0.6991484352	-1.2498081079	-0.7581490990
2012	0.4031180830	1.4689522291	-0.7270915672	0.1944941578	0.1119144803	-0.1265614379	-0.3861084752	-0.5508696555	0.3244107963	-0.3270889947
2013	0.7506511184	0.3111423199	-0.6091848266	-0.1408405970	-1.8066194673	1.7718601300	-0.5148113002	-0.4529497065	0.2197765874	-0.6305167776
2014	1.0611786324	0.7556313484	-0.3340690984	0.3956950107	0.1119144803	-0.1265614379	-0.8151178920	-0.3550297576	0.7122217132	-0.2692932265
2015	0.7440580404	0.5265132925	-0.7270915672	-1.2139118123	-0.0479633487	0.0316403595	-1.0725235422	-0.0025179415	0.7124985233	0.0154123369
2016	1.0133877552	0.2347696346	-0.8056960609	-2.0857821748	-0.5275968356	0.5062457514	-0.0858018834	0.1513562639	0.2852098976	0.0149389948