# A boring (academic) title or a clever title? A secondary title

YOUR NAME HERE Washington State University

In this article we compare the *empirical characteristic function* (Tukey 1977; Becker et al. 1988) to a *moment-generating-functional form* to compute the proportion of hypotheses m that are rejected under the null hypothesis.

Here is a second paragraph of the abstract (if necessary), and with the pipe notation it doesn't break. Notice it still needs to be indented.

Generally, we write this abstract last. Often it is called the executive summary. It should succinctly summarize the entire document. You can include references such as this one to the Appendices section 6 if necessary.

**Keywords:** multiple comparisons to control; multivariate chi-square distribution; nonlinear growth curves; Richard's curve; simulated critical points

November 08, 2020

#### 1 Introduction

Write something here.

[ONE GRAPHIC]

[TWO GRAPHICS AS ONE]

Write something here.

- 2 Research Question: What is my primary question
- 2.1 What is my secondary question
- 2.2 What is my other secondary question
- 3 Data Description

Very brief introduction to the data, how it was collected, and so on. Remember that everything is covered (who, what, when, where, why, how, so what, and so on). Reference the section in the Appendix with greater detail about the data provenance. This section should be about two paragraphs, and the Appendix should have more information.

- 3.1 Summary of Sample
- 3.2 Summary Statistics of Data
- 4 Key Findings
- 5 Conclusion

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Here is some more text.

Below are some example code that may benefit you in preparing your document.

$$Y_{jt} = \alpha + \beta X_{jt} + v_j + \varepsilon_{jt}, \tag{1}$$

where  $\alpha$  is the grand mean,  $v_j$  is the fixed-time country mean,  $X_{jt}$  (country j at time t) is the matrix of country-level observations for the vector of aforementioned parameters  $\boldsymbol{\beta}$ , and  $\varepsilon_{jt}$  represents the residual idiosyncratic disturbance. Our panel data set consists of repeated observations of countries over time. Therefore, we employ cross-section time-series models. This approach redefines Equation~1 by subtracting time-demeaned values. This within transformation subtracts constant country effects for the dependent variable  $\bar{Y}_j$ , the predictor variables  $\bar{X}_j$ , and the intercept  $\bar{v}_j$ :

$$(Y_{it} - \theta \bar{Y}_i) = (1 - \theta)\alpha + \beta (X_{it} - \bar{X}_i) + (v_{it} - \theta \bar{v}_i), \tag{2}$$

If  $\theta=0$ , the model reduces to a basic pooled ordinary-least-squares (OLS) model; if  $\theta=1$ , the model reduces to a fixed-effects model; otherwise the model represents a random-effects model. The pooled OLS estimation is biased if country effects exist (Hsiao 2003). The random-effects model may be susceptible to omitted-variable bias (Wooldridge 2006): bias because a predictor was excluded from the model specification. Conversely, the fixed-effects model is not susceptible to this bias as it captures unobserved intracountry variation around its average country-level "fixed effect." Panel-data analysis commonly has issues with heteroskedasticity, serial autocorrelation, and cross-sectional autocorrelation.

i = 1 and

i = 1

See Figure 1.

Necessary Conditions

Basic Human Development

Trade Fluidity

High-tech Exports

Human Capital

Capital

Physical Capital

Figure 1: Conceptual Model

**Internationalizing-Innovation Profile (IIP)** 

This is a footnote<sup>[1]</sup> that can be placed within a document.

Refer to the Appendices in section~6 where I am going to cite John (Tukey 1962, pp. 2-3). Here is a quote by Tukey (1962, pp. 2-3):

For a long time I have thought I was a statistician, interested in inferences from the particular to the general. But as I have watched mathematical statistics evolve, I have had to cause to wonder and to doubt. [...] All in all, I have come to feel that my central interest is in *data analysis*, which I take to include among other things: procedures for analyzing data, techniques for interpreting the results of such procedures, ways of planning the gathering of data to make its analysis easier, more precise or more accurate, and all the machinery and results of (mathematical) statistics which apply to analyzing the data.

Large parts of data analysis are inferential in the sample-to-population sense, but these are only parts, not the whole. Large parts of data analysis are incisive, laying bare indications which we could not perceive by simple and direct examination of the raw data, but these too are only parts, not the whole. Some parts of data analysis, as the term is her stretch beyond its philology, are allocation, in the sense that they guide us in the distribution of effort and other valuable considerations in observation, experimentation, or analysis. Data analysis is a larger and more varied field than inference, or incisive procedures, or allocation.

Statistics has contributed much to data analysis. In the future it can, and in my view should, contribute more. For such contributions to exist, and be valuable, it is not necessary that they be direct. They need not provide new techniques, or better tables for old techniques, in order to influence the practice of data analysis.

Table 1: Descriptive Statistics and Correlation Analysis

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4.	WTO	.82	.39	6	*	.18*	.14**	П					
rċ.	Team: Sole Inventor	.37	.16		05	.04	22**	30***					
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.01	10. Unique Technologies (BREADTH)	1.64	.19	6	00.	03	05†	20***	*20***	* .10**	05	00.	.14**
+ + + + + + + + + + + + + + + + + + +	$\uparrow_{p < .10}$ * $p < .05$ ** $p < .01$ *** $p < .01$ *** $p < .01$ Notes: Pearson pairwise correlations are reported. Correlations and Summary Statistics fail to account for country-level and time-varying effects. We	ted. Corre	elatic	ms and Summa	ury Stat	istics fai	l to acco	unt for	: country	/-level ar	nd time-	varyin	g effects. We

- 6 APPENDICES
- 6.1 Data Provenance

### 6.1.1 Data Collection Handout

Figure 2: Handout Page 1

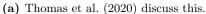
Nam		
vvna	nt is your domina	ant nand?
Wha	at is your domina	ant eye?
Wha	at color are your	eyes?
Wha	at side is your do	ominant swing of a bat?
How	old are you?	
Ву и	vhat gender do y	you currently identify?
Wha	at is your ethnici	ty?
		Measurement Guide
	height head.height head.circumference hand.length hand.width hand.elbow elbow.armpit arm.reach arm.span foot.length floor.kneepit floor.navel floor.armpit	Standing height of the individual, preferably with NO SHOES on Height from the top of the head to below the chin Distance around head, measured right above ears/eyes Length of hand from middle finger to wrist Width of hand from pinkie finger to thumb fully stretched Length from middle finger to elbow Length from elbow to arm pit Standing flatfooted, length from floor to the extended arm Length from each middle finger, fully extended Length of foot from largest toe to back of heel Distance from floor to the knee pit Distance from the floor to the hip Distance from the floor to the navel Distance from the floor to the arm pit
Note	es:	(To be completed later)

Jessica Smith, WSU ID 11602418, jessica.legarza@wsu.edu

Figure 3: Handout Page 2

		le One:	imperiai	Metric
Body Part	Mo	easurement		
height				
head.height				
head.circumference				
floor.navel				
arm.span				
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albaarmanit				
elbow.armpit				
arm.reach				
foot.length				
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What is the overa	ll auglity of the mass	uromonto	2 (1 10)	
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(b) Schnitt realer Sensor (Thomas et al. 2020)

Figure 4: Der Sensor in Theorie und Verwirklichung... caption at bottom instead? I can write a really long caption if I want.

This is using "crop" to include one image and trim it to appear as two. Likely you will have two separate images if you use this option, so you would set the trim parameters all equal to 0.

This figure has subfigures which each also have a possible caption.

#### 6.2 Preparing the Report Workspace as a subsection

6.2.1 Preparing the Report Workspace as a subsubsection

Preparing the Report Workspace as a paragraph

Preparing the Report Workspace as a subparagrah Below is the necessary functions and libraries required to run the code referenced in this document.

```
library(devtools);
                         # required for source_url
## Warning: package 'devtools' was built under R version 4.0.3
path.humanVerseWSU = "https://raw.githubusercontent.com/MonteShaffer/humanVerseWSU/"
source_url( paste0(path.humanVerseWSU, "master/misc/functions-project-measure.R") );
## Warning: package 'survival' was built under R version 4.0.3
  Below is the code to load the data and prepare it for analysis.
path.project = "C:\\Users\\jsmit\\Desktop\\WSU\\DataAnalytics\\STAT419\\WSU_STATS419_FALL2020\\project-
path.to.secret = "C:\\Users\\jsmit\\Desktop\\WSU\\DataAnalytics\\STAT419\\_SECRET_\\";
measure = utils::read.csv( paste0(path.to.secret, "measure-students.txt"), header=TRUE, quote="", sep="
#path.github = "https://raw.githubusercontent.com/this-IS-YOUR-PATH-TO-GITHUB/";
#source_url( pasteO(path.github, "master/functions/functions-project-measure.R") );
# this is your function
# put in the same "units"
# merge left/right
# build proportion data
# and so on ...
# measure.df = prepareMeasureData(measure);
```

Below is the code to generate the summary statistics and save them as a table that you see in Section ??.

#### **ENDNOTES**

[1] This is a footnote that can be really long.

You can have multiple paragraphs in the footnote. You can have <u>underline</u> or **bold** or *italics*. You can even have a math equation inline.

In this section, we review the regression results to summarize our findings. First, we examine each model for significance, and conclude the hypothesized models fit well with the data. Second, we conclude that the fixed country effects represent consistent and unbiased parameter estimates. Third, with the use of the Driscoll and Kraay (1998) robust standard errors, we adjust any variance bias to ascertain the significance of these consistent estimates. Therefore, we are able to make inferences about the hypotheses using our model estimates. For ease of interpretation across these 12 models, we introduce  $\hat{\beta}_1$  as notation to refer to parameter estimate  $\hat{\beta}_1$  (HDI) for the Total Sample and (M1) Model 1: Main Effects. We proceed by reporting findings for the total sample.

The footnotes are automatically converted to "endnotes" and will be included at the end of the document. It will finish when you have that outer brace like this.

#### REFERENCES

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