

Paper Contents					
Category	Excellent (Exceeds Standards)	Good (Occasionally Exceeds)	Acceptable (Meets Standards)	Unacceptable (Below Standards)	Score
Introduction (10 points)	*Provides a strong introduction of the topic and research question. *Discusses the motivation for this research. *Motivation is strong and relevant. *Clearly presents/discusses the research objective(s). *Concise discusses the key findings of the regression analysis – how the regression results address the research objective(s).	*Provides an introduction of the topic and research question. *Discusses the motivation for this research. *Motivation is sound. *Clearly presents/discusses the research objective(s). *Concise discusses the key findings of the regression analysis. (8-9pts)	*Provides an introduction of the topic and research question. *Discusses the motivation for this research. *Motivation is sound. *Research objective is somewhat ambiguous. *Discusses the regression results or key findings. (6-7 pts)	*Provides an introduction of the topic. *Does not discuss motivation for this research or motivation is irrelevant. *No research objective or research objective is very vague. *No discussion on the regression results. (0-5 pts)	
Literature Review (15 points)	*Reviews and synthesizes relevant peer-reviewed studies. *Discussion is well organized and systematic. *Enhances reader's understanding of the subject. *Brings out the essence of the journal articles reviewed. *All supporting materials are clearly related to the topic and key question. *Performs in-depth, evidence-supported discussion on the topic. *Strong transitions linking paragraphs and sections. *Demonstrates a good understanding of the subject matter.	*Reviews relevant literature or studies on the subject. *Some supporting materials are clearly related to the topic and key question. *Performs evidence-supported discussion on the topic. *Some transitions between paragraphs or sections are not strong. (12-14 pts)	*Summarizes past studies on the subject. *Papers are summarized individually and not related to each other in the review (this is not good). *Some supporting materials are related to the topic and key question. *Performs discussion on the topic. *Paragraphs or sections are not consistently well linked. (9 -11 pts)	*Summarizes some documents tangentially related to the subject. *Papers are summarized individually and not related to each other (this is not good). *False and inaccurate references and citations: citing studies that did not make the claims discussed in the paper. *Materials are not related to the topic and key question. *Lacks relevant discussion on the topic. *Many transitions are unclear or nonexistent. (0-8 pts)	
Regression Model(s) and Estimation (20 points) ***Must use an estimation method covered in this course.	*Correctly presents and specifies the regression model in equation form – no error. *Equations (if more than 1) are numbered accordingly. *Uses subscripts and superscripts appropriately and consistently. *Uses Greek letters for regression parameters correctly and consistently. *Regression model is clearly related to the research objective(s). *Regression results would be highly relevant for the research question/ would address the research objective presented in the introduction. *Correctly discusses the regression equation, the variables, the coefficients/parameters, and the regression error term. *Variables are well defined. *Choice of regressors are justified. *Considers more than 1 regression models. *Correctly discusses the relationship between the left-hand-side variable and the regressors. *Discusses and justifies the estimation method. *Uses OLS, FGLS, or 2SLS correctly. *Estimation method is appropriate for the data.	*Correctly presents and specifies the regression model in equation form -- has 1 or 2 minor editorial errors (or typos). *Equations (if > 1) are numbered accordingly. *Uses subscripts and superscripts appropriately and consistently. *Regression model is clearly related to the research objective(s). *Regression results would be relevant for the research question presented in the introduction. *Discusses the regression equation, the variables, the coefficients (parameters), and the regression error term. *Correctly discusses the relationship between the left-hand-side variable and the regressors. *Discusses and justifies the estimation method. *Uses OLS, FGLS, or 2SLS correctly. *Estimation method is appropriate for the data. (17-19 pts)	*Correctly presents and specifies the regression model in equation form -- has 2 or 3 minor editorial errors (or typos). *Equations (if > 1) are numbered accordingly. *Uses supercripts and subscripts with occasional inconsistencies. *Regression model is related to the research objective(s). *Regression results may/may not answer the research question/address the research objective presented in the introduction. *Discusses the regression equation, the variables, the coefficients (parameters), and the regression error term, but with errors. *Correctly discusses the relationship between the left-hand-side variable and the regressors. *Discusses and justifies the estimation method. *Uses OLS, FGLS, or 2SLS. (14-16 pts)	*No regression model, or presents a regression model in equation form and has more than 3 errors (or typos). *Equations (if > 1) are not numbered. *Regression model is vaguely related or clearly unrelated to the research objective(s). *Regression results may not answer the research question/address the research objective presented in the introduction. *Does not discuss the regression equation, the variables, the coefficients (parameters), and the regression error term. *Does not discuss the relationship between the left-hand-side variable and the regressors. *Does not discuss or justify the estimation method. (0-13 pts) **Does not use OLS, FGLS, 2SLS or other estimation methods covered in this class. (0 pt)	

	Excellent (Exceeds Standards)	Good (Occasionally Exceeds)	Acceptable (Meets Standards)	Unacceptable (Below Standards)	Score
Assumptions and Testings (15 points)	<p>*Discusses the key assumptions of the model (MLR/Gauss Markov or TS assumptions).</p> <p>*Discusses how any of the key assumptions may be violated and consequences of such violation(s), and uses the appropriate test(s), and discusses how the issues are addressed.</p> <p>*Depending on the type of data used, the paper should perform a test on homoskedasticity (for cross-sectional or panel data) or a test on unit root (for time series data). *Presents the test results, interprets the results correctly, and uses corrective measures to address the violation(s) or to mitigate the problem(s) associated with homoskedasticity, non-stationarity, endogeneity, etc. If model suffers from not satisfying the zero conditional mean assumption, the paper must address how this problem is addressed with IV, discuss the appropriate test and how the IV's satisfy the two key IV criteria. *If using IV, Stage 1 results are presented and discussed.</p>	<p>*Discusses the key assumptions about the model (MLR/Gauss Markov or TS assumptions). *Discusses how any of the key assumptions may be violated and the consequences of such violation(s), and but does not use the appropriate test(s) for the type(s) of violation(s) discussed, and uses corrective measure(s) such as robust standard errors, first-differencing, IV, etc. without justification. *If using IV, Stage 1 results are presented. (12-14 pts)</p>	<p>*Discusses the key assumptions about the model, (MLR/Gauss Markov or TS assumptions).</p> <p>*Discusses how any of the key assumptions may be violated, uses corrective measure(s) such as robust standard errors, first-differencing, IV, etc., but does not use or perform any testing and does not justify use of corrective measures. *Conducts a test not meant for the assumption violation. (9-11 pts)</p>	<p>*Does not discuss the key assumptions about the model. *Does not perform any testing. *Does not address any potential violation(s). *Conducts a test not meant for the assumption violation. (0-8 pts)</p>	
Sample & Data (10 points)	<p>*Data are appropriate for the estimation method.</p> <p>*Uses data from official, credible source(s). *Data sources are clearly cited in the text and listed in the reference list at the end of the paper. *A large enough sample size for the model and research objective(s) and topic. * Clearly discusses data sources associated with each variable.</p> <p>*Discusses the units of measurement for all variables used. *Provides a variable descriptions table (see Table 19.1). *Presents the descriptive statistics in a table (example: Table 19.2).</p> <p>*Discusses the descriptive statistics. *Values of the descriptive statistics are not logged. *Interpret the mean values correctly. *For time series data, presents the line graphs of the variables in addition to the descriptive statistics table. Discusses the line graphs.</p>	<p>*Data are appropriate for the estimation method.</p> <p>*Uses data from official, credible source(s). *Data sources are clearly cited in the text and listed in the reference list at the end of the paper. *A large enough sample size. * Clearly discusses data sources associated with some of the variables</p> <p>*Discusses the units of measurement for some of the variables used. *Provides a variable descriptions table (see Table 19.1). *Presents the descriptive statistics in a table (example: Table 19.2).</p> <p>*Discusses the descriptive statistics. *Values of the descriptive statistics are not logged. *Interpret the mean values with some minor errors. *For time series data, presents the line graphs of the variables in addition to the descriptive statistics table. Discuss the line graphs. (8-9 pts)</p>	<p>*Data are from official, credible source(s). *Data sources are clearly cited in the text and listed in the reference list at the end of the paper. *A large enough sample size. * Discusses data sources associated with some of the variables *Discusses the units of measurement for some of the variables used. *Presents the descriptive statistics in a table (example: Table 19.2). *Discusses the descriptive statistics. *Values of the descriptive statistics are not logged. *Does not interpret the mean values. *For time series data, missing line graphs. (6-7 pts)</p>	<p>*Data are not suitable for the estimation method.</p> <p>*Data sources are ambiguous or unreliable. *Data sources are not cited in the text and not listed in the reference list at the end of the paper. *A small or inadequate sample size. *Does not discuss data sources associated with each of the variables</p> <p>*Does not discuss the units of measurement for the variables used. *Does not present the descriptive statistics in a table. *Does not discuss the descriptive statistics. *Values of some of the descriptive statistics are logged. *Does not interpret the mean values. *For time series data, missing line graphs. (0-5 pts)</p>	

	Excellent (Exceeds Standards)	Good (Occasionally Exceeds)	Acceptable (Meets Standards)	Unacceptable (Below Standards)	Score
Results, Interpretations & Overall Analysis (20 points)	<p>*Presents regression results in a table or tables (See Chapter 19). *If more than one table, each table is numbered accordingly. *Each results table has key components (including left-hand-side variable(s), regressors, coefficient estimates, std. errors or robust s.e., asterisks following the coefficients to indicate the levels of significance (at 1%, 5%, 10%) for the significant variables. *Correctly interprets all test results, including coefficient estimates, R2, adjusted R2, F statistic(s), t statistics, LM statistics (if applicable), forecast (time series model). *Conducts the appropriate statistical tests for the hypotheses in question. *Draws correct conclusions based on the test results. *Discusses the significance and implications of the findings. *All results make good, reasonable sense. *Relate or compare and contrast results to past studies, especially those discussed in the lit review. *Demonstrates a good understanding of the subject matter. *Correctly applies regression analysis to the research problem.</p>	<p>*Presents regression results in a table or tables (See Chapter 19). *If more than one table, each table is numbered accordingly. *Each results table has key components (including left-hand-side variable(s), regressors, coefficient estimates, std. errors or robust s.e., asterisks following the coefficients to indicate the levels of significance (at 1%, 5%, 10%) for the significant variables. *Correctly interprets all test results, including coefficient estimates, R2, adjusted R2, F statistic(s), t statistics, LM statistics (if applicable), forecast (time series model). *Conducts the appropriate statistical tests for the hypotheses in question. *Draws correct conclusions based on the test results. *Discusses the significance and implications of the findings. *Some of the results make good, reasonable sense. *Demonstrates a good understanding of the subject matter. *Correctly applies regression analysis to the research problem. (17-19 pts)</p>	<p>*Presents regression results in a table or tables (See Chapter 19). *If more than one table, each table is numbered accordingly. *Results table(s) has(have) key components (including left-hand-side variable(s), regressors, coefficient estimates, std. errors or robust s.e., asterisks following the coefficients to indicate the levels of significance (at 1%, 5%, 10%) for the significant variables. But some tables omit certain key components. *Interprets all test results, including coefficient estimates, R2, adjusted R2, F statistic(s), t statistics, LM statistics (if applicable), forecast (time series model). *Result interpretations contain minor errors. *Conducts the appropriate statistical tests for the hypotheses in question. *Draws correct conclusions based on the test results. *Discusses the significance and implications of the findings. *The results do not fully make sense but are acceptable if sound/plausible explanations are provided to address the shortcomings. *Demonstrates an understanding of the subject matter. *Correctly applies regression analysis to the research problem, but has some errors in interpreting the results. (13-16 pts)</p>	<p>*Presents raw regression output from software (copies and pastes regression outputs in software format). *Not all (or no) results are consistently presented in a table. *Results table omits certain key components. For examples, omitting one or more of the following: left-hand-side variable(s), regressors, coefficient estimates, std. errors or robust s.e., asterisks following the coefficients to indicate the levels of significance (at 1%, 5%, 10%) for the significant variables. *Interprets some of the test results, including coefficient estimates, R2, adjusted R2, F statistic(s), t statistics, LM statistics (if applicable), forecast (time series model). *Result interpretations contain major conceptual errors. *Does not provide result interpretation. *Does not conduct the appropriate statistical tests for the hypotheses in question. *Draws erroneous conclusions. *The results do not fully make sense, and no sound/plausible explanations are provided to address the problems. *Exhibits a lack of understanding on the subject matter and regression analysis. (0-12 pts)</p>	
Conclusion (10 points)	<p>*Correctly applies regression analysis to the research problem throughout the paper. *Correctly and consistently supports conclusions with statistical evidence. *Clearly relates the regression results to the research objective(s). *Discusses the importance of the findings. *Discusses the limitations of the regression analysis. *Provides discussion on welfare <u>and</u> policy implications (if applicable).</p>	<p>*Correctly and consistently supports conclusions with statistical evidence. *Adequately relates conclusion to past studies. *Clearly relates the regression results to the research objective(s). *Discusses the importance of the findings. *Provides discussion on welfare <u>or</u> policy implications (if applicable). (8-9 pts)</p>	<p>*Provides a synthesis and conclusion of the research. *Support conclusions with statistical evidence. *Clearly relates the regression results to the research objective(s). *Does not discuss the importance of the findings. (6-7 pts)</p>	<p>*Does not discuss regression results with respect to the research objective(s). *Does not discuss the importance of the findings. *Does not support conclusions with statistical evidence. (0-5 pts)</p>	
				Total Points before Deduction:	

Please Turn Over

Paper Format					
	Acceptable		Unacceptable		
	-0% from total points	-1% to -10% from total points	-11% to -20% from total points	-21% to -100% from total points	Deduction
Grammar & Mechanics	*The paper is free of any errors in grammar, spelling and punctuation.	*The paper has rare errors in grammar, spelling and punctuation.	*The paper has few grammatical, spelling or punctuation errors that interfere with reading the report.	*The paper has numerous grammatical, spelling and punctuation errors that substantially interfere with reading the report.	
Overall Organization & Communication	*Scholarly style presentation. *Writing is flowing and easy to follow. *Times New Romans, 12-point font, 1-inch margin on each side. *8-10 pages in long in text (excluding tables, diagrams and bibliography).	*Scholarly style presentation. *Writing has minimal awkward or unclear passages. *Times New Romans, 12-point font, 1-inch margin on each side. *8-10 pages long in text (excluding tables, diagrams and bibliography).	*Word choice occasionally informal in tone. *Writing has a few awkward or unclear passages. *Times New Romans, 12-point font, 1-inch margin on each side. *Less than 8 or greater than 10 pages long in text (excluding tables, diagrams and bibliography). *Copies and pastes raw regression outputs from software. *Inserts screenshots of raw regression outputs.	*Word choice is informal in tone. *Writing is choppy, with many awkward or unclear passages. *Incorrect font or font size. *Less than 8 or greater than 10 pages long in text (excluding tables, diagrams and bibliography). *Copies and pastes raw regression outputs from software. *Inserts screenshots of raw regression outputs.	
Reference Style	*Uses credible, updated, relevant and research-based sources. *Uses the Chicago Manual of Style Author-Date system. *Uses the AEA sample references for less common sources. *All references and citations are correctly and accurately written and present. *No error is detected. *Reference style and citation format is consistent. *No errors in reference style. *References are listed in alphabetical order according to authors' last names. See Paper Guidelines.	*Has rare errors in the Chicago Manual of Style that do not detract from the report. *References are listed in alphabetical order according to authors' last names. *Reference style and citation format are accurate and consistent throughout the paper.	*Errors in the reference style are noticeable. *References are inconsistently listed in alphabetical order according to authors' last names. *References and citations are accurate, but one or two references and/or citations are omitted. *Inconsistent reference style and/or citation format.	*Errors in the reference style are noticeable. *References are not listed in alphabetical order according to authors' last names. *Inconsistent reference style and citation format. *Many missing references and/or citations. *Many inaccurate/incorrect references and citations. *No references listed.	
Quotes	*Has 0 to 3 quotes. *Quotes, if used, do not exceed 50 words in total or have no more than 5 sentences (all quotes combined). *Quotes include page number(s) in the citation.	*Has 4 quotes. *All quotes combined have no more than 50 words or no more than 5 sentences. *Quotes include page number(s) in the citation.	*Has more than 4 quotes. *All quotes combined have more than 50 words. *Some quotes include page number(s) in the citation.	*Has more than 4 quotes. *All quotes combined have more than 50 words. *Quotes do not include page number(s) in the citation. *Quotes have no citation.	
Program & Output	*Appends all programs and outputs (including test results). *Saves data file(s) -- I may ask.	*Append some but not all programs and outputs. *Saves data file(s) -- I may ask.	*Does not append programs and outputs. *No evidence of data file(s). *Data file(s) provided to the instructor is/are not the ones used for the analysis. *Data are fabricated.		

		Acceptable		Unacceptable		
Diagrams or tables (unrelated to data, model and results)	*Used sparingly and only when absolutely necessary and justified. *Tables/diagrams are created by student using first-hand and credible sources. *Source(s) are cited accurately and listed in the reference list. *Provides a relevant discussion on the diagram(s)/table(s).	*Used sparingly and only when absolutely necessary and justified. *Tables/diagrams are <u>not</u> created by student but source(s) are cited accurately and listed in the reference list, or tables/diagrams are created by student using credible secondary sources. *Provides a relevant discussion on the diagram(s)/table(s).	*Diagrams/tables lack relevance. *Source(s) are cited, but are incomplete or not fully listed in the reference list, but errors do not detract from the report. *Provides some discussion on the diagrams/tables.	*Diagrams/tables are not necessary and are irrelevant. *Source(s) are not cited, and not listed in the reference list, or sources are insignificant or unsubstantiated. *Lacks discussion on the diagrams/tables.		
	Plagiarism (or Other Violations of Academic Honesty) - Refer to Course Syllabus & NDSU Policy 335 for Details					
			Total Deduction:			%
			Total Points on Paper before Presentation:			

Paper Presentation					
	Acceptable		Unacceptable		Deduction
Length	7 to under 12 minutes (-0%)	5 to 6 mins, or 12 to 14 mins (-10%)	> 14 minutes (-20% per minute over)	< 5 mins, or no presentation (-100%)	
PPT	Prepared and well organized (-0%)		No PPT (-100%)		
Research Objective	Discussed (-0%)	On PPT but not discussed (-5%)	Not on PPT but discussed (-10%)	Not on PPT & not discussed (-20%)	
Regression Model & Data	Key variables and data are discussed (-0%)	On PPT but not discussed (-5%)	Not on PPT but discussed (-10%)	Not on PPT & not discussed (-20%)	
Estimation Method(s)	Reasons for using the method(s) and assumptions are discussed (-0%)	On PPT but not discussed (-5%)	Not on PPT but discussed (-10%)	Not on PPT & not discussed (-20%)	
Regression Results	Key statistical findings are discussed (-0%)	On PPT but not discussed (-5%)	Not on PPT but discussed (-10%)	Not on PPT & not discussed (-20%)	
Result Interpretation	Results are interpreted in layman's terms (-0%)	On PPT but not discussed (-5%)	Not on PPT but discussed (-10%)	Not on PPT & not discussed (-20%)	
Conclusion	Key findings & limitations(s) are discussed (-0%)	On PPT but not discussed (-5%)	Not on PPT but discussed (-10%)	Not on PPT & not discussed (-20%)	
					Total Deduction: %
					Total Points on Paper & Presentation: