

Institutionalized Uncertainty and Economic Growth during Structural Reform

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I. Introduction

Beginning in the late 1970s and early 1980s, Latin America was thrust into the neoliberal era, which advocated economic liberalization and democratic reform. This new development paradigm served in stark contrast with the previous 50 years in which the region undertook state led economic development under Import Substitution Industrialization (ISI). Neoliberal policies advocated fiscal discipline, trade liberalization, privatization, and other initiatives to get the state out of the economy. The removal of the state was necessary to spur competitiveness in the domestic realm and proved dynamic in opening up Latin American political systems by altering traditional mechanisms of political control.

From the turn of the 20th century, Latin American nations have been traditionally ruled by strong one-party regimes, or military dictatorships. These regimes perpetuated their power through corporatist networks within the state-run economic system. Corporatism gave the state power to divide classes within state sanctioned groups, such as labor and agricultural groups, making individuals compete for state subsidies and other discretionary spending. Since Latin America is extremely poor, individuals became reliant on state handouts and in return would offer their unwavering political support. This style of maintaining power is able to survive only as long as regimes have the capacity to give out subsidies.

In the early 1980s many Latin American regimes were running huge national debts and had to turn to international organizations, such as the IMF, for financing. These international organizations advocated neoliberal policy implementation in exchange for financial aid packages. Once the state was removed from the economy under neoliberal doctrine, corporatist networks were disrupted and discretionary spending, the main mechanism behind corporatism, dried up. Previously co-opted constituents no longer offered their unwavering support.

Therefore, neoliberal policies spurred a dual transition, creating pressure on economic and political systems across Latin America to open.

As the 1980s unfolded, much variation in economic and political development persisted across Latin America. The overarching principle of modernization theory, the theoretical mechanism behind neoliberal development, is that political and economic development should be reinforcing. As an economy is liberalized, more individuals should gain economic interests. The political system will then be driven to open, since socioeconomic development increases the likelihood of disputes amongst economic actors that help create competing sources of interests (Chavez 2003). As newly vested economic actors want to voice their opinions, the political system opens as it must respond to the demands of more of the population, such as increasing the quality of primary education and basic services, both of which reinforce economic development. However, many developing nations have not had an easy time realizing the effects of liberalization that modernization theory purports will inevitably occur.

Across Latin America, development has been realized unevenly. Throughout the 1980s, Latin American countries have been plagued by economic crises, with over 40 individual economic downturns of more than 4% across the region (Lustig 2000). As liberalization has taken place, the success of a developing nation's economic success has been in the hands of market forces. As the sentiments of international investors change, so does the health of the developing economy. Therefore, through a pattern of crisis-based development, nations have been forced into implementing policy, such as austerity, needed to insure stability in international capital markets. Latin American nations have had to put on policymaking handcuffs, stifling domestic policy demands, as larger economic stabilization goals have taken

precedent. This process has led to unevenness in the political and economic development that has been achieved across the region.

With the apparent variation in both political and economic development across Latin America, a body of literature has emerged that tries to explain why modernization theory has not come to complete fruition across the region. This literature, such as Albornoz and Dutta (2007) seeks to explain the variation in Latin American economic outcomes by examining the underlying political variation cross-nationally. This body of work, which will be explained in greater detail later, shows that regime type has an inadvertent effect on economic growth by driving government expenditure patterns.

Cross-national literature, such as Albornoz and Dutta (2007), is extremely provocative in telling national level stories. However, regime oriented growth literature overlooks the fact that the same variation between national level outcomes is also occurring within nations at the subnational, or provincial level. In undertaking this study, I will depart from a national level analysis of regime type affecting economic growth and will attempt to explain the variation in provincial growth within Argentina as a function of provincial level political development.

Argentina provides a perfect landscape for my subsequent provincial level analysis. First and foremost, Argentina has the highest per capita GDP in South America, which makes it an important case study, since it represents the highest portion of the economic development continuum of South America.

Structurally, Argentina lends itself well to a subnational study. Argentine provinces have had well defined borders, minimizing any possible effect change in territory may have on political units or economic structure. Also, throughout the 1980s, the Argentine economy was tumultuous, experiencing hyperinflation, periods of deindustrialization, and negative economic

growth. Therefore, historical circumstances have helped in controlling for any possible endogeneity in economic development that modernization theory purports will drive subsequent political development. Since economic development was lackluster in the 1980s, a model of economic growth as a function of regime type can confidently rule against the reverse causality of economic development actually spurring any subsequent political development.

Lastly, from 1991 to 1999, Argentina undertook a well defined period of structural reform under the Cavallo Plan. This adds more importance to my analysis since any findings will unveil how political development interacts within a deep structural reform process of the economy in a federal system of government.

This paper will proceed by giving a brief background of Argentina's national story since the 1980s, in order to describe the context through which the subnational analysis emerges. A survey of growth literature will follow, which will highlight some specific growth related theories that will impact my subnational model. Finally my model will be presented and analysis will follow.

II. Background

After more than a decade of military rule, in 1983 Argentina became a federal democracy, with 23 provinces and one autonomous city. Throughout the 1970s Argentina's military government was constantly at odds with leftist guerilla movements. In order to maintain tight control, the military did not recognize the human or civil rights of many Argentines. The military's resilience in maintaining control led to the imprisonment of many high profile citizens that were thought to be potentially subversive.

With the onset of democracy in 1983, Argentina's first President Raul Alfonsin, was challenged with governing a population that was still recovering from the intolerances of over a

decade of military rule and stabilizing a national economy that was in terrible condition due to an aging development paradigm. Since the 1950s, Argentina in concert with much of Latin America implemented the economic development policy of Import Substitution Industrialization (ISI). This mode of development sought protectionism and large public investment in industry, which would produce the finished goods the domestic market demanded, rather than importing finished goods from overseas. Initially, ISI had some success as nascent domestic industries were providing domestic markets with basic finished goods. However, Argentina's industry was dependent on protectionist barriers and state subsidy to be competitive and was unable to manufacture competitive second stage products, such as stoves and washing machines.

As ISI policies progressed and domestic industry grew under the protection and subsidy of the state, an ever-increasing national debt became a problem for the Argentine economy. Initially national debt funding was not an issue since huge supplies of private sector foreign loans, created in the oil shocks of the 1970s, left oil rich private investors and countries eager to lend to developing markets such as Argentina. However, with Mexico's announcement in New York in 1982 that it could no longer service its national debt, the most significant debt crisis since the Great Depression emerged and the seemingly endless spigot of private foreign loans was turned off. Argentina now had to face up to its structural economic issues, such as a bloated public sector and non-liberal trade policy in order to get funding from the IMF.

Argentina's first president, Raul Alfonsin, proved unable to bring Argentina out of its economic malaise. The Alfonsin Government half-heartedly adopted IMF loans that were laden with conditional stipulations for liberal market reforms. Alfonsin adopted some policies in order to appease the IMF. However, underlying structural issues, such as uncompetitive industry, a bloated public sector and an increasing national debt persisted, since the government's initiatives

of appeasement were not nearly enough to have any effect. These problems augmented into intense hyperinflationary pressure, which reached 200% in July of 1989 alone (Starr 1997). Amidst hyperinflation, food riots created by exorbitant price increases, and stagnant economic growth, 1989 culminated with the resignation of Raul Alfonsin and the emergence Argentina's second president Carlos Menem.

Once in office, President Menem enacted several economic reforms that had some short-term success, but did not solve Argentina's overarching structural problem. Finally in 1991, Menem implemented the Cavallo Plan. Named after his minister of the economy Domingo Cavallo, the Cavallo Plan sought to structurally revamp the economy by removing the state from the economic realm through privatizations, creating a currency board, cutting public sector employment, along with increasing economic openness to the world economy.

Success from the Cavallo Plan was realized almost immediately. Monthly inflation was cut from 11% in March of 1991 to 1.3% in August to just .6% in December 1991 (Starr 1997). Remarkably, as inflation was being reduced Argentina was not thrust into a recessionary period, which is normally the case as nations tighten monetary policy to reduce inflationary pressures. Previously during the final year of the Alfonsin administration, the Argentine Economy contracted 6% (Starr 1997). During the first four years of the Cavallo Plan (1991 through 1994), the economy grew 8.9%, 8.7%, 6%, and 7% respectively.

The most important feature implemented during the Cavallo Plan that reduced inflation while generating economic growth was the country's currency board (Starr 1997). Under the Convertibility Law, the central legislation behind the currency board, the value of the Argentine currency was fixed at a 1:1 ratio with the US dollar, full convertibility was established, and the Argentine Central Bank was required to hold reserves equal to at least 100% of the domestic

monetary base (Starr 1997). The requirement of being able to back 100% of the monetary base was significant since it prevented the Argentine Central Bank from printing money to finance public deficits, thereby creating more inflationary pressure.

The stringent rules behind the currency board spurred economic growth because credibility was given to the Menem administration's purported resilience in fighting inflation. With renewed credibility in government policy, confidence in the Argentine economy returned. Argentines, who traditionally hold much of their wealth overseas, brought some of their assets back to Argentina, increasing reserves from \$2.4 billion in March of 1991 to \$6.1 billion in December of 1991 (Starr 1997). Credibility also brought international markets back in favor of the Argentine Economy. The IMF approved new lines of credit within a year of the implementation of the Cavallo Plan, the US offered debt forgiveness under the Brady Plan and international investors sought out Argentine assets as their risk premiums were reduced (The spread between real international and Argentine interest rates fell in half – Starr 1997). The influx of reserves into the Argentine Economy, which totaled more than \$30 billion between 1992 and 1994, drastically increased the money supply under the currency board system (Starr 1997). With the increase in the money supply, interest rates fell and access to cheap capital helped to finance expansion.

Argentina's currency board was extremely beneficial in creating the credibility needed to attract financial inflows. However, the cost of credibility was that the monetary system was completely in the hands of market forces. Since Argentina's money supply under the currency board was set by foreign reserves, the growth in the money supply, which directly affects interest rates and economic growth, was dependent on the flow of capital into or out of the country.

Market sentiment became vital to maintaining reserves and thus economic growth. In the aftermath of the Mexican Peso crisis in 1994 and Mexico's subsequent economic crisis in 1995, international markets became fickle. Private investors feared that other emerging markets such as Argentina may also not be able to meet its own debt obligations. In the first six months of 1995, over \$7.5 billion was pulled out of the Argentine Economy (Starr 1997). As reserves were cut with the financial outflow, borrowing became expensive and economic growth was shattered. Prices remained stable through the crisis and trade deficits decreased, allowing the economy to emerge from contraction in 1996 for the rest of the decade. However, the government was forced to cut discretionary spending and many social programs' budgets, which hurt the standard of living of Argentines. Despite social setbacks, the currency board had done its job of stabilizing the economy even through a time of crisis.

Argentina had to weather more economic shocks around the turn of the 21st century. The contagion effects of the Asian Financial Crisis in 1997 spread throughout Latin America much like the previous Mexican Peso crisis. These effects caused huge devaluations in the Argentine Peso and much inflationary pressure, culminating in a currency crisis in 2001. The currency board was then disbanded and the Cavallo Plan ended on a down note, even though the plan's currency board was the main catalyst behind the Argentina's substantial economic growth throughout the 1990's.

III. Variation in the Subnational Realm

At the subnational level during the Cavallo Plan, provinces experienced much variation in their economic growth and their underlying political development. Annualized growth rates across Argentina's provinces from 1991 through 1999 varied greatly, averaging 4.3% annually in the most fortunate, to completely stagnant in others. These annualized growth figures do contain

the contraction of 1995, which saw national level GDP per capita decline by over 4%. At the subnational level, 8 provinces saw growth contract more than 5%, while only four were able to tread water with marginally positive or stagnate growth.

Variation in the political arena was also evident. Of the 24 provinces, 9 never have had an alternation of the political party controlling the governorship, while other provinces have had 3 alternations of power in just five gubernatorial races up till 1999. In provincial deputy elections, many of the winning parties received an average vote share near 35% while other parties dominated, averaging over 60% of the votes in all provincial deputy elections. These statistics point to a varying degree of electoral competition within provincial politics across Argentina. While Argentina is a democracy, many of its provinces exhibit authoritarian like political environments.

The subnational variation in political and economic development occurring across Argentina is no more apparent than in the two neighboring provinces of San Luis and Mendoza. San Luis has been plagued by one party rule since the country's inception of democracy in 1983. The governorship was controlled by the Partido Justicialista (PJ) from 1983 through 2001. Over this period, the PJ received over 50% of the seats in the legislature and due to self-interested electoral reforms, 100% of the senate seats until 1999. This extremely uncompetitive electoral environment meant the province was ardently controlled by the PJ, allowing Governor Rodriguez Saá absolute control over provincial politics during his sixteen-year reign. With no viable opposition, Saá faced incentives to centralize his political power. Since Saá did not see his displacement from power as a threat, he and his PJ cohorts did not establish checks and balances in the political system that would protect them once ousted from power (Chavez 2003).

Under complete one party control, San Luis became notorious for its disrespect of the rule of law within a nationally democratic nation and lackluster economic performance. Judges had no autonomy and were appointed based on connections with Saá, state courts never ruled against the state, and corruption was rampant (Chavez 2003). In fact, Saá often used his uncontested provincial executive powers to sell contracts from the federal industrialization promotion plan without the proper oversight, which effectively led to tax evasion for lucky corporations and kickbacks for the governor (Chavez 2003). Meanwhile, San Luis over this same period was, in terms of constant 1993 pesos, was economically stagnant from 1991 through 1999. During the economic crisis of 1995, provincial GDP per capita contracted by over 7%, which was well below the national average of a 4% contraction.

Mendoza's political and economic development story could not be any different than San Luis. Politically, Mendoza was dominated by competition between three major parties. The province experienced alternations in the party controlling the governorship. Often the governor's party did not hold a majority of legislative seats, imposing the need for the provincial executive to govern through a coalition government. Because of its extremely open political environment, Mendoza has an autonomous judiciary, including the transparent selection of judges who rule against the state (Chavez 2003). Likewise Mendoza has not experienced the same level of corruption as the one party dominated San Luis. Economically, Mendoza experienced annualized growth of 2.6% during the period of 1991 through 1999 and during the 1995 economic crisis, growth contracted by just 3%, which was above the national average.

In the literature, some work has been dedicated to determining why in a national level democracy some enclaves of authoritarianism like San Luis persist. Gibson (2005) comments that "Democratic transitions at the national level create little pressure for subnational

democratization...In fact they (national democratic transitions) often hinder it” (Gibson 107). During the transitions process, central governments are usually frail, allowing peripheral state governments much more autonomy. For instance, when Alfonsín took control of Argentina in 1983, subnational democratization goals were trumped by holding the national economy together and haggling with the IMF for financial rescue packages.

Beyond being of little priority, Gibson points to the persistence of authoritarian provincial politics as a possible direct result of the self-interest of politicians at the national level. A great advantage of authoritarian versus competitive provinces is that in authoritarian provinces, governors have the power to deliver large blocks of voters in national elections. These blocks of reliable constituents become extremely important for national electoral viability, especially for presidents forced to adopt structural reform that goes against traditional constituents (Gibson 2005). For instance, when Menem was steadfast in his resolve to combat inflation and keep in line with austerity demands, he had to rely on the peripheral constituencies of many authoritarian provincial elites to retain his electoral edge. Therefore, authoritarian elites, such as Saá in San Luis, are important allies for national level politicians, who do not want to pursue subnational democratization efforts, which may hurt during the next election cycle.

IV. Related Literature

The dichotomy in economic and political development presented in the case between San Luis and Mendoza, serves as evidence that an area of scholarly work is needed in connecting the theories of growth literature to subnational work, such as Gibson (2005) that focuses on the persistence of authoritarian like political and electoral environments at the subnational level. While national level growth studies have examined the effect of national levels of

democratization on aggregate growth, little work has been completed that sheds light on how subnational political development drives subnational economic outcomes.

The question of how political competitiveness affects economic growth is related to a strand of research focusing on the effects regime type has on economic growth. Regime oriented growth literature has emerged from the more traditional neoclassical, endogenous, and institutional strands of growth theory.

Growth literature began with the concept of absolute convergence. Neoclassical growth papers such as Solow 1956 and Cass 1965 postulated that low income nations with low stocks of physical capital are able to accumulate enough physical capital to be able to inevitably catch up with high income nations. The theory of absolute convergence assumes similarities cross-nationally except for starting physical capital stock and GDP. Since physical capital experiences diminishing marginal returns (technology is assumed constant and human capital is ignored), relatively capital poor countries are able to achieve more growth through physical capital accumulation than their rich neighbors, allowing growth convergence between them.

Neoclassical growth theories are overly simplistic and hold similar the different factors within a nation, such as human capital and savings, which in subsequent studies have been proved to affect economic growth. This body of growth literature has since emerged, focusing on endogenous factors of individual nations that affect economic growth. Endogenous Growth literature including Barro et. al. (1992) and Levine et. al. (1992) focus on the fact that convergence across rich and poor nations is not necessary, but rather is dependent on parameters endogenous to society including propensity to save, investment rates, and even human capital (which was ignored in neoclassical models). Lucas (1988) challenged the notion that the same level of technology is available to all nations. Lucas finds that countries with higher initial stocks

of human capital seem to grow relatively faster than nations with lower initial levels.

Theoretically, human capital influences the rate at which a nation is able to capitalize on new technology and ideas and therefore indirectly affects growth potential from capital accumulation. Endogenous Growth Theory's main contribution to the literature has been that growth rates will not inevitably converge across nations, but are in fact affected by endogenous characteristics of society.

Branching off endogenous growth theory is a strand of literature that focuses on how institutions in society drive economic growth. Endogenous growth theory proves absolute convergence to be questionable, allowing for endogenous factors to also drive growth. Therefore, the institutions within a society should be important. Theoretically, institutions play a substantial role in shaping the endogenous environment. North (1991) finds that institutions create an incentive structure that may aid or hinder economic activity. Specifically, Besley (1995) suggests that secure property rights safeguard investment from expropriation, which invigorates economic actors who must not worry about the state taking over their business. Good institutions over credit markets may decrease barriers to entry, information costs, and transactions costs, enabling more financial inflows that spur economic growth. Lane et. al. (1996) reiterates the importance of the institutional creation of property rights. Countries rich in natural resources are found to under perform in this study because their lack of defined property rights allows natural resources to be exploited in ways that do not maximize their potential in driving a nations' full growth potential.

Many scholars today are trying to determine if regime type affects economic growth, which is the strand of growth literature most parallel to my own study. A regime can be defined by the paradigm through which political actors solve conflicts arising over the distribution of

scarce resources. Democracy tends to provide for transparent, debated decisions, versus authoritarian regimes, which decide political conflict heavy handedly. If institutions play a role in creating incentive structures (North 1991) then current literature focusing on regimes is pertinent since institutions (specific types and the quality of institutions) are defined and created by the specific type of regime in power.

Regime oriented literature is problematic because of the inconclusiveness scholars have had in forming consensus about whether regime type matters, or if the independent byproducts of regime type (the institutions themselves) matter more. Some studies including Nelson et. al. (1998) have found regime type to hold significant first order effects in driving economic growth. However, an equal body of work including Leblang (1996) has found that democracy itself does not seem significant to explaining economic growth, but institutions such as strong property rights are significant independent of regime type. Leblang takes the analysis one step further to show that property rights are associated more with democratic regimes and therefore inadvertently affect economic growth through the creation of certain institutions guaranteeing property rights. Concurrently Albornoz and Dutta (2007), find regime type to be insignificant, but government expenditure to be a driving force of economic growth. However the significance of government expenditure is found to be dependent on regime type. Democratic spending is found to increase growth while spending in authoritarian regimes is found to hinder growth potential in their study.

Much scholarly work on the neoclassical, endogenous, institutional, and regime determinants of economic growth has been done at the aggregate nation level. While this work has been important in comparing economic outcomes cross-nationally, it is lacking an in depth examination of the sub-national realm. Work focusing on the subnational realm is warranted

because of all the political and economic variation happening within nations, even amongst neighboring provinces as shown in the San Luis and Mendoza example illustrated previously. Some subnational work, such as Hiskey (2005), has bridged the divide between political development and economic outcomes, by studying how uneven electoral transitions in Mexico affected post 1995 crisis economic recovery rates. My goal is to continue such work and tie together the aggregate level regime growth literature with literature focusing on the persistence of subnational authoritarian electoral environments (Gibson 2005). In doing this, I hope to illustrate how political variation and electoral competitiveness at the sub-national level in Argentina affect economic outcomes.

V. Modeling Subnational Growth in Argentina

Differences exist between my study and the brunt of regime oriented growth literature. First and foremost, my study is sub-national, across Argentina's 23 provinces and one autonomous city. While a cross-national study of Latin America benefits from regional controls of historical commonalities, an intra-national study across provinces is able to inherently control for even more qualitative variables because all provinces have emerged through the same national system and heritage.

Instead of focusing specifically on regime type affecting economic growth, I will focus on how institutionalized uncertainty affects economic growth. I define institutionalized uncertainty as a level of political competitiveness that insures that incumbent politicians and parties are not guaranteed victory in subsequent elections. In later discussion, it will be evident that institutionalized uncertainty will create different incentives within provincial regimes to adopt structural reforms and maintain traditional forms of unproductive patronage spending, both of which will potentially affect a province's growth rate.

While I would like to mimic cross-national growth literature in determining whether democratic provinces have higher growth rates during structural reform, my study is limited to available data of the subnational realm. Unlike national level analyses such as Albornoz and Dutta (2007), which utilize the Polity IV Index as an indicator of regime type, no such aggregate institutional variable is broken down to the provincial level. Therefore, I have adopted other means to measure regime type. My measure is unable to capture a robust picture of regime type because unlike the in Polity IV Index, subnational figures on measures of rule of law, corruption, and health of institutions are unavailable. Therefore, in an attempt not to show an electoral bias in defining democracy, I will limit my study's results to the affect institutionalized uncertainty has on economic outcomes, by observing electoral competition within provinces (explanation to follow in variables section).

My basic model of economic growth is:

$$Y_i = \beta_0 + \beta_1 \text{Comp}_i + \beta_2 \% \text{NBI}_i + \beta_3 \text{PubExp}_i + \beta_4 \text{ExpShare}_i + \beta_5 \text{InitialGSP}_i$$

- Y: the geometric average of Gross State Product per Capita over the period 1991 to 1999.
- B_0 : the constant
- Comp: is my competitive province dummy
- %NBI: average percentage of the population living with basic needs unsatisfied
- PubExp: average total public consumption in per capita terms
- ExpShare: is the ratio of export value to GSP in 1993 constant pesos
- InitialGSP: level of provincial GSP at onset of structural reform

In the following paragraphs, I will explain each of the variables I have included in my model, along with the underlying theoretical thinking behind their inclusion. I will leave the explanation of my competition dummy for last, since it is the most involved.

The dependent variable in my model is the geometric average of GSP per capita growth over the sample period 1991 to 1999, by province, i .

The first independent control variable is %NBI, which is the percentage of the population living without basic needs. In order to be deemed living without basic needs, a person must be subject to at least one of the following as defined by the Instituto Nacional de Estadísticas y Censos en Argentina:

1. Living in a home with more than 3 people per room
2. Living in a structurally unstable home with earth floors, no window, etc.
3. Living in a home that does not have a toilet
4. Living in a home with a boy of scholastic age that does not attend school
5. Living in a home with an illiterate head of household

This number is a percentage ranging from 0-1. A higher %NBI signifies that a greater portion of the provincial population is living with basic needs unsatisfied as defined above.

The %NBI has been included in my model because it captures the overall provincial human development level in a snapshot. Controlling for the average level of human capital and development during an era of structural reforms is vital because of the implications these variables have on economic growth. When an economy is subject to adverse conditions in which populations must evolve, or even change their economic activities, the more overall development within the province should foster higher levels of economic growth. Likewise, taking from endogenous growth literature, more human capital tends to affect the absorption of any new technology and therefore the rate of return able to be captured by physical capital accumulation. New machinery accumulated by poor provinces without the necessary knowledge in the human sphere, will be vastly underutilized relative to provinces with the same levels of physical capital and a greater stock of human capital (Lucas 1988).

While the NBI measure is an aggregate snapshot of development, the inclusion of such a variable in the model is more beneficial than including individual development indicators such as illiteracy rates, percentage of households with dirt floors, amongst others. By including an

overall development snapshot, the model is able to capture any possible effects of development factors working together, along with solving the co-linearity issues that would inevitably arise when including multiple development indicators, since they tend to be highly correlated with one another.

Using one overarching variable to measure development is also practical in a model with only 24 observations. Instead of estimating coefficients for multiple development indicators, the model is able to economize on degrees of freedom since only one beta for development must be estimated. This will allow for more robustness of the regression model.

PubExp represents the average annual per capita total public consumption from 1991 to 1999 in units of thousands of constant 1993 pesos. Public expenditure is included because of its potential to generate economic growth, or at least to smooth out economic outcomes during periods of adverse structural reform. My expectation is that provinces with relatively higher public spending should exhibit relatively higher economic growth. However, taken in the context of the period of the model, higher public expenditure could signal reluctance from the provincial government to adopt structural reform, which may hold adverse consequences for economic outcomes over the period. It will also be interesting to examine how institutionalized uncertainty affects expenditure allocation, as in Albornoz and Dutta (2007) regime type was a strong determinant of the effect expenditure had on economic growth.

ExpShare, as defined above, is the ratio of international export value to GSP and gives the model a measure of provincial economic integration. Provinces with a higher export share of GSP are more interdependent on the world economy and less dependent on the domestic economic climate. During periods of structural reform, higher export shares should allow provinces to attain relatively higher economic growth since a larger proportion of their GSP goes

overseas, which is not tied in to the national economic climate. Greater export share also signals a greater level of liberalization within the provinces, making liberalizing structural reforms less costly in social terms.

Initial GSP per capita is included in the model to control for the initial provincial level of economic development. In the Neoclassical Growth literature, where absolute convergence is assumed, provinces with initially higher economic development should grow slower than their less developed counterparts as physical capital accumulation exhibits diminishing marginal returns (See Neoclassical Growth in literature review). Including this variable in the model will control for any tendency of convergence of growth rates across the provinces with different levels of capital. Significance of this variable would also serve as evidence to the applicability to the subnational level, of theories of economic growth that have been normally applied to national aggregate level pictures.

Comp, is a competition dummy variable, which is a categorical variable separating provinces that exhibit institutionalized uncertainty in the period of democracy prior to the period of economic growth under the study. For instance, if the period of the model runs from 1991 through 1999, the competition dummy will encompass electoral results from only the years prior to 1991. I examined a plethora of electoral statistics in order to try and capture a robust provincial political snapshot. Merely observing election outcomes will not afford the model as good of a picture of regime type. However, electoral observation can give any model of institutional determinants of growth insight as to how a competitive electoral climate can affect economic outcomes.

Two components make up the model's competition dummy variable. Both try and capture how uncertain electoral outcomes are across the provinces through the observation of electoral results.

The first component is a District Level Competition (DLC) Index. In Holbrook et. al. (1993), the authors find a connection between political competition and public policy outcomes. The authors argue that elected officials in competitive areas will be relatively more responsive to constituency needs due to the risk of electoral defeat. The majority of competition literature utilizes the Ranney Index, which is a measure of the strength of a democratic party in a state government, which is not based on election results, but rather simply party characteristics. Holbrook et. al. (1993) utilizes the DLC Index as a measure of party strength relative to competing parties through the observation of election results. I draw from their model, because of its ability to capture institutionalized uncertainty.

The DLC Index value is created from the following formula:

$$\text{DLC Index Score} = 1 - ((\text{DPShare} + \text{GoberShare} + \text{Winner's Bonus} + \text{Margin Victory}) / 4)$$

- DPShare is the average vote share of the winning party in provincial deputy elections.

This measure is included as a basic indicator of electoral competitiveness in provincial deputy elections. A higher winning party vote share is indicative of less competition within the provincial legislature, which allocates seats roughly in proportion to votes.

- GoberShare is the average vote share of the winning candidate in the provincial governor's elections. Again, this is a measure of fundamental electoral competitiveness.

A governor who commands a higher vote share will in theory be less subject to institutional uncertainty.

- Winner's Bonus is the ratio of the percentage of seats garnered in provincial deputy elections to the percentage of votes received. This variable measures the overrepresentation in the legislature of the winning party and captures the institutional characteristics of a province. A higher winner's bonus indicates a provincial political climate that is less conducive to giving equitable seat shares to opposition parties.
- Finally, MarginVictory is the difference in the percentage of votes garnered by the first and second place candidates in electoral contests for the governorship. This takes into account how close elections are. Competitive elections in theory should drive candidates to be more responsive to constituencies out of their fear of losing their jobs.

The DLC Index offers a well rounded snapshot of the provincial electoral environment. It is efficient in my model to use such an aggregation of electoral variables because of the limited number of cases available to estimate robust coefficients. Estimating individual coefficients if all of the above variables were included as regressors would not be economical in utilizing degrees of freedom. Likewise, an aggregate index of electoral variables is able to capture the inherent effects of the different electoral conditions working together to foster institutionalized uncertainty.

A province's DLC Index score can range from 0 to 1. From 1991 through 1999, DLC Index scores used in the model ranged from a maximum of .72 to a minimum of .43 with a standard deviation of .06. DLC scores closer to 0 are indicative of less competitive provincial political environments and scores closer to 1 indicate more competitive electoral environments.

Intuitively, provinces with lower winning vote shares, winner's bonuses, and margin of victories, (all indicative of a greater degree of political competition), will have higher DLC Scores as the term being subtracted from 1 in the index formula will be relatively smaller.

Taken by itself, the DLC Index score is not enough to define institutional uncertainty, since the index only takes into account electoral results at their face value. However, an important component to institutionalized uncertainty is actual alternation of power. In Huntington (1991) consolidation of democracy is not satisfied until passing a two-turnover test. Alternation whereby a government loses an election to the opposition, and subsequently the opposition loses in the following election, is a necessary characteristic of democracy. A province could have the slimmest margins of victory, vote shares for electoral winners, and winner's bonuses, but if alternation in power has never taken place in a newly democratic regime, it is hard not to say that politicians have complete certainty over their positions in power. Alternation signifies the existence of at least some form of democratic culture, whereby leaders understand their power may be fleeting. Therefore, the second part of my competition dummy variable takes into account whether there has ever been an alternation of power in the provincial governorship and legislature.

Alternations in power are important because if elections have been close, but never lost, institutional uncertainty is not fully present. Closer electoral statistics may indicate that politicians have to work harder or even differently for votes in tightly contested provinces. However no alternations would seem to indicate that incumbents have shaped the rules of the game to preserve the status quo. In such cases, institutionalized uncertainty cannot be assumed.

Election results were observed from 1983, the onset of democracy in Argentina, through the present and power swaps were identified in both provincial deputy and governor elections. Elections from 1983 to 1991 are prior to my model's period of analysis. However, it is important to take these prior years into account in order to understand the political culture within a

province. A transfer in power prior to my model's period of study will still indicate some level of uncertainty in election results.

In deciding which provinces warranted the categorical separation on the basis of having competitive political environments, my basic rule of thumb was that a competitive province had a DLC Index score of greater than .68 and had at least some evidence of power alternation in both the governorship and legislature. In order to test the robustness of the above strategy, I performed individual regressions (not reported) using different techniques for choosing which provinces were deemed competitive. When alternations of power were ignored in formulating the competition dummy, the regressor's coefficient and significance remained nearly unchanged, which is expected since generally higher DLC Index scores are also associated with alternations in power. However, as I lowered the acceptable threshold DLC score for deeming a province competitive, the dummy variable's coefficient began losing its significance and practicality. Therefore, I am confident that my selection of competitive provinces is applicable to what is actually occurring politically in country.

To examine the possible extent in which institutionalized uncertainty affects economic growth, I ran four specifications varying based on the period of observation. The first is a baseline specification that encompasses the years 1991 through 1999, corresponding to the duration of the Cavallo Plan. Next, three more specifications were created, splitting the period of 1991 through 1999 into three intervals. The first is 1991 through 1994. The second is a one year analysis of 1995, which is the year Argentina was pushed back into economic crisis, stemming from the spillover effects of the Mexican economic crisis. Finally, the 3rd period is from 1996 through 1999. Cross sectional analyses, which are a standard type of analysis in regime oriented

literature (see Nelson et. al.) were ran instead of implementing a time series analysis because of the mismatch of electoral data points, which were not all occurring uniformly.

THE BASELINE MODEL: 1991 through 1999

In the findings for this period displayed in Table I, some interesting results occur when modeling economic growth rates as a function of the competition dummy, along with human development and economic controls. Overall, the regression explains 58% of the total cross-provincial variation in economic growth rates from 1991 to 1999. On a whole, the model is significant at below the 1% level, indicating that the coefficients taken together are extremely robust in explaining economic growth across the provinces in Argentina.

Individually, some of the regressors are lacking explanatory power within the model. Initial, export share of GSP, and total government expenditure per capita are extremely insignificant. We cannot reject that these coefficients are significantly different than zero.

The percentage of the population living without basic needs has an effect on economic growth according to the model. The NBI regressor is significant at the one percent level with a coefficient of $-.156$. The interpretation of this coefficient is counterintuitive. As NBI increases one unit, more individuals are living *without* basic needs. Therefore, as NBI increases one unit, the population is less developed and therefore economic growth will decrease by around 15 percent. This result seems to be in line with the Lucas (1988) national level study of the affect of human capital on economic growth. Controlling for economic development level, the human capital stock at the provincial level seems to be important in explaining provincial growth trends. This suggests some provincial divergence during the period, as the best-off economically are also generally the provinces with the highest human development stocks.

However, when interpreting the NBI coefficient, it is important to keep in mind the scale of the variable in order to determine whether its effect is economically significant, affecting economic growth in an amount that is practical to interpret. While a one unit change in NBI will cause economic growth to decrease by 15%, the NBI variable can only range from 0 and 1. Therefore, the difference in economic growth between provinces with none of the population living without basic needs and those with one hundred percent living without basic needs is 15%. Variation in NBI levels across provinces is not this extreme. The standard deviation across all observations included in the model of %NBI is around .09 or 9%. Therefore, the average decrease in annualized growth from NBI effects is around -1.5%. Over the nine years of structural reform this would be over a 14% decrease in economic growth for provinces that are within one standard deviation of the mean %NBI.

The initial GSP per capita variable is also significant in the model at the 1% level. Remember, the GSP variable is in units of thousands so an increase in 1000 pesos of initial GSP per capita at the onset of the period of the model, will cause a .1% decrease in economic growth. While the actual coefficient is practically much less significant than %NBI, it does suggest that aggregate level growth theory is pertinent to a subnational analysis (See Neoclassic Growth literature review). This coefficient shows the existence of a slight convergence of growth rates, as initially less developed provinces have slightly higher growth over the period.

The big finding of the model is that the competition dummy is significant at below the five percent level. Being deemed a competitive province increases annualized economic growth by 1.5% relative to provinces that are deemed to be non-competitive. Again, this coefficient is also economically practical because taken over the period of the model; a 1.5% increase in annualized

economic growth would make competitive provinces have total economic growth over the period of structural reform that is over 14% relatively higher than non-competitive provinces.

1991 through 1994 Specification:

Over a decade, much economic variation can occur as markets mature and international and domestic economic actors change their sentiments about the economy. Therefore to add to the robustness of the above results, the baseline specification was split up in order to determine if the effects of the regressors were consistent across the period.

The same model as the baseline specification yielded slightly different results from 1991 through 1994 (See Table II). The model explained over 40% of the variation of economic growth across the provinces over this four year period alone and was significant as a whole at the 1% level.

The initial GSP per capita variable was not significant during this period, but retained its negative coefficient, showing some continuity with the baseline model. %NBI was still highly significant at below the 1% level and had a coefficient of -.313. Compared to the baseline specification, the %NBI became more powerful in explaining variation in growth. The competition dummy also retained its positive coefficient, but is only significant at the 10% level in this specification.

1995 Crisis Year Specification:

The one year period covering the 1995 economic crisis in Argentina, yielded drastically different results in the model. The regression taken as a whole was tremendously significant, explaining over 87% of the variation in economic growth across the provinces and is significant at below the 1% level. However, neither the competition dummy, %NBI, nor the initial GSP per capita variables were significant. Instead, during this year of economic crisis, both government

per capita spending and export share of GSP were vital in explaining economic growth, or rather lack thereof during the crisis.

In order to control for any endogeneity associated with an income effect the economic crisis may have in driving the actual total expenditure amounts of 1995, an average of the previous three year's total expenditures was utilized. By using the average total expenditure levels of the previous three years in this specification, I hope to capture the effects equilibrium levels of expenditure have on the provincial economic outcomes of the crisis. In the 1995 crisis specification, government per capita expenditure is significant at below the 1% level with a coefficient of $-.039$. Therefore, with an increase of 1000 pesos of additional per capita expenditure, provincial economic growth would be almost 4% relatively lower.

Export share of GSP was also significant at near the 1% level with a coefficient of $.556$. This result seems to indicate that provinces that are more integrated into international markets do relatively better during times of economic crisis.

1996 through 1999 Specification:

After the economic crisis of 1995, Argentina emerged with positive aggregate economic growth in 1996. The model over this period seems to be weaker, explaining only 25% of the variation in economic growth across the provinces. This is the only specification that is not significant as a whole at below the 1% level and is only significant at the 10% level.

Individually, only the competition dummy and the government per capita expenditure variables are significant at the 10% level. The competition dummy retains its positive coefficient and the expenditure variable much like during the 1995 crisis specification remains negatively associated with economic growth. After holding explanatory power in previous specifications, %NBI is not significant in the 1996 through 1999 model.

VI. What Electoral Competition Creates to Spur Growth?

Except for the crisis year, the model clearly indicates that institutionalized uncertainty matters in driving economic growth over periods of structural reform. However this study is also interested in determining what causal mechanisms institutionalized uncertainty creates within provinces, which drive better economic outcomes.

Taken from the literature, one hypothesis is that institutionalized uncertainty creates a political culture of less corruption and more constituency response. Both push provincial government toward policy that is more conducive to the adoption of structural reform and therefore relatively higher economic growth. Remmer et. al. (2000) postulates that political competition enables adjustment by undermining the tendency of provincial governments to create and maintain bloated public sectors. During periods of structural reform, costs are immediate, but gains are not easily quantifiable and will only be realized in the future. Therefore, there is little pressure on current provincial regimes to adopt policy that may potentially hurt their constituencies and their hold on power.

However, with increased competition, there is no political advantage to patronage and more willingness to push policy toward alignment with structural reform. If a party has a competitive electoral climate, then returns to patronage, or handing out jobs become equalized as more parties have access to the power needed to dole out public jobs to the constituency for votes. Thus, provincial parties in this competitive climate must search for other means through which to mobilize support. One avenue is promising a better future through the implementation of structural adjustment. While these reforms are particularly risky in the short-run, politicians must go out on a limb because patronage will not be viable in attracting the median voter needed to maintain their power (Remmer et. al. 2000).

Likewise, Careaga et. al. (2002) discusses possible avenues through which good governance enables other growth promoting provincial policy. The authors indicate that sub-national governments allocate their resources across two categories of policy: (1) Public goods that foster markets, and (2) The provision of public benefits (aka corruption/patronage). Like all economic actors subject to budget constraints, politicians will choose an expenditure path that maximizes their utility, which in the politician's realm is maintaining power. Public goods, such as schools, hospitals, and infrastructure, provide utility directly to citizens and indirectly increase tax revenue, allowing the government to provide more such public goods. Corrupt subsidies and patronage only benefit the citizens directly receiving the benefits. This paper will ignore the possible spillovers existing when individuals on the public payroll spend their subsidies (or income) giving others earning potential. Assuming government officials want to stay in office by generating public support, the authors point to the necessity of increased public good provision and less patronage spending in order to be able to attract the median voter in competitive elections. More spending on public goods will foster economic growth relatively better than non-productive transfers to a select few of the constituencies on the public dole.

VII. Provincial Expenditure's Inverse Relationship with Institutionalized Uncertainty

In light of the literature dedicated to explaining public consumption choices, I wanted to test whether or not competitive provinces in Argentina had differing expenditure allocation. Drawing from the literature, competitive provinces should spend relatively more on market fostering public goods, such as health, education, and infrastructure and less on public bureaucracy and other areas dedicated to patronage and corrupt subsidy.

To test whether expenditure allocation differs across competitive and non-competitive provinces, individual regressions were run of the individual government expenditure categories

on the DLC Index number. Again the DLC Index measures electoral uncertainty, which should drive expenditure allocation as provincial governments with more competition will see decreasing returns to patronage and an increased incentive to attract median voters with public goods provision.

All regressions also include the percentage of the population living with basic needs unsatisfied as a control for need based expenditure and average provincial GSP per capita levels to control for any income effect on government expenditure. For instance, it is expected that provinces with high illiteracy may spend more on education than other provinces in an attempt to remedy lackluster education numbers. Likewise, depending on the level of economic development, provinces may have the means to spend more or less in general. Therefore, by controlling for NBI and GSP per capita levels, the pure effects from the DLC index will be able to be teased out of the variation in government expenditure. The results are presented below. Each of the following regression statistics are from individual regressions of the DLC Index and development controls on the individual expenditure listed in the left most column:

DLC Index and Public Consumption (controlling for development)		
Public Expenditure	DLC Coefficient	T- Stat
Total Expenditure	-7.76	-2.30*
Gov. Administration	-2.98	-3.32**
Security	-.25	-2.21
Social Services	-2.98	-2.05*
Health	-.55	-2.26*
Social Assistance	-.28	-2.08*
Education	-1.31	-1.85*
Potable Water	-.26	-2.14*
Pub. Employees / 1000	-144.25	-2.57**

* Significant at the 5% level **Significant at the 1% level

In order to accurately interpret the above regression outputs, all expenditure data was presented in constant 1993 thousands of pesos. The DLC index is a number from 0 to 1, however the minimum DLC score in the model was .43 and the maximum was .72. Remember, a high DLC Score is indicative of a province with higher levels of institutionalized uncertainty.

The output above, illustrates some expected an unexpected results pertaining to institutionalized uncertainty and expenditure allocation. While it was previously hypothesized that competitive regimes would spend more on public good fostering expenditures, more competitive regimes seem to have spent significantly less on all major public consumption choices. While the hypothesis about public good expenditures is wrong, it is true that competitive provinces spend less on the public sector, which indeed indicates that competitiveness leads to less unproductive subsidies and patronage.

Reverting back to the specification of the year of economic crisis in 1995, the competition dummy was not significant. However, government per capita expenditure was highly significant and inversely related to economic growth. Therefore, in light of the individual expenditure regressions implemented above, electoral competition is inadvertently significant in this model because of the fact that electorally competitive provinces spend less, which was a condition that created better economic outcomes during the time of economic crisis.

VIII. Conclusion

The main conclusion that should be drawn from this subnational growth study is that institutionalized uncertainty within a provincial political climate fosters relatively higher provincial economic growth. The baseline specification encompassing the years 1991 through 1999, found the competitive dummy to be significant at below the 5% level, demonstrating the positive long run effects institutionalized uncertainty has on economic growth. The other

specifications, except for the crisis year, also indicated that the institutionalized uncertainty variable was significant at the 10% level or better. While the crisis year's specification did not hold institutionalized uncertainty to be significant, it provided valuable insight into why increased political competition also inadvertently matters. The study found that with increased political competition, provinces spend less on unproductive patronage and align themselves with national level ideals of economic restructuring. These expenditure patterns held first order effects in both the specification of the crisis year and the specification of 1996 through 1999.

While the shorter duration secondary specifications may not have been as robust in illustrating the first order effects institutionalized uncertainty has on economic growth, more weight should be given to the baseline specification because of its longer time frame. Over the period of study from 1991 to 1999, the Argentine provinces were dealing with many simultaneous economic issues. In such a tumultuous time, it is my view that models over shorter intervals are not able to capture the true average effect of a variable. A model over a longer time frame is able to reduce the effect any one major economic event may have on the model. This allows the model to capture a more robust snapshot of how a variable, such as institutionalized uncertainty, truly affects economic growth over time.

These findings hold serious implications for the future development strategies of aspiring nations. The significance of institutionalized uncertainty proves that variation in subnational political development must be a concern to anyone with ambitions of promoting economic growth across a nation. Throughout the neoliberal era, decentralization has been promoted as a way to achieve better economic outcomes. However, this study shows that in empowering subnational political units in Argentina, diverging economic outcomes will likely occur as provinces exhibiting institutionalized uncertainty grow relatively faster over time. As

development divides emerge and persist, discontentment may arise as some individuals living in poorer regions begin to feel left behind. This discontentment can lead to situations of rebellion and armed conflict, such as in Chiapas, Mexico in 1994. Such rebellions hold adverse consequences to both future political and economic development. In order to promote growth equitably and to avoid increasing development divides, internal political environments must be taken into consideration. Special incentives must be created at the subnational level in order to get politically uncompetitive provinces to jump on board with responsible growth promoting policy, such as spending less on unproductive patronage.

While the findings of this study are interesting, there is much more work that needs to be done in explaining the variation in economic growth across provinces in terms of political development. This study was narrow in its use of electoral results as an institutional variable serving as a proxy for political development. As better disaggregated data becomes available, it will be worthwhile to apply a similar growth model as this study has done, but adding a revamped main independent variable, which includes societal characteristics such as rule of law indicators, a quality of institutions measure, and corruption levels. The inclusion of these indicators will provide a more robust picture of how an overall more democratic environment affects growth at the provincial level.

This study has tried to pinpoint the underlying mechanisms behind political competition that spur better economic outcomes. Further study is needed in this area as well, especially focusing on how private investment varies across provinces with different political development. Unfortunately, disaggregated private investment data was not obtainable for this study. Being purely speculative, it is my view that a direct relationship exists between more politically

developed provinces and higher private investment flows. I believe this occurs do to the inherent stability and better institutions associated with increasing levels of political development.

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Table I: Specification for 1991 through 1999**Model Summary (b)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.823(a)	.677	.588	.0140359084 54631	1.524

a Predictors: (Constant), Exp91to99, Comp91to99, GSPCap91, NBI91, GastoTot91to99

b Dependent Variable: GeoGSP91to99

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.007	5	.001	7.563	.001(a)
	Residual	.004	18	.000		
	Total	.011	23			

a Predictors: (Constant), Exp91to99, Comp91to99, GSPCap91, NBI91, GastoTot91to99

b Dependent Variable: GeoGSP91to99

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.058	.012		87.904	.000
	Comp91to99	.015	.006	.331	2.394	.028
	GastoTot91to99	-.002	.003	-.098	-.455	.654
	GSPCap91	-.001	.000	-.622	-3.098	.006
	NBI91	-.156	.036	-.643	-4.304	.000
	Exp91to99	-.007	.057	-.021	-.125	.902

a Dependent Variable: GeoGSP91to99

Table II: Specification for 1991 through 1994
Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.735(a)	.540	.412	.0330635612 50754	1.967

a Predictors: (Constant), Exp91to94, Comp91to99, NBI91, GSPCap91, GastoTot91to94

b Dependent Variable: Geo91to94

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.023	5	.005	4.220	.010(a)
	Residual	.020	18	.001		
	Total	.043	23			

a Predictors: (Constant), Exp91to94, Comp91to99, NBI91, GSPCap91, GastoTot91to94

b Dependent Variable: Geo91to94

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.094	.031		34.750	.000
	Comp91to99	.029	.015	.321	1.911	.072
	NBI91	-.313	.099	-.651	-3.155	.005
	GSPCap91	-.002	.002	-.456	-.891	.385
	GastoTot91to94	.000	.006	.035	.067	.947
	Exp91to94	.139	.170	.166	.820	.423

a Dependent Variable: Geo91to94

Table III: Specification for 1995 - The Crisis Year

Model	Variables Entered	Variables Removed	Method
1	Exp95, Comp91to99, GSPCap95, AvgGastoPerCap91to94, NBI91(a)	.	Enter

a All requested variables entered.

b Dependent Variable: Grwth95

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.949(a)	.901	.872	.0519867108 3191	2.267

a Predictors: (Constant), Exp95, Comp91to99, GSPCap95, AvgGastoPerCap91to94, NBI91

b Dependent Variable: Grwth95

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.420	5	.084	31.069	.000(a)
	Residual	.046	17	.003		
	Total	.466	22			

a Predictors: (Constant), Exp95, Comp91to99, GSPCap95, AvgGastoPerCap91to94, NBI91

b Dependent Variable: Grwth95

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.924	.066		13.961	.000
	Comp91to99	-.021	.025	-.070	-.822	.423
	NBI91	.221	.171	.139	1.288	.215
	GSPCap95	.005	.003	.170	1.427	.172
	AvgGastoPerCap91to94	-.039	.004	-1.019	-10.381	.000
	Exp95	.505	.176	.245	2.866	.011

a Dependent Variable: Grwth95

Table IV: Specification for 1996 Through 1999
Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.643(a)	.413	.250	.0205159994 55685	2.098

a Predictors: (Constant), Exp96to99, Comp91to99, GSPCap96, GastoTot91to99, NBI91

b Dependent Variable: GeoGSP96to99

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	5	.001	2.537	.066(a)
	Residual	.008	18	.000		
	Total	.013	23			

a Predictors: (Constant), Exp96to99, Comp91to99, GSPCap96, GastoTot91to99, NBI91

b Dependent Variable: GeoGSP96to99

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.044	.026		40.251	.000
	Comp91to99	.019	.010	.388	1.956	.066
	NBI91	-.076	.068	-.289	-1.114	.280
	GSPCap96	.000	.001	-.106	-.381	.708
	GastoTot91to99	-.003	.001	-.386	-1.723	.102
	Exp96to99	-.082	.059	-.278	-1.375	.186

a Dependent Variable: GeoGSP96to99

