```
GET DATA

/TYPE=XLSX

/FILE='F:\correlation\forspss.xlsx

/SHEET=name 'total'

/CELLRANGE=FULL

/READNAMES=ON

/DATATYPEMIN PERCENTAGE=95.0

/HIDDEN IGNORE=YES.

EXECUTE.

DATASET NAME DataSet1 WINDOW=FRONT.

T-TEST PAIRS=arrival WITH departure (PAIRED)

/CRITERIA=CI(.9500)

/MISSING=ANALYSIS.
```

T-Test

Notes

Output Created	11-APR-2017 16:17:51	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	674
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST PAIRS=arrival WITH departure (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

 $\hbox{\tt [DataSet1]-Total\ Volume\ (Arriving\ vs\ Departing)\ by\ MONTH}$ More people arrive into Singapore by plane than depart

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	741153.39	674	703790.322	27108.990
	departure	738214.98	674	698229.387	26894.791

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	arrival & departure	674	.999	.000

Paired Samples Test

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	2938.404	26830.521	1033.473	909.184

Paired Samples Test

		Paired			
		95% Confidence Interval of the			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	4967.623	2.843	673	.005

```
GET DATA

/TYPE=XLSX

/FILE='F:\correlation\forspss.xlsx'

/SHEET=name 'region'

/CELLRANGE=FULL

/READNAMES=ON

/DATATYPEMIN PERCENTAGE=95.0

/HIDDEN IGNORE=YES.

EXECUTE.

DATASET NAME DataSet2 WINDOW=FRONT.

T-TEST PAIRS=arrival WITH departure (PAIRED)

/CRITERIA=CI(.9500)

/MISSING=ANALYSIS.
```

T-Test

Output Created	11-APR-2017 16:20:25	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	5392
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST PAIRS=arrival WITH departure (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

[DataSet2] - Distributed by region

Further supports that even when split into buckets by region, more people still arrive than leave through Changi.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	170575.88	2668	204923.834	3967.341
	departure	169711.09	2668	202213.240	3914.864

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	arrival & departure	2668	.997	.000

Paired Samples Test

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	864.790	17031.437	329.730	218.238

Paired Samples Test

		Paired 95% Confidence			
		Interval of the			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	1511.342	2.623	2667	.009

```
GET DATA
  /TYPE=XLSX
  /FILE='F:\correlation\forspss.xlsx'
  /SHEET=name 'country'
  /CELLRANGE=FULL
  /READNAMES=ON
  /DATATYPEMIN PERCENTAGE 95.0
  /HIDDEN IGNORE=YES.
EXECUTE.
DATASET NAME DataSet3 WINDOW=FRONT.
USE ALL.
COMPUTE filter_$=(country='Malaysia').
VARIABLE LABELS filter_$ "country='Malaysia' (FILTER)".
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
T-TEST PAIRS=arrival WITH departure (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
 T-TEST PAIRS=arrival WITH departure (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
```

T-Test

Output Created	11-APR-2017 16:31:50	
Comments		
Input	Active Dataset	DataSet2
	Filter	<none></none>
	Weight	<none></none>
	Split File	region
	N of Rows in Working Data File	5392
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST PAIRS=arrival WITH departure (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

[DataSet2] - Analysis of differences in arrival and departure by Region. Su mmary: These countries have UNEVENarrival:departure ratios - North America: More departures - Oceania: More departures - Other regions: Near significance. (0.79) - South Asia: More arrivals - South East Asia: More arrivals

region = Europe

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	118167.13	374	44677.268	2310.207
	departure	117831.08	374	43302.831	2239.136

a. region = Europe

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	374	.906	.000

a. region = Europe

Paired Samples Test^a

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	336.048	19072.437	986.212	-1603.185

Paired Samples Test^a

		Paired			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	2275.281	.341	373	.733

a. region = Europe

region = Middle East

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	21753.16	374	18290.448	945.777
	departure	21538.56	374	18218.084	942.035

a. region = Middle East

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	374	.976	.000

a. region = Middle East

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	214.594	4021.330	207.938	-194.284

Paired Samples Test^a

		Paired			
		95% Confidence Interval of the			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	623.471	1.032	373	.303

a. region = Middle East

region = North America

Significant - More people depart to north america than enter

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	21754.15	374	8324.294	430.439
	departure	22465.79	374	8147.746	421.310

a. region = North America

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	374	.909	.000

a. region = North America

Paired Samples Test^a

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	-711.636	3522.908	182.165	-1069.836

		Paired			
		95% Confidence Interval of the			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	-353.437	-3.907	373	.000

a. region = North America

region = North East Asia

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	302010.24	374	160595.423	8304.192
	departure	302341.28	374	159784.173	8262.243

a. region = North East Asia

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	374	.990	.000

a. region = North East Asia

Paired Samples Test^a

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	-331.037	22928.573	1185.608	-2662.352

Paired Samples Test^a

		Paired			
		95% Confidence Interval of the			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	2000.277	279	373	.780

a. region = North East Asia

more people depart to Oceania than enter from there

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	138950.81	374	65439.704	3383.807
	departure	144787.42	374	66834.069	3455.907

a. region = Oceania

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	374	.937	.000

a. region = Oceania

Paired Samples Test^a

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	-5836.610	23431.660	1211.622	-8219.076

Paired Samples Test^a

		Paired			
		95% Confidence Interval of the			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	-3454.143	-4.817	373	.000

a. region = Oceania

region = Other Regions

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	7809.48	50	1227.086	173.536
	departure	7973.98	50	1162.241	164.366

a. region = Other Regions

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	50	.854	.000

a. region = Other Regions

Paired Samples Test^a

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	-164.500	649.058	91.791	-348.960

Paired Samples Test^a



a. region = Other Regions

region = South Asia

more people arrive in FROM south asia than depart to south asia

Paired Samples Statistics^a

			Mean	N	Std. Deviation	Std. Error Mean
Pair	r 1	arrival	93132.69	374	59233.950	3062.915
		departure	90700.44	374	58298.537	3014.546

a. region = South Asia

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	374	.985	.000

a. region = South Asia

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	2432.251	10083.530	521.407	1406.986

Paired Samples Test^a

		Paired			
		95% Confidence Interval of the			
		Upper	t	df	Sig. (2-tailed)
Pair 1	arrival - departure	3457.517	4.665	373	.000

a. region = South Asia

region = South East Asia

More people arrive from within SEA than depart out to SEA

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	520023.23	374	258419.072	13362.532
	departure	509935.71	374	257212.730	13300.154

a. region = South East Asia

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & departure	374	.997	.000

a. region = South East Asia

Paired Samples Test^a

Paired Differences

					95% Confidence
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	arrival - departure	10087.527	19174.250	991.477	8137.942

	Paired			
	95% Confidence Interval of the			
	Upper	t	df	Sig. (2-tailed)
Pair 1 arrival - departure	12037.112	10.174	373	.000

a. region = South East Asia

Notes

Output Created		11-APR-2017 16:36:00
Comments		
Input	Active Dataset	DataSet2
	Filter	<none></none>
	Weight	<none></none>
	Split File	month, region
	N of Rows in Working Data File	5392
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST PAIRS=arrival WITH departure (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:02.50
	Elapsed Time	00:00:02.50

DATASET ACTIVATE DataSet1.

DATASET CLOSE DataSet2.

COMPUTE Total=departure + arrival.

EXECUTE.

SORT CASES BY month.

SPLIT FILE SEPARATE BY month.

T-TEST GROUPS=month(12 2)

/MISSING=ANALYSIS

/VARIABLES=total

/CRITERIA=CI(.95).

T-Test

Notes

Output Created	Output Created		
Comments	Comments		
Input	Active Dataset	DataSet1	
	Filter	<none></none>	
	Weight	<none></none>	
	Split File	month	
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.	
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.	
Syntax		T-TEST GROUPS=month (12 2) /MISSING=ANALYSIS /VARIABLES=total /CRITERIA=CI(.95).	
Resources	Processor Time	00:00:00.00	
	Elapsed Time	00:00:00.00	

Warnings

Independent samples tests are not performed for month because this variable is specified both as a grouping variable and as a split variable.

Execution of this command stops.

SPLIT FILE OFF.
T-TEST GROUPS=month(12 2)
/MISSING=ANALYSIS
/VARIABLES=total
/CRITERIA=CI(.95).

Output Created	Output Created			
Comments				
Input	Active Dataset	DataSet1		
	Filter	<none></none>		
	Weight	<none></none>		
	Split File	<none></none>		
	N of Rows in Working Data File	674		
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.		
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.		
Syntax		T-TEST GROUPS=month (12 2) /MISSING=ANALYSIS /VARIABLES=total /CRITERIA=CI(.95).		
Resources	Processor Time	00:00:00.02		
	Elapsed Time	00:00:00.02		

Output Created	Output Created		
Comments			
Input	Active Dataset	DataSet1	
	Filter	<none></none>	
	Weight	<none></none>	
	Split File	<none></none>	
	N of Rows in Working Data File	674	
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.	
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.	
Syntax		T-TEST GROUPS=month (12 6) /MISSING=ANALYSIS /VARIABLES=total /CRITERIA=CI(.95).	
Resources	Processor Time	00:00:00.00	
	Elapsed Time	00:00:00.00	

DESCRIPTIVES VARIABLES-departure arrival total /STATISTICS-MEAN STDDEV VARIANCE MIN MAX SEMEAN KURTOSIS SKEWNESS.

Descriptives - Checking data for uneven distribution

Huge skewness and kurtosis because non-linear functionHigh STDEV too because of non-linear scatter

Output Created		11-APR-2017 16:43:27
Comments		
Input	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	674
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=departure arrival total /STATISTICS=MEAN STDDEV VARIANCE MIN MAX SEMEAN KURTOSIS SKEWNESS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Descriptive Statistics

	N	Minimum	Maximum	Me	ean
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	674	10897	2786523	738214.98	26894.791
arrival	674	11027	2838114	741153.39	27108.990
total	674	22087.00	5624637.00	1479368.368	53994.31655
Valid N (listwise)	674				

Descriptive Statistics

	Std. Deviation	Variance	Skewness		Kur	Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	
departure	698229.387	4.875E+11	.885	.094	227	.188	
arrival	703790.322	4.953E+11	.895	.094	191	.188	
total	1401773.987	1.965E+12	.889	.094	212	.188	
Valid N (listwise)							

SORT CASES BY month.
SPLIT FILE SEPARATE BY month.

DESCRIPTIVES VARIABLES-departure arrival total

Descriptives - Dec has highest mean, Feb has lowest mean

Notes

Output Created		11-APR-2017 16:44:52
Comments		
Input	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	month
	N of Rows in Working Data File	674
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=departure arrival total /STATISTICS=MEAN STDDEV VARIANCE MIN MAX SEMEAN KURTOSIS SKEWNESS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.05

month = 1.00

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic Std. Error	
departure	57	11355	2556029	740040.56	94091.578
arrival	57	11814	2642038	752439.63	97890.355
total	57	23169.00	5198067.00	1492480.193	191949.9114
Valid N (listwise)	57				

	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	710375.838	5.046E+11	.913	.316	136	.623
arrival	739055.974	5.462E+11	.971	.316	018	.623
total	1449190.051	2.100E+12	.942	.316	079	.623
Valid N (listwise)						

a. month = 1.00

month = 2.00

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic Std. Error	
departure	57	11060	2293676	690116.89	87549.001
arrival	57	11027	2348046	692798.61	88225.127
total	57	22087.00	4629840.00	1382915.509	175755.5231
Valid N (listwise)	57				

Descriptive Statistics^a

	Std. Deviation	Variance	Skewness		Kur	tosis
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	660980.464	4.369E+11	.915	.316	114	.623
arrival	666085.098	4.437E+11	.914	.316	108	.623
total	1326925.100	1.761E+12	.914	.316	114	.623
Valid N (listwise)						

a. month = 2.00

month = 3.00

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	12884	2422486	727428.77	93291.209
arrival	56	12703	2437156	722892.61	93228.782
total	56	25587.00	4859642.00	1450321.375	186517.7387
Valid N (listwise)	56				

	Std. Deviation	Variance	Skewness		Kur	Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	
departure	698127.484	4.874E+11	.894	.319	193	.628	
arrival	697660.321	4.867E+11	.905	.319	161	.628	
total	1395770.950	1.948E+12	.900	.319	177	.628	
Valid N (listwise)							

a. month = 3.00

month = 4.00

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic Std. Error	
departure	56	13162	2366216	694897.80	89412.045
arrival	56	13159	2384191	695965.57	90369.531
total	56	26321.00	4750407.00	1390863.375	179775.8152
Valid N (listwise)	56				

Descriptive Statistics^a

	Std. Deviation	Variance	Skewness		Kur	tosis
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	669098.478	4.477E+11	.938	.319	116	.628
arrival	676263.643	4.573E+11	.957	.319	084	.628
total	1345319.014	1.810E+12	.948	.319	100	.628
Valid N (listwise)						

a. month = 4.00

month = 5.00

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	11895	2377533	703430.41	91115.195
arrival	56	12221	2366789	686047.80	89027.081
total	56	24116.00	4744322.00	1389478.214	180132.9446
Valid N (listwise)	56				

	Std. Deviation	Variance	Skewness		Kur	Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	
departure	681843.686	4.649E+11	.954	.319	108	.628	
arrival	666217.667	4.438E+11	.967	.319	042	.628	
total	1347991.526	1.817E+12	.960	.319	076	.628	
Valid N (listwise)							

a. month = 5.00

month = 6.00

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	10897	2371241	733726.61	94211.952
arrival	56	11532	2425547	760689.43	97054.522
total	56	22429.00	4796788.00	1494416.036	191252.5169
Valid N (listwise)	56				

Descriptive Statistics^a

	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	705017.693	4.970E+11	.907	.319	184	.628
arrival	726289.541	5.275E+11	.870	.319	276	.628
total	1431202.785	2.048E+12	.888	.319	232	.628
Valid N (listwise)						

a. month = 6.00

month = 7.00

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	12350	2521603	753028.71	95614.323
arrival	56	13655	2609912	767654.39	98166.556
total	56	26005.00	5131515.00	1520683.107	193777.1108
Valid N (listwise)	56				

	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	715512.078	5.120E+11	.883	.319	210	.628
arrival	734611.240	5.397E+11	.911	.319	136	.628
total	1450095.116	2.103E+12	.897	.319	173	.628
Valid N (listwise)						

a. month = 7.00

month = 8.00

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	12959	2447055	767342.93	94958.701
arrival	56	13501	2453913	763281.68	94757.177
total	56	26460.00	4900968.00	1530624.607	189714.2487
Valid N (listwise)	56				

Descriptive Statistics^a

	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	710605.849	5.050E+11	.865	.319	174	.628
arrival	709097.780	5.028E+11	.877	.319	139	.628
total	1419691.440	2.016E+12	.871	.319	157	.628
Valid N (listwise)						

a. month = 8.00

month = 9.00

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	13202	2279281	711192.70	88491.489
arrival	56	12974	2258798	709710.50	88853.054
total	56	26176.00	4538079.00	1420903.196	177341.0986
Valid N (listwise)	56				

	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	662209.669	4.385E+11	.840	.319	301	.628
arrival	664915.370	4.421E+11	.836	.319	332	.628
total	1327099.263	1.761E+12	.838	.319	317	.628
Valid N (listwise)						

a. month = 9.00

month = 10.00

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	13218	2368664	737229.20	93368.563
arrival	56	13619	2347744	734189.63	92655.770
total	56	26837.00	4716408.00	1471418.821	186019.9255
Valid N (listwise)	56				

Descriptive Statistics^a

	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	698706.347	4.882E+11	.869	.319	304	.628
arrival	693372.289	4.808E+11	.865	.319	302	.628
total	1392045.656	1.938E+12	.867	.319	303	.628
Valid N (listwise)						

a. month = 10.00

month = 11.00

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	13314	2409220	766755.82	95834.518
arrival	56	13505	2333956	740089.41	92383.010
total	56	26819.00	4743176.00	1506845.232	188213.6731
Valid N (listwise)	56				

	Std. Deviation	Variance	/ariance Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	717159.866	5.143E+11	.828	.319	390	.628
arrival	691331.147	4.779E+11	.824	.319	395	.628
total	1408462.160	1.984E+12	.826	.319	393	.628
Valid N (listwise)						

a. month = 11.00

month = 12.00

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	
	Statistic	Statistic	Statistic	Statistic	Std. Error
departure	56	13463	2786523	834215.68	106416.057
arrival	56	14951	2838114	868743.30	109141.133
total	56	28414.00	5624637.00	1702958.982	215544.9997
Valid N (listwise)	56				

Descriptive Statistics^a

	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
departure	796344.854	6.342E+11	.901	.319	197	.628
arrival	816737.449	6.671E+11	.855	.319	290	.628
total	1612991.081	2.602E+12	.878	.319	244	.628
Valid N (listwise)						

a. month = 12.00

GET DATA

/TYPE=XLSX

/FILE='F:\correlation\forspss.xlsx'

/SHEET=name 'region'

/CELLRANGE=FULL

/READNAMES=ON

/DATATYPEMIN PERCENTAGE=95.0

/HIDDEN IGNORE=YES.

EXECUTE.

DATASET NAME DataSet4 WINDOW=FRONT.

```
SORT CASES BY numregion.
SPLIT FILE SEPARATE BY numregion.
DATASET ACTIVATE DataSet1.
DATASET CLOSE DataSet4.
GET DATA
  /TYPE=XLSX
  /FILE='F:\correlation\forspss.xlsx'
  /SHEET=name 'country'
  /CELLRANGE=FULL
  /READNAMES=ON
  /DATATYPEMIN PERCENTAGE 95.0
  /HIDDEN IGNORE=YES.
EXECUTE.
DATASET NAME DataSet5 WINDOW=FRONT.
SORT CASES BY numregion.
SPLIT FILE SEPARATE BY numregion.
T-TEST PAIRS=arrival WITH value (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
```

T-Test - By Country

Output Created	11-APR-2017 16:56:55	
Comments		
Input	Active Dataset	DataSet5
	Filter	<none></none>
	Weight	<none></none>
	Split File	numregion
	N of Rows in Working Data File	7414
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST PAIRS=arrival WITH value (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

[DataSet5] - Difference in ratio of departure:arrival ratio

- Malaysia (A)- Indonesia (D)- Thailand (A)- Philippines (A)- UK (A)- France (D) (~0.56)

numregion = 1 - Malaysia

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	105290.62	614	65460.206	2641.759
	value	101740.07	614	64701.644	2611.146

a. numregion = 1

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & value	614	.995	.000

		Paired Differences				
						e Interval of the rence
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper
Pair 1	arrival - value	3550.549	6396.611	258.146	3043.591	4057.507

Paired Samples Test^a

		t	df	Sig. (2-tailed)
Pair 1	arrival - value	13.754	613	.000

a. numregion = 1

numregion = 2 - Indonesia

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	94444.57	674	89936.083	3464.208
	value	95767.93	674	90494.756	3485.728

a. numregion = 2

Paired Samples Correlations^a

	N	Correlation	Sig.
Pair 1 arrival	& value 674	.994	.000

a. numregion = 2

Paired Samples Test^a

		Paired Differences				
						e Interval of the rence
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper
Pair 1	arrival - value	-1323.358	10198.444	392.829	-2094.676	-552.039

		t	df	Sig. (2-tailed)
Pair 1	arrival - value	-3.369	673	.001

a. numregion = 2

numregion = 3 - Thailand

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	74877.05	674	69759.874	2687.050
	value	71948.37	674	66139.153	2547.585

a. numregion = 3

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & value	674	.997	.000

a. numregion = 3

Paired Samples Test^a

		Paired Differences						
			95% Confidence Inter Difference					
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper		
Pair 1	arrival - value	2928.677	6235.132	240.168	2457.107	3400.246		

Paired Samples Test^a

			df	Cia (2 tailad)
		ι	df	Sig. (2-tailed)
Pair 1	arrival - value	12.194	673	.000

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	27224.01	674	33400.969	1286.557
	value	26116.29	674	32643.388	1257.376

a. numregion = 4

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & value	674	.983	.000

a. numregion = 4

Paired Samples Test^a

		Paired Differences						
			95% Confidence Interval of t Difference					
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper		
Pair 1	arrival - value	1107.720	6080.524	234.213	647.843	1567.596		

Paired Samples Test^a

		t	df	Sig. (2-tailed)
Pair 1	arrival - value	4.730	673	.000

a. numregion = 4

numregion = 5 - Vietnam

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	39432.93	278	29471.143	1767.562
	value	39255.14	278	29278.231	1755.992

Paired Samples Correlations^a

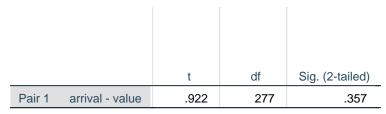
		N	Correlation	Sig.
Pair 1	arrival & value	278	.994	.000

a. numregion = 5

Paired Samples Test^a

			Paired Differences					
			95% Confidence Interval of Difference					
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper		
Pair 1	arrival - value	177.788	3215.221	192.836	-201.823	557.398		

Paired Samples Test^a



a. numregion = 5

numregion = 6 - China

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	82057.27	361	73395.766	3862.935
	value	81606.11	361	73806.885	3884.573

a. numregion = 6

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & value	361	.991	.000

		Paired Differences					
				95% Confidence Interval of the Difference			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	
Pair 1	arrival - value	451.166	9874.263	519.698	-570.859	1473.192	

Paired Samples Test^a

		t	df	Sig. (2-tailed)
Pair 1	arrival - value	.868	360	.386

a. numregion = 6

numregion = 7 - HK

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	52406.09	674	46712.313	1799.291
	value	52036.29	674	46348.104	1785.262

a. numregion = 7

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & value	674	.992	.000

a. numregion = 7

Paired Samples Test^a

		Paired Differences				
					95% Confidence Interval of the Difference	
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper
Pair 1	arrival - value	369.800	5853.677	225.475	-72.920	812.519

		t	df	Sig. (2-tailed)
Pair 1	arrival - value	1.640	673	.101

a. numregion = 7

numregion = 8 - Japan

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	45061.78	674	38696.198	1490.522
	value	45320.67	674	38940.146	1499.918

a. numregion = 8

Paired Samples Correlations^a

		N	Correlation	Sig.
Pair 1	arrival & value	674	.995	.000

a. numregion = 8

Paired Samples Test^a

		Paired Differences					
					95% Confidence Interval of the Difference		
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	
Pair 1	arrival - value	-258.892	3981.800	153.373	-560.039	42.256	

Paired Samples Test^a

		t	df	Sig. (2-tailed)
Pair 1	arrival - value	-1.688	673	.092

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	26558.22	674	22427.024	863.857
	value	25512.69	674	21639.928	833.539

a. numregion = 9

Paired Samples Correlations^a

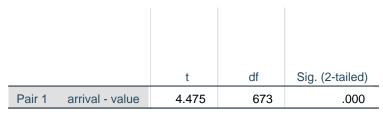
		N	Correlation	Sig.
Pair 1	arrival & value	674	.963	.000

a. numregion = 9

Paired Samples Test^a

		Paired Differences				
						e Interval of the rence
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper
Pair 1	arrival - value	1045.528	6065.086	233.618	586.820	1504.237

Paired Samples Test^a



a. numregion = 9

numregion = 10 - France

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	11886.55	374	6537.440	338.043
	value	12088.33	374	6487.242	335.447

Paired Samples Correlations^a

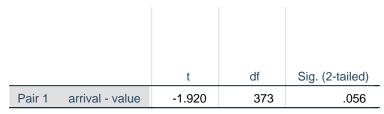
		N	Correlation	Sig.
Pair 1	arrival & value	374	.951	.000

a. numregion = 10

Paired Samples Test^a

		Paired Differences				
						e Interval of the rence
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper
Pair 1	arrival - value	-201.775	2031.861	105.065	-408.369	4.819

Paired Samples Test^a



a. numregion = 10

numregion = 11 - Germany

Paired Samples Statistics^a

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	arrival	22470.40	374	10523.349	544.149
	value	22356.50	374	10203.330	527.602

a. numregion = 11

Paired Samples Correlations^a

	N	Correlation	Sig.
Pair 1 arrival & value	374	.939	.000

		Paired Differences					
				95% Confidence Interval of the Difference			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	
Pair 1	arrival - value	113.898	3634.376	187.929	-255.635	483.432	

Paired Samples Test^a

		t	df	Sig. (2-tailed)
Pair 1	arrival - value	.606	373	.545

a. numregion = 11