# Ejercicio Obligatorio 02:

Análisis Componentes Principales



#### **Dependencias**











## Componentes Principales

	Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Component 7	
Austria	-1.081748	-1.270051	-0.514803	-0.413907	0.001251	-0.381542	-0.575549	
Belgium	-0.681094	-0.416041	-0.687292	-0.283364	0.273518	-0.379129	-0.480972	
Bulgaria	2.609879	0.269638	-0.623031	-1.331941	0.001946	0.003832	-0.025134	
Croatia	1.270149	1.901427	-0.831925	0.371907	-0.377894	0.434888	0.299664	
Czech Republic	-0.167209	-0.131943	-1.001979	-0.263449	-1.047409	0.127808	0.115020	
Denmark	-0.955191	-0.409628	-0.732314	-0.391339	0.027888	-0.173052	0.106606	
Estonia	2.487735	-0.085779	-0.987538	-0.303984	0.555597	0.184727	-0.381139	
Finland	-0.210563	-0.033717	1.174438	-0.614491	-0.145780	0.056705	-0.128946	
Germany	-0.592394	-0.471832	0.992255	-0.843702	-0.981331	0.152432	-0.533010	
Greece	1.000472	3.406849	0.738084	-0.793175	1.068531	-0.094149	-0.170002	
Hungary	1.396898	-0.034231	-0.695239	-0.097312	0.050388	-0.031638	0.290793	
Iceland	-1.583720	-1.477264	-0.306748	1.251670	0.167241	-0.857331	-0.167687	
Ireland	-1.808918	0.521808	-0.301615	1.829776	0.372668	0.015965	0.468092	
Italy	-0.853224	0.327799	1.114486	-0.137694	-0.377246	-0.664211	0.034060	
Latvia	2.306059	-0.675348	-1.301515	0.373985	-0.247019	0.277304	-0.173381	
Lithuania	1.530100	-0.194997	-1.076834	1.142023	-0.283135	0.004186	-0.349605	
Luxembourg	-3.478435	-1.076287	-0.361319	0.361099	2.021508	1.144169	-0.205904	
Netherlands	-1.840053	-0.057229	-0.453754	-0.770093	0.132617	-0.379188	0.132959	
Norway	-2.106511	-0.143963	1.035463	-1.362686	-0.547047	0.793110	0.138720	
Poland	1.471774	0.072985	0.741919	0.207883	-0.116252	0.010299	0.197867	
Portugal	0.526493	1.034774	-0.127654	0.056053	0.451807	-0.489374	0.111846	
Slovakia	0.782966	-0.172260	-0.951409	0.930525	0.095982	-0.081662	0.147810	
Slovenia	0.067543	0.797672	-1.171579	-0.237358	-0.715185	0.365902	-0.117610	
Spain	-0.163767	1.152066	2.129796	2.613753	-0.725067	0.300085	-0.265244	
Sweden	-0.885105	-0.402881	1.796021	-0.241101	-0.612589	0.062566	-0.386276	
Switzerland	-3.281586	-0.108227	-0.753067	-0.476104	-0.813816	-0.055234	0.988174	
Ukraine	4.580268	-2.829042	1.893035	-0.011625	0.467664	0.183246	0.671957	
United Kingdom	-0.340819	0.505702	1.264115	-0.565349	1.301161	-0.530714	0.256892	
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#### **Eigenvectors**

	1	2	3	4	5	6	7
0	0.124874	-0.172872	0.898297	0.044850	-0.324017	0.190118	0.066643
1	-0.500506	-0.130140	0.083956	-0.084255	0.390632	0.638657	-0.397408
2	0.406518	-0.369657	0.198195	0.164686	0.689501	-0.323867	-0.226700
3	-0.482873	0.265248	0.246082	0.026771	-0.101787	-0.606434	-0.507031
4	0.188112	0.658267	0.243679	-0.562375	0.368148	0.035596	0.137310
5	-0.475704	0.082622	0.163697	0.392463	0.347868	-0.120856	0.671147
6	0.271656	0.553204	0.000500	0.701968	0.010159	0.259705	-0.244662



## Matriz Ortogonal

	0	1	2	3	4	5	6
0	1.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0
1	0.0	1.0	-0.0	-0.0	0.0	0.0	0.0
2	0.0	-0.0	1.0	0.0	0.0	-0.0	0.0
3	-0.0	-0.0	0.0	1.0	-0.0	0.0	-0.0
4	-0.0	0.0	0.0	-0.0	1.0	-0.0	-0.0
5	-0.0	0.0	-0.0	0.0	-0.0	1.0	0.0
6	-0.0	0.0	0.0	-0.0	-0.0	0.0	1.0

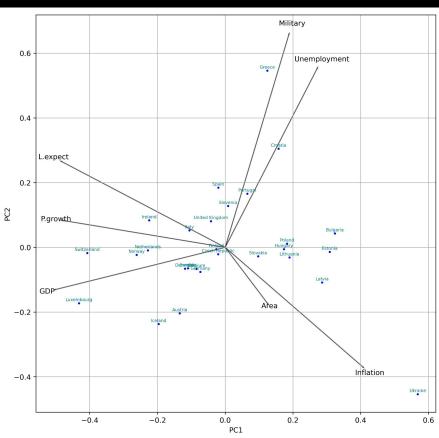


#### Relación Primera Componente En Países

		Luxembourg	-3.478435	Finland	-0.210563
		Switzerland	-3.281586	Czech Republic	-0.167209
		Norway	-2.106511	Spain	-0.163767
Area	0.124874	5. Section 191 191 191 191 191 191 191 191 191 19		Slovenia	0.067543
CDD	0 500504	Netherlands	-1.840053	Portugal	0.526493
GDP	-0.500506	Ireland	-1.808918	Slovakia	0.782966
Inflation	0.406518	Iceland	-1.583720	Greece	1.000472
L.expect	-0.482873	Austria	-1.081748	Croatia	1.270149
Military	0.188112	Denmark	-0.955191	Hungary	1.396898
P.growth	-0.475704	Sweden	-0.885105	Poland	1.471774
-		Italy	-0.853224	Lithuania	1.530100
Unemployment	0.271656	astronomic description (		Latvia	2.306059
		Belgium	-0.681094	Estonia	2.487735
		Germany	-0.592394	Bulgaria	2.609879
		United Kingdom	-0.340819	Ukraine	4.580268



#### Componentes



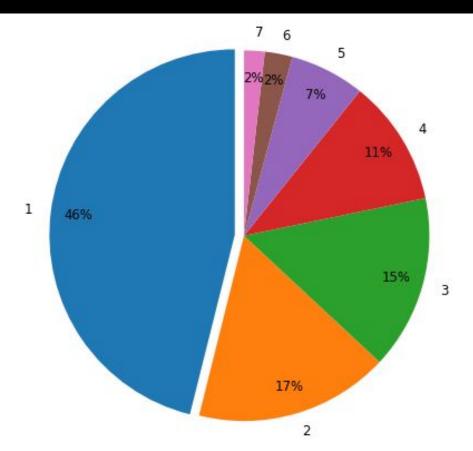


#### Ratio de Varianza

```
Component 1 0.461024
Component 2 0.169589
Component 3 0.151884
Component 4 0.110051
Component 5 0.065407
Component 6 0.024096
Component 7 0.017949
```



#### Ratio de Varianza



# ¡Gracias!