

# **Corruption-Growth Nexus: Evidence from China**

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## **Outlines of the Presentation**

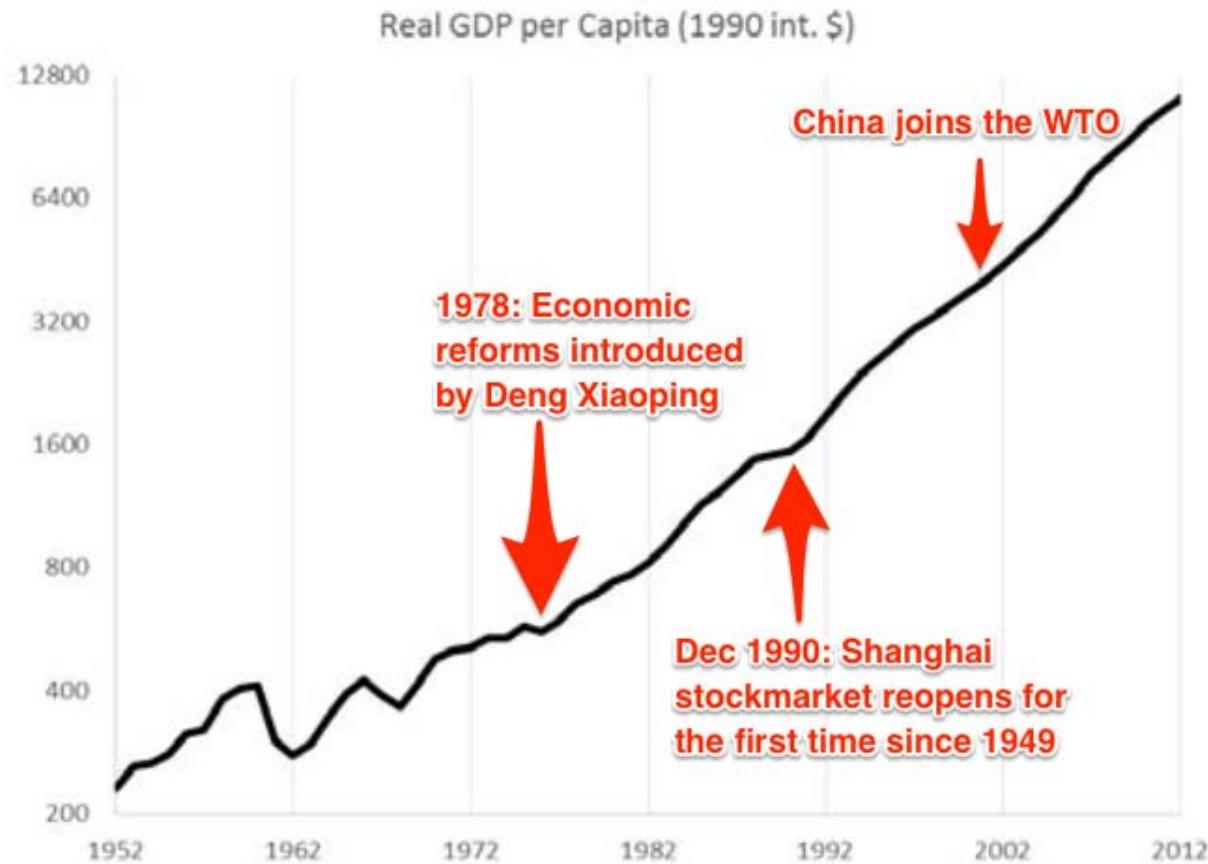
- Introduction
- Motivation of the Study
- Methodology
- Results and Discussion
- Conclusion

- China has accomplished a remarkable achievement in transforming itself from one of the world's poorest countries to its second largest economy in just 30 years.
- China has been enjoying GDP growth rate of 10 percent per annum on average from last three decade. Moreover, China has become more and more integrated into the world economy and has become a major player in world commodity production and trade due to such brilliant GDP growth rate.

# Introduction

- Corruption is wide spread and long-standing problems around the globe, especially in developing countries in recent times.
- It is broadly defined as an abuse of the public powers and authorities for unlawful personal and private gains (World Bank, 1997).
- In contemporary China, corruption is a burning issue and has been most debated subject among Chinese researchers, policy makers and scholars. Presently, it has been common perception in China that that corruption has worsened substantially in the last three decades (Manion, 2004) and (Wedeman, 2012).

# Introduction



# Objective of the Study

- Therefore, the study is an attempt to investigate the relation between corruption and economic growth by using the time series data from 1996 to 2015, to see the short and long run relationship in the solo case of China.

## Literature Review

- There is no single consensus on the impact of corruption on economic growth. One school of thought argues the prevalence of corruption positively on the economy, while the other believes that corruption hampers resource allocation thus impedes economic growth.

# Literature Review

Study	Findings
Delbianco et al. (2016)	<b>Negative:</b> because corruption leads to a lower productive effort
D'Agostino et al (2016)	<b>Negative:</b> in perspective of public sending
Ali et. al (2015)	<b>Negative:</b> good governance precondition and necessary for economics growth.
Ugur (2014)	<b>Negative:</b> corruption is a symptom of weak institutional quality may adversely affect the economic growth
Mo et al. (2001)	<b>Negative:</b> revealed that corruption has negative impact on economic growth.

# Literature Review

Study	Findings
Jiang & Nie (2014)	<b>Positive:</b> Corruption augments the economic efficiency and renders positive influence on economic growth.
Huang (2016)	<b>Positive:</b> grease the wheels of economic productivity
Wedeman (2002)	<b>Positive:</b> has used the term “East Asian Paradox” to best describe the argument in support of corruption
Rock& Bonnett (2004)	<b>Positive:</b> also support the argument of “East Asian Paradox”

**Table-1:**  
**Corruption Perceptions Index (CPI) for Selected Economies**

	2008	2009	2010	2011	2012	2013	2014	2015	2016
China	3.6	3.6	3.5	3.6	3.9	4.0	3.6	3.7	4.0
Burkina Faso	3.5	3.5	3.1	3	3.8	3.8	3.8	3.8	4.2
Canada	8.7	8.7	9.2	8.7	8.4	8.3	8.3	8.7	8.3
El-Salvador	3.4	3.5	3.6	3.4	3.8	3.8	3.9	3.9	3.6
Germany	7.9	8.0	7.9	8.0	7.9	7.8	7.9	8.1	8.1
Jamaica	3.1	3.0	3.3	3.3	3.8	3.8	3.8	4.1	3.9
Japan	7.3	7.7	7.8	8.0	7.4	7.4	7.6	7.5	7.2
Peru	3.6	3.7	3.5	3.4	3.8	3.8	3.8	3.6	3.5
Tobago and Trinidad	3.6	3.6	3.6	3.2	3.9	3.8	3.8	3.9	3.5
Serbia	3.4	3.5	3.5	3.3	3.9	4.2	4.1	4.0	4.2
US	7.3	7.7	7.1	7.1	7.3	7.3	7.4	7.6	7.4

Source: International Transparency Report (2017) 2008 to 2016

# Methodology

The study uses the time series data series for china from 1996 to 2015 by Auto-regressive distributed lag model (ARDL). The model derivation for the said study is explained as follows:

However, following the Levine and Renelt (1992) and Mo (2001) we can developed the following production function for this study, to see the effect of corruption on economic growth.

$$\frac{dY}{Y} = f(CPI) \quad (4)$$

# Methodology

So, the mathematical form of this study as is under:

$$PC_t = \alpha_0 + \alpha_{CPI} CPI_t + \alpha_{TO} TO_t \quad (6)$$

(6). Thus, the econometrics form of our study as is follow:

$$\ln PC_t = \alpha_0 + \alpha_{CPI} \ln CPI_t + \alpha_{TO} \ln TO_t + \varepsilon_i \quad (7)$$

Where:  $\varepsilon_t$  random error. The ARDL specification of equation (7) as is under:

$$\Delta \ln PC_t = \theta_0 + \theta_t t + \theta_{CPI} \ln CPI_{t-1} + \theta_{TO} \ln TO_{t-1} + \sum_{i=1}^m \alpha_i \Delta \ln CPI_{t-i} + \sum_{j=0}^n \alpha_j \Delta \ln TO_{t-j} + \varepsilon$$

**Table-2:**  
**Descriptive Statistics and Correlation Matrix**

Description	LNCPI	LNPCI	LNTO
Mean	3.340526	7.400939	13.76723
Median	3.500000	7.355259	13.95374
Maximum	4.000000	8.184061	14.98855
Minimum	2.160000	6.633126	12.55123
Std. Dev.	0.447319	0.499735	0.930095
Skewness	-1.262193	0.090605	-0.092027
Kurtosis	4.368063	1.692580	1.387613
Jarque-Bera	6.526598	1.379229	2.084986
Probability	0.038262	0.501770	0.352575
Sum	63.47000	140.6178	261.5774
Sum Sq. Dev.	3.601695	4.495232	15.57138
Observations	19	19	19
LNCPI	1		
LNPCI	0.7721	1	
LNTO	0.6745	0.6770	1

**Table-3:****Unit Root Test**

Variables	ADF		DF-GLS	
	<i>Without trend</i>	<i>With trend</i>	<i>Without trend</i>	<i>With trend</i>
At level				
LNCPI	-2.58	-3.05	-0.55	-2.71
LNPCI	-1.14	-3.81*	-0.42	-2.97**
LNTO	0.156	-1.86	-0.70	-1.84
At first difference				
$\Delta$ LNCPI	-3.77**	-3.59**	-3.36***	-3.77**
$\Delta$ LNPCI	---	---	----	----
$\Delta$ LNTO	-3.20**	-3.10*	-3.07***	-3.26*

**Table-4:**  
**Long and Short Runs Analysis**  
Dependent Variable = ln PC

<b><u>LONG RUN RESULTS</u></b>		
<b>Variable</b>	<b>Coefficient</b>	<b>AIC (1,1,0)</b>
Ln CPI	0.114*	2.783
ln TO	0.6123***	14.48
<b><u>SHORT RUN ANALYSIS</u></b>		
ln CPI	-0.0886	-0.7225
ln TO	0.0634***	5.1212
ECM <sub>t-1</sub>	-0.10365***	-3.597
R-Square	0.72	
F-statistic	18.513	
DW	1.94	
<b><u>DIAGNOSTIC TESTS</u></b>		
<b>Test</b>	<b>F-statistic</b>	<b>Prob.value</b>
$\chi^2$ NORMAL	0.8775	0.7260
$\chi^2$ SERIAL	1.8977	0.1161
$\chi^2$ ARCH	0.6500	0.3422
$\chi^2$ WHITE	1.1329	0.2100
$\chi^2$ REMSAY	0.0577	0.7311

Note: \*, \*\* and \*\*\* indicate significance at 1%, 5% and 10% levels respectively.

# Conclusion

Empirically, it is proven from the data analysis, that corruption has encouraged the economic growth in China in the short run. However, in the long run the negative relationship revels that there is a likeliness of deterioration in economic growth and political instability. Therefore, it is highly important to put some controls over rampant corruption in china for stabilizing the economic growth that eventually would result in political liberalization and equality in the society.

Thank You!

