Progressive Leadership and Economic Development in China

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The death of Mao gives economists and other social scientists a rare chance to study the effects of economic reforms in a communist country. In order to test the hypothesis that individual political leaders are significant for economic development, this paper provides both quantitative and qualitative data. The qualitative data support the notion that provinces with progressive leaders with connections to the central government experienced higher levels of economic development compared to provinces with more conservative leaders. A two-way fixed effects model is used to analyze data from every province. Data was provided by All China Marketing Research. In this analysis, economic development is measured, in yuan, through GDP per capita. This paper defines progressive leadership as the percentage share of State Owned Enterprises in relation to Gross Industrial Output Value. Lower percentage share was interpreted as progressive leadership. The data show that not only did private industrial output increase, but also that State Owned Enterprise output decreased during the same time period. Holding all else equal, this study found that if a province were to increase state involvement from 0-100%, that province would experience a reduction of GDP per capita by 9.1%. The progressive economic reforms that were established after Mao's death resulted in incredible economic growth and has helped establish China's position in the world economy.

Introduction

When asked about China and its growing role in the world economy, Justin Yifu Lin, former Chief Economist at the World Bank, said, “Whether we are on the verge of an ‘Asian Century’ or not, one thing is clear: there has already been a dramatic shift in the geographic center of the global economy” (Lin, 2011). China has become a major international player in politics and trade. Many scholars have spent time predicting how China's economy will continue to grow and develop, but in order to understand and forecast China's future economic growth, it is important to analyze its recent economic and political history.

This paper examines the reasons for the stark differences in economic growth and development of China's provinces. China's economic revolution has transformed the country from a rural, agriculture-based society into a dynamic and ever-changing economy that welcomes manufacturing and service-oriented industries. In 1978, China's gross domestic product (GDP) per capita was ¥119, but by 2016 it had grown to more than ¥53,980. Although this is an impressive improvement, the majority of economic development has been limited to only a handful of provinces. This paper attempts to provide insight as to why there has been such stark differences in economic development among provinces.

Studying economic growth and development in China is important not only because economic policies directly affect more than one billion people, but also because the lessons from this analysis may have the potential to be applied to other developing nations. By understanding how the disparity has come about, China's national government will be able to help local government officials in underperforming provinces replicate the success that others have experienced over the last few decades.

This paper studies the importance of political leaders and their involvement with State Owned Enterprises (SOEs) at the provincial level. This research attempts to isolate the effects of the few leaders at the top of their local governments who exert political power and influence in the economy. These political leaders use their connections with the central government to lobby for national investment in their province and ensure their own success. The findings of this paper suggest that progressive leadership at the provincial level is an important factor when studying the historical economic development within China. This analysis does not suggest provincial leaders acted with malice toward other provinces and wished to see them harmed. Rather, by lobbying for national investment in their province and ensuring their own success, political leaders unintentionally limited the resources available to other provinces. Therefore, the differences in economic development can best be explained by the choices and relationships of provincial government leaders.
Existing Literature

Some scholars argue that liberalizing and strengthening the rule of law attracted foreign business and has driven economic growth and development (Yeung, 2015). These scholars contend that investors, both foreign and domestic, were concerned that the communist state would arbitrarily involve itself in private business transactions. Investors feared that their assets would be confiscated by the state and that they would not be given due process in the court of law as guaranteed by other countries. One of the biggest reforms in the early post-Mao era was the codification and enforcement of business law throughout the country. These new laws ensured the safety of foreign investment in Chinese companies (PriceWaterhouseCoopers, 2014). This reform created a system in which the government could not capriciously seize control of private property in the name of national interest. This theory explains why new capital suddenly became available to Chinese businesses. According to this theory, investors were waiting for assurances that their risk exposure was limited to market forces, not government intervention.

This line of thinking falters when it comes to explaining the gaps in economic development among different provinces within the country. The system of laws applied to the entire country, but it would appear that investors were interested only in the coastal region. Why would investors not want to invest in the large amount of natural resources located farther inland? Why not invest in border regions and establish strongholds where emerging markets were quickly developing and demanding new goods? The theory of a stronger and more robust legal system explains the availability of capital, but it does not explain the uneven distribution.

Other scholars insist that location is the key to trade and therefore favorable location unlocks economic growth and development (Huang & Liu, 2016). The assumption is that trade occurs where it is easiest to import and export goods. Access to the sea is a major competitive advantage that the coastal region has compared to landlocked provinces. Large shipping containers provide access to global markets. Regardless of how large China is, the global market is the largest source of demand. As China has further developed its shipping infrastructure, it has been able to meet the global demand for cheap labor and production. China now has some of the largest and most sophisticated commercial ports in the world (Lin, 2011). These ports allow Chinese firms to produce and ship goods at a low cost. While the inland provinces lack direct access to the sea, firms can invest and create new factories near the coast and export their products to the world. Individuals who subscribe to this school of thought contend that the inland region does not have a competitive advantage in any form of trade and thus naturally lags when compared to provinces along the coast.

While this argument provides an explanation for why provinces within the country have experienced different trends in economic development, it has shortcomings. For example, if being by the coast is the most important requirement for growing an economy, why are South East Asian countries like Thailand and the Philippines not experiencing exponential growth like China has been? China has experienced significant growth rates while other countries struggle with extreme poverty. Major industries in China such as agriculture and mining are located farther inland, but many of these provinces are not nearly as economically developed as others. While it is easy to see how access to the sea can help facilitate trade, it is not enough on its own to explain China’s history of economic development.

Yet another variable used to explain the varying degrees of development between provinces is the presence of Special Economic Zones (SEZs). SEZs are geographical areas “where special and flexible policies [are] granted to attract and encourage foreign investment” (Yeung, 2015). China is not the only country to experiment with SEZs, and much has been written about the practice. Many developing countries have used China’s model for SEZs as a guide for implementing their own (Brautigam & Xiaoyang, 2012). In theory, SEZs combine all of the strengths of the previous schools of thoughts. These areas have unique and liberal regulations compared to the rest of the country and therefore makes foreigners more likely to invest capital in domestic industries. SEZs are primarily located near the coast in order to satisfy global demand. With friendly business laws, foreign capital has flooded into these special regions.

Some research suggests that SEZs increase foreign direct investment (FDI) in a province (Sun & Dutta, 1997). A high level of FDI has been shown to have a positive correlation with economic growth and development. This correlation may be a result of a positive feedback loop in which FDI helps improve infrastructure and productivity, which


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leads to a more attractive area for investment. If this is the case, it explains why there has been a growing disparity between the provinces with and without SEZs.

Although the benefits of SEZs in China are clear, they still do not fully explain the puzzle explored in this paper. Government officials knew that the SEZs would cause a growth imbalance at first, but they hoped that investment would have spillover effects and eventually improve the entire country (Tan, 2002). Decades later, it is clear that this spillover has yet to occur. The central government had the power to create SEZs throughout the country. If the goal of the central government was growth and development, SEZs would have been constructed at key border regions in western provinces at the same time they were built along the coast. China has always had a large population and while many people have relocated to the coast, there is still a large market for cheap goods in the inland provinces and bordering countries. While the global market is not accessible to provinces located in the west, the economic potential of trading with the fourteen countries that border China is still large and government leaders could have established SEZs in provinces in the west with major industries like mining and farming decades ago, but they failed to do so.

The school of thought that best describes the differences in economic development within China focuses on the role that local political leaders play in their respective economies. Qingshan Tan argues that new laws and policies greatly influenced the development of provincial governments in the early post-Mao era, and he claims that local government officials were responsible for economic success or failure. He maintains that because of the new laws, the central government encouraged growth across the entire country. It was ultimately up to local officials to take advantage of the laws and initiate new projects to help drive growth and development. Tan argues provinces that experienced poor economic development, such as Jiangxi, were led by traditionalist leaders who still supported Maoist principles whereas provinces like Fujian, an area that experienced strong economic growth and development, had progressive leaders who initiated bold new programs to help grow the local economy.

In order to achieve national goals, local and central government officials work closely with each other. Due to different personalities and beliefs at the provincial level, this intimate relationship can have different results. Progressive leaders that aligned themselves with the goals of the central government received more support from the central government. Even if their programs would have failed in other countries experiencing the same circumstances, the local economy led by progressive leaders thrived because of the significant domestic investment by the central government (World Bank, 2013). This argument is the strongest because it provides an explanation for why economic development varies among provinces. It explains why different leaders were sent to specific provinces throughout their political careers. The provinces and leaders examined in the following sections show that individuals with close connections to the central government were given strong support from senior leadership back in Beijing. Researchers who subscribe to this school of thought recognize the importance of individuals and the effects that political leaders have on average citizens through their respective provincial economy.

Provincial Government Analysis

In order to understand how political leaders can have great influence on local economies, it is important to understand China’s system of government. One of the biggest aspects of Chinese politics is loyalty to the Communist party. The party comes before all else and therefore party leaders are extremely important. Although loyalty to the Communist party is important, factions are prevalent and are a very important component of Chinese politics (Hillman, 2010). Different factions compete for power and the winning factions are given preferential treatment with regard to appointments and leadership positions at the provincial level.

Provincial government leaders must always consider their actions in the eyes of the central government in order to avoid any misunderstanding and punishment (Shih, 2012). The National People’s Congress is particularly important for this paper because of its influence over economic policies and close working relationship with provincial leaders. The following case studies highlight just a few political leaders in China. The more connections an individual has with central government leaders, the more likely that individual is to succeed in their political career.

With this basic understanding of the structure of the Chinese government, we can now look at the individual provinces that are the focus of this paper.
The first province is Jiangxi, located in the southeast corner of the country. From an economic development standpoint, it does not perform nearly as well as some of its neighbors. While it does not border the coast, it is very close and one would think having wealthy provinces as neighbors would encourage domestic trade. Some scholars argue that although a lack of direct access to the coast can explain some of the variation with its neighbors, “self-inflicted suffering deserves at least equal attention” (Hendrischke, 2001). This “self-inflicted suffering” refers to resistance to capitalism and progressive economic reforms. The political leaders responsible for improving the lives of their citizens refused to embrace the new system that other provinces were using during the reform movement. To an outside observer, it would appear as if the Maoist-inspired leaders were doing everything they could to hinder the reform efforts implemented by Deng Xiaoping. In Jiangxi, there were checkpoints every 30 kilometers and the local government controlled the flow of goods throughout the province even after the central government encouraged reform efforts that called for more trade and new farming practices (Hendrischke, 2001). While Jiangxi remained strict, other regions began to flourish as citizens were given incentives to work for themselves rather than for the state. The cultural fight against capitalism was so strong in Jiangxi that years after the reforms were supposed to be enacted, local leaders restricted what crops farmers could grow based on cultural preferences even if other crops were more profitable (Hendrischke, 2001). Even though most of the leaders who were in power during the 1980s have died, the damage they caused through inaction still haunts the local communities, and the national government is still struggling to implement reforms and encourage foreign investment in the province (Huang, Ma, Sullivan, 2010). In 1978, the GDP per capita was less than ¥300. The province’s GDP per capita in 2016 was more than ¥40,000. The central government is still in the process of opening Jiangxi’s economy to foreign investors in order to drive new economic growth in multiple industries. The first SEZ was established in the 1990s and there are now only two in the province.

Fujian shares a border with Jiangxi, but has experienced a different level of economic growth and development since the reforms in the 1980s. While policy makers are still struggling to encourage economic development in Jiangxi, Fujian has been praised as a success story. Fujian began to change political and economic policies shortly after the central government called for reforms. Political leaders in Fujian began aggressively pursuing industrialization and shifted away from an agriculture-based economy. The results of this change in policy quickly affected the local population. Just a year later, Fujian’s per capita export was more than twice of Jiangxi’s and per capita income also rose substantially compared to Jiangxi (Tan, 2002). In 1978, its GDP per capita was around ¥300. In 2015, the GDP per capita was almost ¥74,000.

Fujian is an important strategic province because of its proximity to Taiwan. The central government performs military exercises in Fujian as a deterrent for Taiwan (Jensen, 2016). Because of this close relationship, many local political leaders have had close ties with leaders in the central government. Tan notes that “from 1982 to 2000, five major provincial officials went to work in the central government from Fujian as opposed to one from Jiangxi.” This close relationship allowed leaders in Fujian to aggressively pursue economic development in their province. The central government essentially guaranteed Fujian’s success through government investment as well as appointing progressive leaders to the province. The central government conceded more autonomy to Fujian and local leaders were able to secure foreign loans worth billions of dollars. More than two-thirds of the workforce participated in the new economy and new jobs emerged as political leaders encouraged entrepreneurs to open new businesses and expand old ones (Tan, 2002). Fujian was held up as an example for other provinces to follow and the Xiamen SEZ has continued to show strong growth since it was created in the early 1980s and nine other SEZs have been established since.

Guangdong is another example of economic success in China. The province is located in an area known as the Pearl River Delta. The Pearl River Delta is one of a handful of economic hot spots located across the country. According to some scholars, the Pearl River Delta “has functioned as the national economic ‘motor’ since the Communist Party of China experimented with global economic (re)integration in 1978” (Lim, 2016). Hong Kong and Taiwan are both major centers of economic activity and close to Guangdong. Since being admitted to the World Trade Organization, Guangdong, on average, accounts for almost 30 percent of China’s total national output (National Bureau of Statistics, 2014). Guangdong was very influential during the reform era and the central government was very
supportive of its growth initiatives. Lim (2016) describes how Guangdong is a perfect example of a province that followed the reforms set forth by central leaders during the post Mao era.

Some scholars have noted that reforms in China starting in the 1980s were often associated with a “reciprocal accountability” policy (Shirk, 1993). Lim (2016) defines reciprocal accountability as a policy that “invites developmental initiatives of national significance from local governments, in anticipation that these governments would reciprocate by aligning their initiatives to national objectives.” This reciprocity highlights the importance of the quid pro quo system that was prevalent during the reform era in Chinese society. It also emphasized the importance of a national identity and the need for unity among the provinces and the central leadership. Guangdong was given preferential treatment from the central government since the start of the reform era. Ye Jianying was Chairman of the Standing Committee from 1973 until 1985 and Wei Guoqing was Vice Chairman of the Standing Committee from 1978 to his death in 1989. Jianying was born in Guangdong and was also its Chief Political Commissioner early in his career. Guoqing was the Governor of Guangdong before being promoted to the Standing Committee. Political leaders in Guangdong lobbied heavily for the central government to encourage economic growth in their region. Again, the role of the party and factions is crucial in Chinese politics, and with two senior leaders in the central government with ties to Guangdong, it should not come as a surprise that the province received a significant amount of support. Deng Xiaoping, the main leader during the reformation period, hoped that preferential treatment of Guangdong would have spillover effects in other provinces. During the reforms, Wang Yang was Provincial Party secretary of Guangdong as well and was close friends with Hu Jintao, the General Secretary of the central government. The Special Economic Zones of Shenzhen and Zhuhai would not have been constructed without the close relationships that Guangdong leaders had with central government officials (Chen, Medici, 2009). Chen and Medici (2009) highlight the fact that Shenzhen was the first SEZ and was a radical idea for most leaders who survived the Cultural Revolution and Maoism. In a country as large and diverse as China, to receive substantial funding from the national government required strong personal relationships. The local leaders, who had connections with the central government, were able to assure the central government that their province was best suited to help the country as a whole grow. Guangdong now has seventeen SEZs. The GDP per capita in 1978 was less than ¥400. In 2016, the province enjoyed a GDP per capita more than ¥72,000.

The final province that this paper will highlight is Sichuan, located in the center of China. Sichuan is different from the other provinces discussed here because it is located farther inland. The province is one of the country’s most important sources of agricultural products and is known throughout China as “heaven's storehouse” (McNally, 2004). In a country where food security is a major national priority due to the size of the population, areas with fertile lands and large agricultural productivity are crucial for any government that wants to maintain social stability. Sichuan was one of the first provinces to experiment with agricultural reforms. Again, there were close relations between the central government and the Provincial Party Secretary of Sichuan, Zhang Xuezhong, and the General Secretary, Hu Jintao. The leaders in Sichuan faced challenges similar to those faced by the leaders referenced above. Tsai and Dean (2014) note that “since the Reform and the Opening Up period, the two most important indicators of successful political performance in the appraisal of CCP cadres have been economic development and social stability.” One of Sichuan’s major connections to the national government was Zhao Ziyang. Ziyang was Deng Xiaoping’s protégé and a major figure in the reform movement. Ziyang was a political figure in Guangdong before being moved to Sichuan in 1976. He later became the General Secretary of the Chinese Communist Party but maintained strong relationships with Sichuan (Shambaugh, 1984). Sichuan has been a laboratory for social-stability policies because of its close ties with the central government. It has been able to initiate new electoral reforms in multiple regions with great success and approval from the central government. These reforms have encouraged social stability by giving citizens a sense of political voice. Tsai and Dean (2014) argue that “provincial secretaries will interpret the economic conditions of their province and make the rational choice of initiating those reforms which best match provincial priorities.” Although they did not receive any special economic zones until the 1990s, the province now has six.

Critics may argue that the case of Sichuan proves that individuals cannot be the main force driving economic development. In 2016, Sichuan had a GDP per capita less than ¥40,000.
The relatively low GDP per capita suggests that coastal provinces will always receive preferential treatment. While at first glance this may appear to dismiss the argument that local leaders matter, it is important to note that a variety of outside factors are at play in Sichuan that are not as prevalent in other areas (McNally, 2004). A major setback that Sichuan faced was large population outflows. As a result of the reforms, Sichuan became the largest source of China’s trans-provincial population. The hukou system has also limited the province’s ability to develop its economy. The hukou system disproportionately affects rural citizens (Liu, 2005). Sichuan’s economy is primary agriculture-based, and the hukou system has been criticized for discriminating against the rural population because it fails to provide basic state services that urban populations receive. Sichuan’s unique economic challenges demonstrate some of the complexities that provincial leaders must navigate while in power.

Methods

The death of Mao gave economists and other social scientists a rare chance to study the effects of economic reforms in a communist country. To test the hypothesis that individual political leaders are significant for economic development, this paper provides quantitative and qualitative data. The qualitative data above supports the notion that provinces with progressive leaders with connections to central government experienced higher levels of economic development compared to provinces with more conservative leaders. The following is the quantitative portion of the research. A two-way fixed effects model was used to analyze data from every province. A simple OLS model would bias the results by not accounting for the fact that the dataset is a combination of every province with data spanning more than fifty years. The fixed effects model allows the model to account for omitted and time invariant variables. Each province is unique, and the two-way fixed effects model limits potential biases. To account for selection bias, this analysis clusters the data from every province and uses statistical analysis tools to provide robust standard errors.

In this analysis, economic development is measured, in yuan, through GDP per capita. To produce useful coefficients, many variables were transformed into log format. After testing for multicollinearity, the final model was:

\[
\text{GDP per capita} = \beta_1 \text{State Involvement} + \beta_2 \text{Farming} + \beta_3 \text{Coast} + \beta_4 \text{SEZ} + \beta_5 \text{School} + \beta_6 \text{State Industry} + \beta_7 \text{Population} + \beta_8 \text{Health Institution} + \beta_9 \text{Passenger Train} + \varepsilon
\]

The farming variable (Farming) is measured in total output of farms measured in 100 million yuan. This is an important variable to include in the analysis because farming was a crucial part of the Chinese economy before the reforms and the farming industry was the first to undergo reform efforts. Access to the coast (Coast) is a dummy variable that accounts for the fact that some provinces border the coast while others are landlocked. This variable accounts for any advantages that the coastal provinces may have had over the landlocked provinces. The number of SEZs was included to account for the influence that these unique geographic areas had compared to other regions. SOEs gross industrial output value (State Industry) is measured in 100 million yuan and helps measure industry performance. Total permanent population (Population) is measured in 10,000 persons and is used to account for China’s massive population. Number of health institutions (Health Institution) was not logged. Passenger Train was measured by the number of individuals riding the train in 10,000-person increments. Both Health Institution and Passenger Train were used to control for the increase in human investment and overall societal well-being.

Progressive leadership is the most important variable in the model. In an attempt to operationalize personal behaviors and attitudes of local government leaders, this paper defines progressive leadership as the percentage share of State Owned Enterprises in relation to Gross Industrial Output Value. This variable is labeled as “State Involvement” in the analysis. Less state involvement is indicative of progressive leadership while more state involvement is indicative of conservative leadership. This variable intends to measure the merits of laissez-faire capitalism versus communism. This variable was used as a proxy for progressive leadership because it shows how quickly local provinces embraced progressive reform efforts. The appendix provides graphs highlighting the rate at which individual provinces embraced progressive economic practices. The data show that not only did private industrial output increase, but also that SOE output decreased during the same period. This trend supports the idea that progressive provincial leaders were not only...
encouraging private growth, but also discouraging government involvement at the same time.

Reliable data can be difficult to find when researching economic trends in China. The Chinese government has been accused of manipulating economic data to improve its public perception (Khan, 2016). It may be in a government’s self-interest to misrepresent its economy’s health in order to prevent capital flight. China has met its own predicted growth rates time and time again, even though outside analysts predicted different, often lower, numbers (Yao, 2014). The data used in this analysis was constructed by combining a variety of other datasets created and maintained by All China Market Research. This dataset is sponsored by the University of Michigan. Though it is possible that government officials incorrectly reported data for national benchmarks like GDP or national income, it is unlikely that government employees altered provincial level data that span decades. Although it is important to have a healthy degree of skepticism for any economic research on China, the dataset constructed using the University of Michigan’s database provides the most complete and reliable source of information available to the public.

**Results**

The data in Table 1 show some interesting results. With an adjusted R\(^2\) value of 0.793, the fixed effects model explains around 79.3 percent of the variation in GDP per capita. Both models proved to be statistically significant when testing for robust standard errors. Using SOEs as a percent of Gross Industrial Output Value (State Involvement), holding all else equal, if a province were to increase state involvement from 0 to 100%, that province would experience a reduction of GDP per capita by 9.1 percent. In order to appreciate the effects of progressive leadership, this paper focuses on the percentage change in state involvement from 1978 to 1993. This time frame was chosen because the reform movement began in 1978 with Deng Xiaoping and the effects of economic policy changes should be seen within fifteen years. From 1978 to 1993, state involvement in Fujian decreased by 44 percent and therefore, holding all else constant but with progressive leadership, the province experienced a 4.0 percent increase in GDP per capita. During the same time period, Sichuan experienced a 42 percent decrease in state involvement and therefore, holding all else constant but with progressive leadership, the province experienced an increase in GDP per capita of 3.82 percent. State involvement in Guangdong decreased by 43 percent and, holding all else constant but with progressive leadership, GDP per capita increased by 3.91 percent. Alternatively, from 1978 to 1993 state involvement in Jiangxi actually increased by 2 percent and therefore, holding all else constant and with conservative leadership, GDP per capita actually declined by 0.18 percent. After clustering and testing for robust standard errors, the two-way fixed effects model found the coefficient to be statistically significant.

<table>
<thead>
<tr>
<th>Dependent variable: GDP per Capita</th>
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<tbody>
<tr>
<td>(OLS)</td>
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<tr>
<td>(Fixed Effects)</td>
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<tr>
<td>-----------------------------------</td>
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<tr>
<td>State Involvement</td>
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<tr>
<td>-1.386*** (0.042)</td>
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<tr>
<td>-0.091*** (0.034)</td>
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<tr>
<td>Farming</td>
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<tr>
<td>0.471*** (0.016)</td>
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<td>0.174*** (0.019)</td>
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<tr>
<td>Coast</td>
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<td>-0.074*** (0.016)</td>
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<tr>
<td>SEZ</td>
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<tr>
<td>0.045*** (0.003)</td>
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<tr>
<td>0.011*** (0.002)</td>
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<tr>
<td>School</td>
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<tr>
<td>-0.067*** (0.011)</td>
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<tr>
<td>-0.043** (0.020)</td>
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<tr>
<td>State Industry</td>
</tr>
<tr>
<td>0.554*** (0.013)</td>
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<tr>
<td>0.046** (0.019)</td>
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<tr>
<td>Population</td>
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<tr>
<td>-1.156*** (0.018)</td>
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<tr>
<td>-0.356*** (0.046)</td>
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<tr>
<td>Health Institution</td>
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<tr>
<td>0.047*** (0.013)</td>
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<tr>
<td>-0.029*** (0.009)</td>
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<tr>
<td>Passenger Train</td>
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<tr>
<td>0.013 (0.012)</td>
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<tr>
<td>-0.012 (0.010)</td>
</tr>
<tr>
<td>Constant</td>
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<tr>
<td>4.371*** (0.196)</td>
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Observations 1,106 1,036
R2 0.985 0.812
Adjusted R2 0.985 0.793
F Statistic 8,014.526*** (df = 9; 1096) 311.606*** (df = 13; 938)

Note: *p<0.1; **p<0.05; ***p<0.01

Table 1. Results of two-way fixed effects model concerning provinces’ economic data.
Discussion

China has lifted hundreds of millions of individuals out of extreme poverty. While this is a major accomplishment, its leaders know they still have more work to do. While some policies, such as currency manipulation, have been criticized for being unfair and an abuse of state power for international trade, it is clear that China has come far since Mao and his disastrous policies. The progressive economic reforms that were established after Mao's death resulted in incredible economic growth and has helped establish China's position in the world economy.

The end of Maoist China represents a pseudo-natural experiment for economists. This paper highlights the importance that individual government leaders play while shaping the economy. This research demonstrates the importance of individuals using their connections in the central government to get the backing of the state for economic development initiatives. The paper also highlights how factions and alliances allowed provincial government officials to curry favors from members of the central government.

The dominance of the state and party is something that cannot be dismissed when studying China. The one-party system that China works tirelessly to maintain gives leaders control over aspects of the economy that are out of reach for most countries. The umbrella of the Communist party has allowed the state to direct economic growth for the past four decades. If one were to recommend China's economic policies to another country, the other country would need to be able to exercise complete control over its economy.

The findings of this paper most closely support the research done by Tan Qingshan and his comparison of Jiangxi and Fujian. The results seem to suggest that SEZs are not as important as some scholars have claimed and that location by itself is not the single most important variable when discussing economic development. The other coefficients of the fixed effects model seem to agree with previous academic findings.

Although this paper uses a large amount of observations and many different variables for the quantitative portion of the research, more qualitative data needs to be gathered about other provincial leaders in order to make a more compelling argument about the importance of progressive leadership. Because this paper focuses on only four provinces, there is potential for selection bias. It is challenging to capture the reasons that certain leaders were sent to different provinces and it is even more difficult to obtain primary source data about provincial officials' personal thoughts on market reforms and their willingness to embrace them forty years ago.

Operationalizing progressive leadership as state involvement in the economy presents some problems, but without explicit memoirs of provincial leaders expressing clear dissent or agreement with their superiors in the central government, we depend on analyzing their actions. The data show mixed results when testing for the parallel trends assumption. Even though this model uses a treatment variable with varying degrees of intensity rather than a traditional binary treatment term, a test was still performed in order to better isolate the effects of progressive leadership rather than just the natural progression of economic development. Although the majority of the provinces had reasonable values associated with them, the values associated with certain provinces suggest that the results may be biased. Future studies should focus on accounting for variables that this model did not account for. Future studies should also attempt to gain more data on individual provincial leaders and their respective political careers.

Researchers interested in international development and reducing extreme poverty should be excited by China's progress over the past four decades. The country has made great strides but still has a long way to go in order to help all of its citizens. Understanding the role of progressive local leaders in China's recent history may have major implications in future development initiatives both within China's borders and in other developing countries. The results in this paper, coupled with more qualitative research of provincial leaders, may give even more credence to the "China model" of development that researchers continue to study and praise.

Supplementary Materials: Mao Zedong and China

Mao Zedong was born in December, 1893 and died in September, 1976. He was a revolutionary soldier and fought against the Qing dynasty in 1911. Although his service was short, some scholars credit his time as a soldier as having a profound impact on his future political career and his belief that “political power grows out of the barrel of a gun” (Mao, 1927). After the Qing dynasty was overthrown, Mao went back to school and met
many mentors and friends who would eventually become leaders in the Communist movement. Mao became more politically active after participating in the May Fourth demonstrations. As Mao became more involved in campaigning for communism, he disagreed with Marx’s emphasis on the urban working class and instead believed that winning over rural peasants was the key for a successful communist regime. Mao was a major leader during the Chinese civil war and was able to defeat the nationalists after winning the support of the rural peasants.

After forcing the nationalist army to retreat to what is now Taiwan, Mao and his colleagues established the People’s Republic of China. From 1958 to 1962, Mao implemented an economic policy known as the Great Leap Forward. The program was intended to jump-start the economy so China could catch up with its western counterparts. The initiative is one of the greatest economic failures in the history of the world. It is believed that nearly 45 million people died because of poor central planning and its resulting famine. After the disastrous failure, Mao called for a “cultural revolution” in 1966. This revolution was intended to remove all non-communists and ensure that communist ideals were the only accepted school of thought. This policy led to a “14 percent decline in industrial production in 1967” and military force was used to restore order (Worden, 1987). By the time Mao Zedong died in 1976, the Chinese economy was still far behind its western counterparts.

Deng Xiaoping replaced Mao. He believed that China’s best chance for success was embracing more free market principles. Early reforms focused on rural land and farming practices. With the fall of the Soviet Union and the success of the early reforms, Xiaoping continued to implement and encourage more free market reforms. One example of these reforms was the “household responsibility system” which placed more emphasis on individual households farming for themselves rather than everyone sharing with the commune. Xiaoping also introduced Special Economic Zones (SEZs) in order to accelerate China’s economic development and increase foreign investment. As the economy continued to grow and become stronger, Xiaoping also encouraged some minor political reforms in order to reassure investors, both foreign and domestic, that the government was making efforts to control corruption and other poor government practices that limit growth (Goldman, 2001). By looking at China in terms of Mao, early post-Mao, and post-Mao, one can better appreciate China’s economic and political development.
The Falvey Scholar Award

The Falvey Scholar award is an annual program of the Falvey Memorial Library to recognize outstanding undergraduate research. It is a collaborative initiative of the Library and the Center for Research and Fellowships. The winners of the Falvey Scholar award are selected from a pool of candidates that will be generated by applications submitted by a senior Villanova University student or a group of students working on a senior project together with the recommendation of the advisor to the senior thesis or capstone project completed for academic credit.

REFERENCES


Huang, X. & Liu, X. (2016). Exporting firm and productivity growth:


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Mentor

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