Gerrymandering—Vietnamese Style: Escaping the Partial Reform Equilibrium in a Nondemocratic Regime

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Hellman's (1998) depiction of the Partial Reform Equilibrium (PRE) presented a prophecy of despair for many transition economies. Because winners from initial economic reforms could use their newfound power to block further reform initiatives that might undermine their lucrative positions, escaping the PRE trap required the simultaneous resolution of two conundrums. Policymakers interested in furthering transition needed to both overcome opposition from the concentrated group of early winners and unite a disparate group of potential beneficiaries from future reforms into an alternative coalition. In this article, I rigorously test the theory that Vietnamese reformers managed to solve both dilemmas and to escape their unique partial reform trap through the targeted creation of new provinces in 1996. The tactic provided reformers with a majority of votes in the Central Committee, allowing them to push through a series of economic initiatives directly at odds with the State Owned Enterprise Sector, Vietnam's early winners.

In a seminal article, Hellman (1998) argued that the most serious political obstacles to economic reform come not from the short-term losers, but from the short-term winners. Groups that gain from early reforms, be they privatization insiders, state-owned enterprise (SOE) managers, natural resource exploiters, or oligarchs, have a stake in maintaining a Partial Reform Equilibrium (PRE), where future reform progress that damages their previous gains are blocked (Murphy, Shleifer, and Vishny 1992). The archetype for PRE was Russia, where rapid privatization empowered a small group of former SOE managers and connected entrepreneurs, who then sought to block the creation of regulatory institutions and competition policy that threatened their lucrative positions (Frye 2007; Hellman 1998). The theory, however, was meant to apply to reform sequencing generally, implying that whatever policy choices a state makes to initiate a reform program create entrenched interests with an incentive to resist future policies (Frye 2007).

PRE helped explain two puzzles in the transition literature. First, it helped analysts understand why many countries accelerated reforms early in the transition process, but stagnated over the course of the 1990s. Secondly, it demonstrated that political systems more inclusive of losers, such as parliamentary systems, were able to adopt and sustain more comprehensive economic reforms than states insulated from popular pressures, such as single-party states and strong presidential systems (Slantchev 2005). Authoritarian systems were more likely to remain stuck at low levels of reform, because their leaderships were easily captured. Early "winners" only needed to concentrate their lobbying on a single focal point (Hellman, Jones, and Kaufman 2000; Hoff 2000).

Regime type, however, is only an indicator of whether the PRE is likely to be present; it is not a solution. Hellman did not explain how states escape the trap once in it, leaving a prophecy of despair for a wide swathe of countries. For using the same logic, if economic reform predates democratic reform, political change will be extraordinarily difficult if not impossible (Pei 2006). Entrenched winners have domestic political power and should be just as likely to block threatening political reform as new economic policies. The World Bank (2002) attempted some guidance for captured regimes including: mobilizing the electorate for reform, empowering excluded enterprises, ensuring free media, and increasing transparency. These suggestions, however, fail to acknowledge the underlying logic of Hellman's theory. Unless

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the entrenched winners are severely myopic, they will never allow such efforts to see the light of day. Winners should immediately calculate that political reforms will hurt their long-term prospects and put pressure on their political benefactors to stop them. Thus, breaking out of a low-level, PRE trap requires that reformers solve two simultaneous political dilemmas. They must overcome opposition from the powerful and concentrated group of early winners, and they must unite a highly disparate group of potential beneficiaries from future reforms into an alternative coalition (Mitra and Selowsky 2000). Because of the difficulty of these two tasks, escape from the PRE is very rare, particularly in nondemocratic regimes. In fact, the major finding of the transition literature in recent years is quite depressing. Most transition states have been unable to escape the trajectory set in place for them by their historical legacy (De Melo et al. 1997) and the political institutions engendered by that legacy (Horowitz 2004; Kitschelt 2003; Kopstein and Reilly 2000). As a result, analysts should pay careful attention to success stories of escape in authoritarian contexts, as they impart important theoretical lessons for other trapped countries. Vietnam is just such a case.

Members of the reform camp of the Vietnamese leadership faced a classic case of the PRE in the midnineties. Early economic reforms initiated in the late 1970s granted SOEs a dominant market position. They now possessed virtual monopsony purchasing power over primary products, unprecedented profits, and dominant access to the export market (Fforde 2004, 2007a; Riedel and Turley 1999, 33). Just as the logic of the PRE would predict, SOEs used their newfound power to prevail in Hanoi and threatened to succeed at subsequent Party Congresses and plenums of the Central Committee (CCOM) of the Vietnamese Communist Party (VCP), blocking any reform that would hurt their dominant market position (Riedel and Turley 1999, 34; Vasavakul 1997, 89–90). Attempts by reform-minded delegates in the CCOM to push new reform policies forward were met with consistent and widely publicized failure (Abuza 1998; Fforde 2007b, 1; Kolko 1997, 143; Vasavakul 1997, 103).

Looking back in 2008, Vietnam presents a stark puzzle to analysts of economic transition. There have been no fundamental changes in the country's political institutions, the VCP is still the sole political party and ultimate authority, and SOEs continue to account for about 40% of national GDP (GSO 2005), 36% of national revenue (GSO 2005), and 10% of the labor force (MOLISA 2005)—the exact same amount they accounted for at their peak in 1994. And yet since 2000, Vietnam has been pushing a rapid economic reform agenda, where nearly every policy change has been directly at odds with the interests of SOEs, including: the privatization of nearly 3,000 enterprises (Xinhua 2006); the Enterprise Law, which significantly eased the entry of private firms into the market, leading to 200,000 registered private entities by 2007 (many competing directly against SOEs); a stock market that provided an outlet for the sale of privatized SOEs; and the 2001 Bilateral Trade Agreement with the United States, which guaranteed national treatment for American firms investing in Vietnam and paved the way for entry into the World Trade Organization (WTO). The changes have helped propel Vietnam to a 7.5% average annual GDP growth between 2001 and 2005, the second fastest in the world behind only China (Economist 2006). Awestruck authors have glowingly referred to the country as the ''The Transition Tiger'' (Van Arkadie and Mallon 2003), ''Socialist Star'' (Pritchett 2003), and even ''The Good Pupil'' because of the country's adherence to the *Economist*'s favored open-market prescriptions (*Economist* 2004).

In this paper, I provide and test one argument for *how* Vietnam managed to escape its partial reform trap. That is, I study the political process by which those favoring economic reform defeated the entrenched SOE sector and pushed through a package of policies contrary to state-sector interests. *Why* these reformers favored further liberalization is beyond the scope of this article. A wide range of international and domestic factors played roles, including economic competition with China, providing jobs for the 1.4 million annual new entrants to the labor force, the growing influence of FDI, the recession caused by the Asian Financial Crisis, and the individual characteristics of the reformers themselves. The relative importance of each of these factors cannot be adequately ascertained in an article on a single country. While other countries may have faced these same underlying determinants, the specific political process by which the PRE was overcome is contingent on their constellations of domestic political institutions. In this piece, I take as my starting point that Vietnamese reformers were interested in moving beyond early economic policies. Given the strong entrenched interests opposing their initiatives, how did reformers increase their voting power in the CCOM and gain a majority of votes at the 2001 Party Congress?

Although Vietnamese reformers engaged in myriad political tactics designed to bolster their agenda,

I narrow my analytic lens on arguably their most successful—a Vietnamese version of gerrymandering. While gerrymandering typically connotes a ruling group's tactic for *preserving* the status quo, strategic use of the tactic in Vietnam actually allowed challengers to *overturn* it.[1] Specifically, Vietnamese reformers carefully divided provinces dominated by SOEs (in terms of output and revenue) to create pairs of new provinces; one still dominated by the state sector (SOE-Dominant Provinces), but the other where the majority revenue earners were members of a disparate group of economic entities, who all stood to benefit from reforms that undermined SOE power (Nonstate Provinces). Known collectively as the nonstate sector, these entities included household enterprises, formal private firms, and foreign companies. Beginning with the Seventh Party Congress in 1991, provincial representatives received full-fledged membership on the CCOM (Elliot1992; Riedel and Turley 1999, 19). Because the Nonstate Provinces were less dependent on SOE revenue, they were more willing to vote for progress on economic reforms. Thus, splitting provinces accomplished the two necessary tasks of escape from PRE—it created a coalition of potential winners from future reforms and, in 2001, yielded reformers a majority of votes in the CCOM.

The argument is divided into five parts. First, I look at the creation of subnational units in comparative context. Second, I study the chronology or economic reforms in Vietnam and the key coalitions of political actors that crystallized after the initiation of early policies. Third, I explain how the creation of new provinces worked in Vietnam and provide circumstantial evidence for a theory of gerrymandering to create a majority of reform voters in the CCOM. Fourth, I use a linear probability model to test this theory along with alternative hypotheses from Vietnam and the broader political science literature, showing that SOE-Dominant Provinces were specifically targeted for separation in 1996, immediately after the reformers' famous defeat at the 8th Party Congress. Finally, I explore three observable implications of my gerrymandering theory. I demonstrate that (1) Nonstate Provinces were positively inclined toward private firms in their local policies; (2) Nonstate Provinces were more likely to choose CCOM delegates with reformist affiliations; and (3) Side payments were made to individual central conservatives in order to win their acquiescence.

Subnational Divisions in Comparative Context

Since 1990, Vietnam has created 24 new provinces for a total of 64. In that time frame, no country has created more.[2] Vietnam now has nearly twice as many provinces as India (35) and China (28), countries with over 10 times the Vietnamese population. Most work on the creation of new geographic units in other developing countries has focused on the process of constructing new units to accommodate the representational demands of ethnic-minorities, a process referred to as *ethno-federalism* (Hale 2004).[3] But ethnofederalism is of limited utility in explaining provincial splitting in Vietnam's relatively homogenous population. The population is 86% ethnic Vietnamese (*kinh);* and in 83% of the newly constituted Vietnamese provinces, minorities represent less than half the population.

The proliferation of provinces in Vietnam also contradicts the pattern of other transition states, which have favored the consolidation of subnational units in the course of economic reform. In 1998, the Sejm approved legislation transforming Poland's 49 provinces into 16 larger units (Law 2005). Kazakhstan merged six provinces into three to reduce its total number to 17 in 1997 (Law 2005). And Gennady Seleznev, the speaker of the Russian Duma, has voiced a desire to reduce the number of federal subjects from 89 to 40 (Reut et al. 2003). According to Meligrana (2005), mergers make much more sense for developing countries due to international pressure. Globally, local governments have been enlarged in scope and reduced in number (Meligrana 2005, 1). As a contradiction to this trend, Vietnam's provincial splitting warrants serious investigation.

[1]My use does conform to Bernard Groffman's (1985) definition in his Congressional Testimony: ''Fragmenting or submerging the voting strength of a group to create districts in which that group will constitute a near certain minority.'' Nevertheless, it lacks the common implication of an incumbent using their power of redistricting in defense of the status quo and drops the more controversial affiliation of gerrymandering with the institutionalization of discrimination by party identity or race (Dyckman 2003; Marelius 2005).

[2]Although, Uganda (22), Burkina Faso (15), and Nigeria (11) have also been active creators of first-tier units.

[3]See for example: Dent (1995) on Nigeria, Mawdlsey (2002) on India, Barron, Kaiser, and Pradhan (2003) and Klinken (2004) on Indonesia, and Leff (1999) and Roeder (1991) on the USSR.

Partial Reform in Vietnam

By the early 1990s, Vietnam found itself in a classic case of the PRE. The sequencing of reforms initially favored SOEs, who subsequently used their newfound economic and political power to block further reform policies (such as privatization and further trade reform) that might undermine their early gains. In this section, I lay out the chronology of events that led to the partial reform trap and detail the elite political alliances that emerged in the CCOM as a result of it. The discussion provides context for the gerrymandering tactic employed by reformers in later years.

The Sequencing of Economic Reform in Vietnam

In the decade leading up to the *Đổi Mới* (renovation) reforms in 1986, SOE managers felt pinched by restrictive state control over their operations and investment decisions. They argued for more operational autonomy and emerged as strong advocates for economic liberalization in national policy debates (Fforde 1993, 2007a; Stern 1989, 7). The most critical early reform for SOEs was a 1979 decision to enact the ''Three Plan System.'' Under Plan 1, SOEs received subsidized inputs but were obligated to sell a set amount of product to central authorities. Plan 2 permitted SOEs to produce beyond the quotas of Plan 1 and buy additional inputs if necessary. Plan 3 allowed SOEs to sell surplus product at market prices (Riedel 1995). Further reforms at the Eighth Plenum of the CCOM in 1985 expanded the ability of SOEs to charge market prices and retain profits (Stern 1989, 8). The incentive structure of the three plans provided an immediate boost to state-led industrial activity in the 1980s, but also had severe macro-economic consequences (Riedel 1995). The subsidies created large public deficits and consequently rapid expansion of the money supply. A surge in inflation followed that was exacerbated by rising prices for Plan 3 products (Le1992, 100). Despite the economic crisis, SOEs were reluctant to give up either their subsidized inputs or market pricing ability (Riedel 1995).

The *Đổi Mới* reforms at the Sixth Party Congress in 1986 reacted to the ensuing crisis and formalized Vietnam's shift toward a market economy, but noticeably did not touch the SOE-dominated industrial sector, which in 1987 was actually provided with greater autonomy over pricing decisions and a wider range of products that could be sold at market prices (Stern 1989, 20). *Đổi Mới* concentrated primarily on the liberalization of agricultural production. Another partial reform in 1987 further enhanced the economic power of SOEs. Trade was liberalized, but was rooted primarily through about two dozen SOEs under the Ministry of Trade known as Foreign Trade Organizations (Schmidt 2004). In addition, some select SOEs were given the right to apply for individual import/export licenses (Fforde 2004, 2007a).

Consequently, after the initial series of reform policies, SOEs found themselves in an increasingly dominant position. Subsidized access to credit, land, and key inputs, along with liberalized sales prices, provided SOEs with unprecedented profits. At the same time, their privileged position with regard to trade granted them monopsony purchasing power over agricultural products and raw materials, which they could sell for larger profits on international markets (Doanh 1992, 119). Future reforms required for Vietnam to make the leap to a true market economy, such as greater openness to trade and a fairer playing field for the nascent private sector, threatened these privileges and convinced SOE managers, provincial leaders dependent on SOE output, and ministries that controlled large centrally managed enterprises (i.e., Construction, Energy, and Transportation) to shift their political strategy by aligning themselves with the more conservative elements of the party that opposed privatization and reducing state-sector subsidies for ideological reasons (Vasavakul 1997, 104–108). As SOEs shifted their political alliances against reform, their economic power bolstered the conservative forces. Consequently, ''The party's survival and identity needs thus merged with state-sector interests in an SOE-focused development strategy'' (Riedel and Turley 1999, 34).

The SOE-conservative coalition was opposed by a smaller group of modernizers led by Prime Minister Vo Van Kiet, his successor Phan Van Khai, and Foreign Minister Nguyen Co Thach; who, drawing on the Chinese experience, began to argue for deeper economic reforms, including relaxing protections afforded SOEs and liberalization of trade to a wider group of actors and lower tariffs, in order to prevent Vietnam from lagging behind other developing countries. These initiatives were a direct threat to SOE privileges and to those who drew their livelihood from the state sector. Kiet and his allies increasingly found themselves on the losing end of CCOM debates. An attempt by reform-minded delegates to remove indirect subsidies to SOEs and put them on the same legal footing with the private and foreign sectors failed at the Eighth Party Congress in 1996.

Instead, the Congress issued a report arguing that state share of the economy should increase (Abuza 1998; Kolko 1997, 143; Vasavakul 1997, 103). The report was interpreted widely as a loss to the Vietnamese reformers and Kiet in particular (Fforde 2007, 1; Kolko 1997, 144).

In sum, after 1986, the main issue in the Vietnamese CCOM was support for or against economic policies that might harm SOEs along with their ''owner managers'' at the central and provincial levels, the dominant force in the economy due to the sequencing of early reforms (Fforde 2004; Vasavakul 1997, 89). The voting cleavage at subsequent Party Congresses, therefore, was sectoral, based on relative dependence on the state sector (Vasavakul 1997, 85). The debate broke into the open when Kiet circulated a memo to the Politburo calling for thorough reform of the state sector (Riedel and Turley 1999, 36-38; Vasavakul 1997, 101–104). Work by Vuving (2005) and Vasavakul (1997) has shown that modernizers versus conservatives, led by General Secretaries Do Muoi (1991–97) and Le Kha Phieu (1997–2001) continued to be the dominant debate, with alternative disagreements such as philosophical discussions of the meaning of Vietnamese socialist orientation (Riedel and Turley 1999; Vasavakul 1997) and anti-imperialism (Viet Luan 1996) collapsing onto this dimension (Tonneson 2000). Even national security and the military's role in government were part of this debate, as nearly 12% of the standing army was employed full-time in over 100 military-owned commercial enterprises (Thayer 2004).

Political Coalitions in the Vietnamese Central Committee

China watchers may be surprised at the emphasis on provincial membership and gerrymandering in the CCOM, as the institution has been downplayed in recent Chinese scholarship (Shih 2007; Yang 1996). Like China, Vietnam has a standing committee of the CCOM, known as the Politburo, composed historically of 15 to 19 elite VCP members. Why would voting blocs in the CCOM matter if the Politburo could run roughshod over any decisions they make? In contrast to China, however, the CCOM in Vietnam has proven itself to be quite an important institution, leading to a great deal of scholarship on its composition and the importance of elections within it (Abuza 2002; Brown 1996; Sidel 1996; Thayer 1998; Vasavakul 1997).[4] The *Resolution of the Party National Congress* in Vietnam, prepared two years preceding the Congress by the drafting bodies of the CCOM, creates the framework for subsequent government legislation (Vu 2002; McCarty 2002; Dang and Beresford 1998; Soloman and Ket 2004). The CCOM does not often immerse itself in the nitty-gritty details of future legal documents, but its broad guidelines frame the playing field in which the legislation takes place. Subsequent legal documents almost always contain a preamble that carefully places them within the context of the most recent CCOM guidelines. In a recent letter to the VCP, Kiet highlighted the political importance of the Central Committee by describing its relationship with the Politburo as one of a legislature (CCOM) and an executive that implements the CCOM's decisions (the Politburo), emphasizing that the Politburo does not rank above (*cấp trên*) the CCOM (Vu 2002, 5; Vo 2006).[5] This is not just empty rhetoric. In 1995, Kiet used his powers over the administration to merge ministries, designating conservative bureaucracies as junior partners in super ministries under the control of reformist allies (Kolko 1997, 134; Phong and Beresford 1998, 39). The move cost the conservatives some cabinet seats and therefore votes in the CCOM. This shift is reflected in the decline of conservative cabinet seats from 13.7% to 8% in Table 1. The ministerial consolidation highlights the fact that reformers were willing to use administrative changes to increase their political advantage.

As Shirk (1994) described in China, top leaders in Vietnam are chosen by a ''selectorate'' composed of the CCOM and Party elders, but leadership status is constrained by ''reciprocal accountability'' to the selectorate from whose ranks the Politburo is chosen. While Shirk's account has been criticized (Yang 1996), the evidence suggests that the Vietnamese CCOM is capable of wielding enormous power when this trade-off is not realized. In April 2001, on the eve of the CCOM's last plenum before the Ninth Party Congress, the Politburo voted to recommend Le Kha

[4]In fact, the enhanced representativeness and power of the Vietnamese CCOM was noted with some jealously recently by a large number of Chinese newspapers (Yan 2006; Zhou 2006). In Vietnam, national policy is set at the CCOM Plenums that take place three to four times per year (contrasted with China's annual plenums). The differences between the role of the CCOM in Vietnam and China help explain why gerrymandering was a useful tactic for reformers in Vietnam, but has not been employed in China.

[5]This is also evident in Article 9.2 of the Statutes of the Vietnamese Communist Party: ''In between two Congresses, the leading organ of the party is the Party Central Committee.''

Table 1 Voting Blocs in Vietnamese Central Committee (% of Seats)

	Party Congress			
Voting Blocs	**1991**	**1996**	**2001**	**2006**
Position only in Vietnam Communist Party	16.44	10.12	10.9	16.57
Government Ministry Benefiting from SOE†	13.7	7.74	7.69	2.21
Military Position	10.96	12.5	11.54	14.92
SOE-Dominant Province‡	15.07	20.24	12.82	12.71
Manager of SOE	1.37	3.57	2.56	1.66
Conservative-SOE Coalition	**57.5**	**54.2**	**45.5**	**48.1**
Government Ministry Not Benefitting from SOE	21.92	30.95	30.77	18.78
Non-State Dominated Province*	20.55	14.88	23.72	33.15
Reformers Coalition	**42.5**	**45.8**	**54.5**	**51.9**
Total # of Central Committee Delegates	**146**	**169**	**156**	**160**

Ho Chi Minh City treated as an SOE-Dominated province in 1991 and 1996, because its SOE percentage was 68.24% and 53% respectively, despite the fact some analysts consider it to be at the forefront of reform.
†Government Ministry with management responsibility over SOEs or derives material benefits from SOES (i.e. Ministry of Construction or Ministry of Transportation).
‡State-Owned Enterprise (SOE) sector produces over 50% of industrial output.
*Non-State Sector produces over 50% of industrials output.

Phieu's reappointment as General Secretary of the Communist Party (Thayer 2002. The CCOM overturned this recommendation in a direct vote; instead selecting the President of the National Assembly (NA), Nong Duc Manh (Abuza 2001, 2002). Consequently, it is clear in Vietnam that policy outcomes must reflect the bargaining strength of particular blocs on the CCOM.

Due to the high level of secrecy surrounding the VCP, identifying voting blocs is not an easy task. It is impossible to know how members of the CCOM actually voted. Fortunately, however, we do know the position of each of the 160-odd delegates in the Vietnamese government apparatus and, assuming that bureaucrats "stand where they sit" (Ross Schneider 1993; Searing 1994), we can tentatively extrapolate their votes based on their bureaucratic interests. Such a mapping of the sectoral interests of CCOM members was pioneered by Thayer (1988, 1997) and updated by Vasavakul (1997). Table 1 groups the CCOM into two different coalitions. The conservative coalition is comprised of five groups: (1) members with only a VCP position and no corresponding position in government; (2) members who hold positions in government ministries that directly manage SOEs such as the Ministries of Construction and Transportation; (3) representatives of the military; (4) representatives of provinces with over half of their output produced by SOEs; and (5) managers of large SOEs. An alternative coalition is comprised of government officials who derive no material benefit from SOEs, such as the Prime Minister's Office, NA, and provinces with the majority of the output produced by household, private, or foreign (nonstate) companies.

Through 1996, the conservative coalition held a strong advantage over reformers, but this advantage was completely eradicated by the time of the 2001 Party Congress that rejected Phieu. According to Abuza (2002), Phieu's overall poor performance, lack of attention to reforms, and protection of the state sector were key reasons for the negative vote, where Phieu could not even garner a simple majority of delegates. As Abuza, put it, "With 31% of the CCOM comprised of provincial leaders who were steadfastly against Phieu, it was easy to get an additional 20% of the remaining members to vote against the General Secretary. ... Once quiescent and following the center's line, provincial leaders are now far more assertive and willing to advocate on behalf of their constituency" (2002, 132).

While a fascinating description of the provincial-central politics, Abuza's analysis remains incomplete in two critical ways. First, the creation of new provinces that led to the reformist vote in the CCOM is not explored at all. Abuza assumes that the series of NA resolutions to create new provinces and the VCP decision to give them the vote were completely exogenous to the eventual outcome in 2001. As officials who would be affected by CCOM elections had to authorize the separations, this seems unlikely. Second, Abuza assumes that the provinces were united in a single voting bloc. This is also a cavalier assumption (Shanks et al. 2004, 20) and one directly disputed by Riedel and Turley (1999, 34).

While CCOM debates are not open to the public, discussions in the Vietnamese National Assembly (NA) are, and we can directly observe the statements of provincial delegates. SOE-dominated and Nonstate Provinces were unlikely to vote together on economic reform policies, even if they were both from the same region. Take these excerpts from a debate over state sector reform. On one side of the debate were those favoring a balanced legal regime for all business types. As Ngo Dinh Loan of Bac Ninh (created in the 1996) put it, "On the one hand, the government keeps saying it wants to promote non-state economic players,

but on the other hand it continues to provide credit assistance and administrative and tax favors to large and loss-making state companies'' (VIR 1999). Delegate Nguyen Duc Kien of Hung Yen (also created in 1996) concurred, ''The administrative and policy systems still contains discrimination against the nonstate economic sector, so society has not been really convinced to invest in the economy as much as it actually could.'' SOE-Dominant Provinces such as Nghe An and Nam Dinh, by contrast, claimed that nonstate investors were damaging local economies through ''sneaky'' activities and demanded government protection for SOEs. One delegate from Nam Dinh argued, ''Under present government policy, local enterprises are finding it very hard to stay afloat. ... 167 local state enterprises are floundering'' (VIR 2000, 1997).

Recognizing the SOE/Nonstate divide among provinces in the CCOM gives us a clue to the factors motivating provincial separations. Looking back in Table 1, we see that the critical factor in handing control of the CCOM over to reformers was the dramatic increase in the number of Nonstate Provinces between 1996 and 2001, and the corresponding loss in SOE-dominated seats.

Gerrymandering to Create Nonstate Provinces

It is important to note that the 1996 separations that led to the defeat of Phieu were not the only set of divisions. As Table 2 shows, Vietnam has actually created 24 new provinces since 1990 with five sets of successive divisions, a 40% increase in the number of subnational units. The mechanism and willingness to create new subnational units was evident since 1990. Little has been written about any of the separations. The NA resolutions (*nghị quyết*) which legalized all five sets of divisions are notably sparse, simply delineating the exact borders of new provinces.[6]

Some work has assumed that the early divisions were part of the on-going Public Administration Reform (PAR) process (Vasavakul 2002, 25), but there is no direct mention in any of the major PAR legislation of provincial separation at all.[7] In fact, PAR documents emphasize the streamlining of government institutions through consolidation and shedding of labor—not the creation of new units. Vietnamese officials, however, have publicly justified the decisions based on governing capacity and efficiency, claiming that provinces need to be smaller in order to empower local citizens through decentralization. Nguyen Huu Tri of the Organization and Personnel Affairs Board, explained the 1997 divisions this way, ''... the 'big provinces and big districts' model, which used to be suitable to the central planning economy was not meaningful any more'' (VIR 1996). While many of the largest provinces in terms of population and surface area have been split overtime, there are too many anomalies to see efficiency as the complete story. For instance, Thanh Hoa, the second largest, nonmunicipal province in 1988 and most populous province today with three times the Vietnamese median provincial population, has thus far managed to avoid the chopping bloc. By contrast, the newly created Hung Yen has a surface area of only 985 km^2—14 provinces exist with over nine times that amount. Nguyen Dang Son, a noted urban planner, discussing the separations in a recent interview, disputed the efficiency argument forcefully, describing the provincial separations as ''wasteful, cumbersome, and reversing the general trend of modernization'' (Pham 2007, Vietnamnet). It is therefore important to keep in mind that efficiency may simply be a convenient justification for a decision to separate that was made for reasons of political expediency.

Beresford (2003, 74) offers a bottom-up theory that significant jealousy existed within many provinces due to preferential resource allocation across districts; implying these feeling motivated provincial separations during the 1990s. There is anecdotal evidence that intraprovincial tensions played a role in some instances, but there is little systematic evidence across cases. On the other hand, there are countervailing anecdotes that provinces did not request them. A recent report by the legal committee of the NA, discussing separations, highlighted the fact that local officials were often surprised by the decision to separate their provinces and unhappy with the specific terms of the division. Nghiem Vu Khai, a member of the committee from Ha Giang, joked that separation, ''was like a huge clap of thunder (*xoẹt*) from above'' (Lan Anh 2003). Moreover, the Prime Minister's directives on separation in 1996 (*Chỉ Thị* 857-TTg) specifically warn against allowing *tư tưởng bản vị* (regionalism) to play a role in the distribution of administrative positions (Article 3C). Local leaders

[6]To access the official resolutions on provincial creations, go to http://www.vietlaw.gov.vn/LAWNET/index.html.

[7]All Party and Government documents discussing PAR are available at http://www.caicachhanhchinh.gov.vn/Vietnam/Documents/

TABLE 2 Creation of New Provinces and Provincial-Level Cities

Separated and New Provinces							Un-Separated Provinces	
Original Province	Year Split	SOE Share at Time of Split	New Province 1 (SOE Share I Year After Split)	New Province 2 (SOE Share I Year After Split)	New Province 3 (SOE Share I Year After Split)	Number of Provinces	Original Province	Average SOE-Share (1990–2004)
Nghia Binh	1990	43%	Quang Ngai (42%)	Binh Dinh (36%)		1988 = 40	BRVT	32.88%
Phu Khanh	1990	63%	Khanh Hoa (68%)	Phu Yen (14%)			Tay Ninh	22.24%
Binh Tri Thien	1990	47%	Thua-Thien Hue (63%)	Quang Tri (34%)	Quang Binh (32%)		Long An	29.89%
Nghe Tinh	1991	51%	Nghe An (53%)	Ha Tinh (31%)		1991a = 44*	Dong Nai	41.83%
Hoang Lien Son	1991	75%	Lai Cai (75%)	Yen Bai (74%)			Tien Ginag	28.79%
Ha Tuyen	1991	69%	Tuyen Quang (70%)	Ha Giang (43%)			Thai Binh	31.91%
Ha Son Binh	1991	35%	Hoa Binh (58%)	Ha Tay (36%)			Lam Dong	39.09%
Gia Lai - Kon Tum	1991	39%	Gia Lai (31%)	Kon Tum (31%)			Hai Phong	52.78%
Ha Nam Ninh	1991	52%	Nam Ha (54%)	Ninh Binh (47%)		1991b = 49	Dong Thap	31.04%
Thuan Hai	1991	26%	Ninh Thuan (36%)	Binh Thuan (22%)			Thanh Hoa	36.77%
Cuu Long	1991	42%	Vinh Long (47%)	Tra Vinh (34%)			An Giang	36.78%
Hau Ginag	1991	39%	Can Tho (43%)	Soc Trang (29%)			HCMC	52.42%
Song Be	1996	12%	Binh Phuoc (14%)	Binh Duong (12%)		1996 = 53	Ben Tre	41.09%
Vinh Phu	1996	69%	Phu Tho (74%)	Vinh Phuc (15%)			Ha Noi	58.96%
Hai Hung	1996	69%	Hai Duong (77%)	Hung Yen (24%)			Kien Giang	58.97%
Ha Bac	1996	67%	Bac Giang (78%)	Bac Ninh (48%)			Son La	65.88%
Nam Ha	1996	54%	Nam Dinh (63%)	Ha Nam (27%)			Quang Ninh	84.42%
Quang Nam-Da Nang	1996	50%	Da Nang (58%)**	Quang Nam (22%)			Lang Son	51.79%
Minh Hai	1996	75%	Ca Mau (79%)	Bac Lieu (49%)				
Bac Thai	1996	75%	Thai Nguyen (79%)	Bac Can (25%)				
Lai Chau	2003	16%	Dien Bien Phu (52%)	Lai Chau (16%)		2004 = 64		
Can Tho	2003	53%	Can Tho (52%)**	Hau Giang (36.04%)				
Dak Lak	2003	36%	Dac Lac (36%)	Dac Nong (16%)				

Information on Provincial separation comes from Vietnam News Agency and Government Office. *Chinh Phu Viet Nam* [The Vietnamese Government] 1945–2003: *Tu Lieu* [Facts and Figures]. (Hanoi: Vietnam New Agency Publishing House, 2004), p. 241, 251, 275, and 457. SOE Share is State Owned Enterprise Output as a Percentage of Total Industrial Output (General Statistical Office, Multiple Years)

*This set of splits also transferred districts from Dong Nai to the existing province of Ba Ria-Vung Tau, and districts from Hanoi to the existing provinces of Vinh Phu and Ha Tay. These changes did not create new first tier sub-national units.

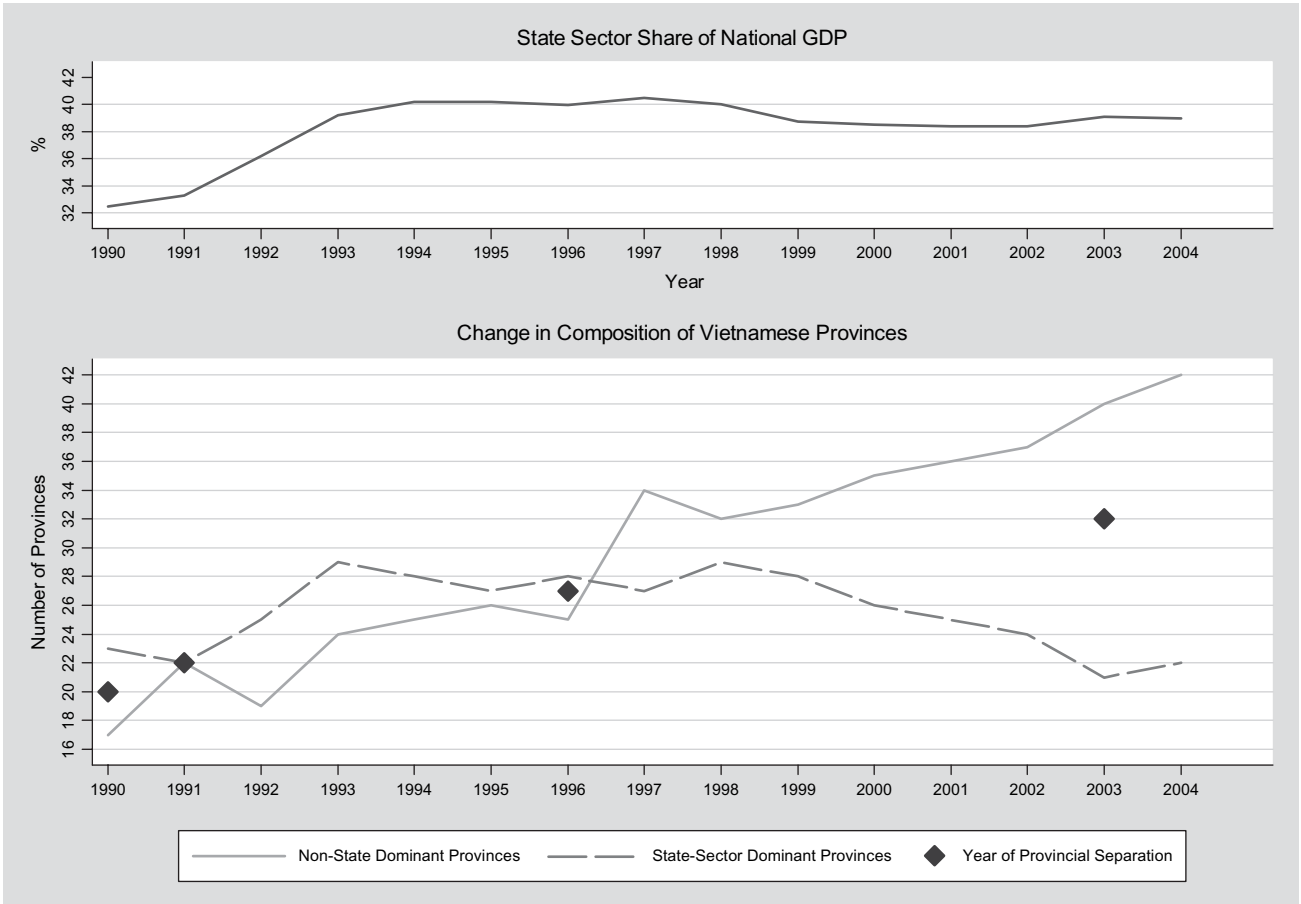
**Provincial capital promoted to provincial level city. Presently, there are five including: Ho Chi Minh City, Ha Noi, Hai Phong, Da Nang, and Can Tho.

were to be allocated based on the needs of the provinces, not the homelands of the officials. While bottom-up demands certainly existed, the decision of which provinces to target and when to implement the divisions was ultimately a central-level decision. The government of Vietnam has not divided provinces in the same lightning quick manner in which earlier socialist planners created them in the late 1960s. Rather, the new provinces have been created in increments over the past 17 years and almost always at critical political junctures.

Noting this, some scholars have argued that the creation of new provinces was an explicit policy of the economic reformers in their attempt to circumvent central-level politics (Abuza 2002). These scholars build their theory off of the role of provincial votes in Nguyen Van Linh's rise to General Secretary of the VCP in 1986 after an 8% increase in provincial representation (Riedel and Turley 1999, 19) and Kiet's campaign to replace retiring central leaders with reformist leaders from the provinces, along with a tacit divesting of authority to the localities (Abrami 2004, 33). Under Kiet's tenure (1991–97), representation of provincial officials at the meetings of the CCOM grew 50% (to 61 delegates) in great part due to new provinces. Along with their increase in numbers, Kiet made sure provincial leaders received increased political authority. At the beginning of the Sixth Party Congress in 1986, provincial representatives were only considered "alternate members," as opposed to those with full-time positions in the Central VCP or Government. At the Seventh Congress in 1991, full provincial membership in the CCOM was made possible.

There is little evidence to support the notion of a central-provincial political cleavage. As noted above, what evidence we do have from national-level debates is that the key political divisions are based on an institution's relative dependence on the state sector (Riedel and Turley 1999; Thayer 1995). While it is possible that Linh and Kiet were attempting to empower provincial voters, it is more likely that they had a specific type of reformist voter in mind. Figure 1 (Panel 2) probes this theory by dividing provinces

FIGURE 1 Non-State versus State-Sector Dominant Provinces in Vietnam



into two groups based on whether the majority of their industrial output was provided by SOEs or the nonstate sector (GSO 2005).[8] The graph shows quite clearly that Nonstate Provinces started the 1990s at a numerical disadvantage to their SOE-Dominant counterparts. Separations in 1991 bolstered the SOE majority, which they held until the 1996 Party Congress.

The 1996 separations, which followed the Congress, reversed that majority in one fell swoop. Two provinces Bac Ninh and Bac Lieu climbed briefly back above the 50% threshold in 1997, but the long-term consequences of the separation strategy are obvious. At present, there are over twice as many Nonstate Provinces as SOE-Dominant. It is not general economic transition across the country that is driving the divergence, though it does account for some perturbations between formal separations. Panel 1 illustrates that state output has actually increased slightly over the same period, continuing to account for about 40% of GDP (39% of national industrial output). Interestingly, the Nonstate Provinces commanded a decisive nine-province advantage in 1999 when the Enterprise Law would ease private firm entry and an 11-province advantage at the celebrated 2001 Party Congress.

The timing of provincial separations after Party Congresses, the dominance of Nonstate Provinces despite little change in national output, and the decisive political outcome of this dominance at the 2001 Party Congress bolster the argument that reformers had an explicit electoral strategy in calling for the splitting of provinces in 1996. By creating new Nonstate Provinces, modernizers believed they could influence the outcomes of future CCOM debates about grand strategies and smaller NA debates about implementation of these new policies. While rhetorically it was easier to argue for new provinces based on efficiency, it would seem they were studying maps of district economic composition and creating new reform-oriented provinces out of SOE-dominated areas.

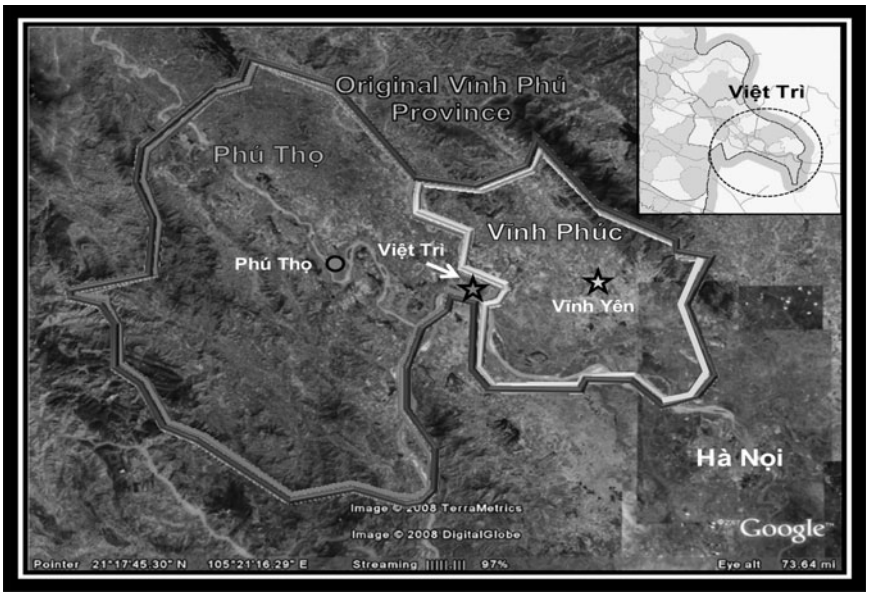
Figure 2 demonstrates the gerrymandering strategy more vividly with an example of the division of the northern Vinh Phu province, returning Phu Tho, an SOE Province, and Vinh Phuc, its nonstate counterpart, to their pre-1965 entities. Of most interest, is the case of the provincial capital Viet Tri (see inset), which was awarded to Phu Tho after separation, even though the majority of the town is situated within the borders of Vinh Phuc. Viet Tri existed as a town within the pre-1965 Phu Tho, but it was much smaller. Historical maps do not show the same finger extending into the premerger Vinh Phuc province (Doyle and Lipsman 1981). The city expanded between 1961 and 1965 as part of the First Five Year Plan's attempt to develop a new industrial complex in Northern Vietnam (Fforde and De Vylder 1996). Within the same period Phu Tho and Vinh Phuc were merged and Viet Tri grew tremendously thereafter, as the sight of three state-owned paper mills, a chemical company, and a textile factory. At the time of the division in 1996, it was the state-owned base and transportation hub of the province (Tran 2002). Rather than cutting Viet Tri back to its original borders and providing Vinh Phuc province with a portion of the most developed city in the area, a decision was made to award the entire capital to Phu Tho. From an efficiency perspective, this was an especially strange decision because Phu Tho also possessed the second-largest urban area in Vinh Phuc province—Phu Tho Town. If we consider the reformers' goal of isolating the state sector, the odd-shaped border resulting from the carving makes more sense.

The gerrymandering strategy outlined above fits well with Linh and Kiet's other administrative battles to replace central leaders with leaders from the provinces, to empower provincial CCOM voters, and with the historical efforts of reformers at the central level to reach out to provinces with similar interests (Riedel and Turley 1999; Stern 1993). Nevertheless, two important questions remain unanswered:

First, how could reformers be certain that new provincial leaders would vote along reformist lines? This was a concern shared by Kiet, who fought vigorously with the Provincial PCOMs that resisted his efforts to centralize their appointment process in the early nineties. Kiet was attempting to ensure that he would have loyal backers at the provincial level. But with their newfound autonomy, local leaders objected to his efforts; eventually agreeing only to two-term limits (Abuza 2002). The squabble was ultimately irrelevant; central reformers could actually be quite certain that new Nonstate Provinces would vote along reformist lines due to the peculiar incentive created by Vietnamese fiscal targeting. In the system, which is a legacy of SOE output targeting under central planning but was officially enshrined under the 1996 Budget Law, Hanoi sets national taxes through the Ministry of Finance but returns to provinces all revenue they generate above a biannually negotiated target (Hanai and Huyen 2002; Rao,

[8]Only 100% FDI is considered to be nonstate, joint ventures with SOEs are attributed to the state sector. SOE share of GDP or revenue would be a better measure, but accurate numbers for SOE service and agricultural output do not exist at the provincial level for the entire time period.

FIGURE 2 Example of Provincial Splitting of Vĩnh Phù Province



Bird, and Litvack 2001; World Bank 1996). While only eight provinces routinely bring in more revenue than expenditures, close to two-thirds meet their targets on a regular basis (Bird et al. 1995; Rao, Bird, and Litvack 2001). As a result, provincial officials have an important incentive to accede to the policy demands of the dominant source of revenue in the province. Le Thanh Cung, the Vice PCOM of Binh Duong stressed this point when he argued that separation from Binh Phuoc would allow the province to make "best use of the provincial strengths," meaning the large concentration of foreign and private firms in the province (*Dau Tu* 1995, 1). Reformist central leaders could feel confident that they were creating new voters, whose economies were propelled by nonstate entities and therefore would like to see a balanced playing field for these firms in national law.

There is evidence that reformers were aware of the incentive structure that existed for provinces based on their fiscal status and hoped to exploit it. One interesting document is the official directive from the Prime Minister's Office to provincial agencies about how to implement the changes (*Chỉ Thị* 857/TTG). The detailed instructions offer a vivid picture of what Kiet intended to accomplish with the separations. First, the Prime Minister was aware that he was carving lines around the state sector and determining a province's incentives by the structure of the economy. The document repeatedly emphasizes that provinces must rely on making their original source of output more efficient; they should not expect assistance or resources from the central government, warning, "As for production and business, these will not be divided, the manufacturing and business establishments (*cơ sở sản xuất kinh doanh*) of each province will continue their activities in the most efficient manner, as local conditions demand" (Clause 2B). The use of the term manufacturing and production units denotes local SOEs under provincial management. The Prime Minister did not want to see an equitable distribution of these resources across provinces. In fact, Clause 2D drives this point home, "[Officials] Must oppose the demands for equality and a reasonable mechanism [of division], as this immediate local profit will lead to the use of property less efficiently and wastefully." In short, the 1996 separation was designed to concentrate the SOE sector into specific geographic units. The Prime Minister was aware of the impact of the separations on local finances, advising local agencies to adhere to the 1996 Budget Law in regards to budget allocation and administration of the socioeconomic plan (Clause 3D).

Secondly, even though *Chỉ Thị* 857 is a government document and officially separate from VCP selection, election of national and VCP officials plays a prominent role. Though no specific directions are given on selection, it makes clear that provinces should adhere to national laws for elected positions and that officials must meet the demands of their specific provincial constituencies in upcoming NA elections (Clause 2C). Provinces were allowed to share government personnel as needed and the

document specifically states that individuals need not work in their homelands. Thus, SOEs could not be equalized across borders, despite the fact that personnel were expected to shift to fill human resource need. Granted, the utility functions of provincial officials are more complex than the fiscal incentives of their province. It is very difficult to know the strength of other factors (promotion, pecuniary benefits, etc.) relative to the fiscal target. If they are more important than fiscal incentives, however, SOE share is unlikely to be significant in the empirical tests below.

Second, why would conservative central leaders not act to block the splitting strategy, if they could see that in the long-term it would affect their power? One answer might be that the 1992 Constitution (Article 84 and 109) makes clear that the administrative apparatus was under the exclusive control of Prime Minister (Kiet in 1996 and Khai in 2003). Conservatives, while certainly aware that divisions were taking place may not have realized the impact that these particular border decisions would have on the composition of the CCOM. The exact details of new borders were not decided in the upper echelons of the VCP, but among relatively low-level officials in the bureaucracy. As pointed out above, all separations were authorized through unnumbered NA resolutions that do not reference previous VCP legislation. This does not mean that the VCP was unaware or naïve; most high-ranking government officials are Party members. It does indicate, however, that high-level conservatives were uninterested in the technicalities, as earlier separations had not been threatening. As Table 1 shows, the three sets of divisions before the 1992 Constitution actually appeared to favor conservative leaders. SOE-Dominant Province vote totals rose from 15% to 20% by 1996, while Nonstate Provinces dropped by the same amount. As will be discussed below, there is no solid statistical evidence to show that the 1991 separations favored conservatives by design, yet the results probably served to limit their interest in the technicalities of future divisions. The decisive victory for reformers came in 1996 with the sweeping creation of seven new Nonstate Provinces. If this tactic had been incremental across several CCOMs, we can be sure that conservatives would have acted to reverse it. But by the time the gerrymandering strategy was apparent to all, reformers held a dominant voting position. Conservatives gained back some ground in 2006 with an insistence on increases in VCP and military delegates, but the overall majority remained with reformers (Thayer 2007).

While important, basing an empirical analysis on the myopia of a group is limiting. A complementary rationalist explanation is that conservatives faced a classic collective action problem; the danger was clear for conservatives as a whole, but individually, high-ranking central leaders from those provinces could be bought off by the kickbacks and patronage opportunities they gained through the creation of new provincial entities. Indeed, a recent letter to the editor titled "No Need to Separate Provinces" lamented the inevitable drain on national coffers of constructing new provinces (Nguyen Thanh Tam 2003).[9] For individual central leaders, there was a lot to be gained from the prestige of providing new pork in one's homeland and the pecuniary benefits in kick-backs from construction contracts. A recent corruption scandal over the criminal mishandling of construction contracts in the Ninh Thuan government dates back to particular company's role in the province's creation in 1992 (*Thanh Niên* 2001). The bubbling land market provided additional opportunities for personal benefit as owners of land near where new highways and roads were to be built (often those with inside information) were rewarded with precipitous rises in prices (*Tuổi Trẻ* 2004). Below, I test the payoff hypotheses more explicitly.

Data and Empirical Tests

The ultimate goal of the empirical test is to determine whether a group of SOE-Dominant Provinces were deliberately targeted for separation in 1996, as the circumstantial evidence above seems to indicate.

H1: Provinces with large state sectors were more likely to be targeted for separation after the 1996 Congress.

Eye-balling Table 2 we see that of the eight provinces selected for separation in 1996, seven were provinces with dominant SOE sectors. The only exception, Song Be province, actually yielded two Nonstate Provinces and thus two additional CCOM votes. Such a simple analysis, however, neglects the total pool of provinces from which reformers had to select and potentially conflating factors, such as provincial

[9]The focus on kick backs from construction contracts is not merely a theoretical conjecture. The largest corruption scandal of recent years in Vietnam revolves around widespread siphoning of construction resources for local road projects managed by the Project Management Unit 18 of the Ministry of Construction (Gainsborough 2007).

size or wealth. Multiple regressions from the entire population of provinces, controlling for alternative causes, is the only way to conclusively test the gerrymandering hypothesis. A probabilistic model is necessary, because reformers only needed to target enough provinces to achieve a majority of votes; they would not need to split every SOE-Dominant Province.

I begin with a linear probability model of provincial separation between 1990 and 2004. My dependent variable (y_{ij}) is a dummy variable capturing whether province i was separated by the central government in year j.

$$y_{ij} = \beta_0 + \beta_1 SOE_{ij} + \beta_4 X_{ij} + \beta_5 A_{ij} + u_{ij}$$

A linear probability model is preferable to PROBIT in this case, because some structural controls perfectly predict failure in early years—a problem known as *separation*. Because dropping clearly important variables from the model can lead to omitted variable bias (Zorn 2005) and because I am interested in the impact of SOE share net of these structural factors, I opt for the linear probability model with robust standard errors (clustered at the provincial level, u_{ij}).[10] A Huber-White robust standard error correction is used, because linear probability models violate the Gauss-Markov assumption of homoskedasticity. Without correction, traditional methods of hypotheses testing are not valid.[11]

SOE_{ij} is SOE industrial output as percentage of industrial output in the province (GSO 1995–2004). I use this variable to capture the likelihood that local officials from a province will be against reforms that might harm the state sector. To test whether a specific level of SOE output is necessary, I also use a dichotomous measure of whether a province has SOE output of 50% or more. Fifty percent is admittedly arbitrary; the exact level of SOE output that causes an individual province to oppose economic reforms probably ranges within a band around 50%, but errors on either side of the figure likely cancel each other out.[12]

X is a vector of provincial level control variables to avoid omitted variable bias.[13] To address the official Vietnamese explanations for the division, I control for the *provincial population*, measured by thousands of people, and the *surface area of the province*, measured in square kilometers.

Secondly, I add a variable, which partially addresses bottom-up demands for separation. Many separations have created provinces which mirror colonial-era borders. Between 1887, when the French established control of Vietnam, and 1930, the colony's population exploded, nearly doubling since the original 31 provinces were created under Emperor Minh Mang. Correspondingly, the French, under Governor Paul Doumer, began to expand the number of provincial units. New provinces were created in the Northern Upland region, and Cochinchina's provinces expanded from six to twenty due to a flurry of provincial separations in the Mekong Delta (Marr 2004). At the time of French defeat at the battle of Dien Bien Phu and Vietnamese independence in 1954, Vietnam was divided into 74 units. According to a cease fire agreement, everything north of the seventeenth parallel was awarded to the Communist Democratic Republic of Vietnam (DRVN), which, in 1965, consolidated provinces into larger conglomerates in line with socialist industrialization theories. With the defeat of South Vietnam in 1975, a similar process of creating provincial conglomerates was applied to the new, southern provinces (Marr 2004). Since 1990, many new provinces have been sliced back to their French borders. Thus, a dummy variable is used to control whether the province is already at its *1965 borders.* The variable offers an imperfect proxy for bottom-up demands due to a claim that old borders represent unique provincial cultures that prevailed throughout the socialist period and are now reasserting themselves in the reform era. Care should be taken about too strong an interpretation of this factor. The fact that old borders appear to have recovered salience in the modern era might also result from the fact that they, like size, offer more proximate utility for central officials with larger goals in mind.

Years after Party Congress gauges whether a Party Congress took place the year before, as separation may

[10]Zorn recommends a correction in cases of separation called a Maximum Penalized Likelihood Estimator, but the small number of provinces in early years leaves too few degrees of freedom to perform the procedure properly.

[11]Aware that readers may fear that results are an artifact of my model specification, I conducted two robustness tests. First, a PROBIT model was run with the offending structural controls dropped from the analysis. Secondly, the model was respecified as a Cox Nonproportional Hazard model, interacting variable with time. In both cases, the fundamental conclusions (with marginal differences in predicted values) of the standard linear probability were upheld (See Robustness Tests 1 and 2 in the online appendices).

[12]All models were rerun with 45% and 55% cut-offs, yielding similar results.

[13]A full listing of descriptive statistics and sources for variables can be found in the Online Appendices.

TABLE 3 Linear Probability of Provincial Separation, 1990 to 2004

	1990			1991			1996			2003
Variable Labels	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
SOE Share of Provincial Industrial Output	−0.00128	0.00115		−0.00490*	−0.00667*		0.00430*	0.00612*		−0.000772
	(0.0012)	(0.0025)		(0.0024)	(0.0027)		(0.0024)	(0.0023)		(0.0012)
SOE Share of Industrial Output above 50% (Dummy)			0.0631			−0.270*			0.316*	
			(0.093)			(0.092)			(0.100)	
Province the Result of Previous Split (Dummy)	−0.00423	0.0308	0.0365	0.138	0.124	0.132	−0.174*	−0.171*	−0.166*	−0.0773
	(0.062)	(0.094)	(0.089)	(0.091)	(0.098)	(0.100)	(0.089)	(0.091)	(0.091)	(0.078)
Province Already at 1965 Borders (Dummy)	−0.0862	0.00425	−0.00153	−0.406*	−0.468*	−0.447*	−0.307*	−0.244*	−0.272*	−0.0331
	(0.056)	(0.073)	(0.065)	(0.099)	(0.10)	(0.098)	(0.098)	(0.096)	(0.087)	(0.070)
Population in 10,000s	0.000215	−0.00100	−0.00103	0.00140*	0.00115*	0.00125*	0.000950	0.000493	0.000508	0.000193
	(0.00040)	(0.00063)	(0.00061)	(0.00048)	(0.00056)	(0.00054)	(0.00063)	(0.00083)	(0.00077)	(0.00038)
Area in 1,000s of Square Kilometers	0.0177	0.0165	0.0163	0.0271*	0.0178	0.0182	0.00661	0.0258*	0.0275*	0.0124
	(0.012)	(0.012)	(0.012)	(0.0097)	(0.012)	(0.012)	(0.011)	(0.013)	(0.012)	(0.010)
International Border (Dummy)		−0.134	−0.126		−0.140	−0.173*		−0.116	−0.0798	
		(0.12)	(0.12)		(0.094)	(0.095)		(0.091)	(0.088)	
Number of Compatriots in Cabinet		0.0942	0.101*		0.0743*	0.0807*		−0.000729	0.0116	
		(0.059)	(0.055)		(0.043)	(0.042)		(0.049)	(0.051)	
% of Minorities in Province		−0.0597	−0.0598		0.112*	0.119*		−0.0651	−0.0718*	
		(0.051)	(0.052)		(0.045)	(0.041)		(0.039)	(0.041)	
Natural Log of GDP per Capita	0.0462	−0.131	−0.112	−0.111	−0.0510	−0.127	−0.184*	−0.0587	−0.0887	−0.0835*
	(0.056)	(0.14)	(0.12)	(0.11)	(0.14)	(0.13)	(0.096)	(0.12)	(0.097)	(0.049)
% if Population in Urban Areas		0.00246	0.00217		0.00186	0.00139		−0.00660	−0.00711*	
		(0.0034)	(0.0030)		(0.0042)	(0.0037)		(0.0050)	(0.0042)	
Lagged Party Congress (Dummy)										
South (Dummy)		0.0816	0.0876		0.0486	0.0895		−0.0154	0.0255	
		(0.14)	(0.13)		(0.11)	(0.094)		(0.090)	(0.11)	
Party Rank of People's Committee Chair										
1990 (Dummy)										
1991 (Dummy)										
1996 (Dummy)										

TABLE 3 (Continued)

	1990			1991			1996			2003
Variable Labels	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
2003 (Dummy)										
1990 (Dummy) *SOE Share>50% (Dummy)										
1991 (Dummy) *SOE Share>50% (Dummy)										
1996 (Dummy) *SOE Share>50% (Dummy)										
2003 (Dummy) *SOE Share>50% (Dummy)										
Constant	−0.0149	0.131	0.150	0.295	0.253	0.0537	0.197	0.229	0.361*	0.203
	(0.11)	(0.22)	(0.16)	(0.20)	(0.24)	(0.17)	(0.20)	(0.24)	(0.19)	(0.15)
Number of Observations	40	40	40	44	44	44	53	53	53	61
R-squared	0.17	0.41	0.42	0.55	0.62	0.63	0.41	0.50	0.54	0.16
Root Mean Squared Error	0.263	0.242	0.241	0.296	0.293	0.287	0.295	0.289	0.275	0.210

	2003		Year Dummies		Robust			
Variable Labels	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**	**(16)**	**(17)**	**(18)**
SOE Share of Provincial Industrial Output	−0.00110							
	(0.0014)							
SOE Share of Industrial Output above 50% (Dummy)		0.0106	0.0110	0.00816	0.000386	0.00681	0.00869	0.00599
		(0.075)	(0.012)	(0.0058)	(0.0061)	(0.0059)	(0.0059)	(0.0056)
Province the Result of Previous Split (Dummy)	−0.0886	−0.0945	−0.0224*	−0.0214*	−0.0248*	−0.0196	−0.0213*	−0.0177
	(0.087)	(0.094)	(0.013)	(0.012)	(0.013)	(0.013)	(0.012)	(0.013)
Province Already at 1965 Borders (Dummy)	−0.0291	−0.0355	−0.0509*	−0.0547*	−0.0492*	−0.0516*	−0.0541*	−0.0525*
	(0.072)	(0.066)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Population in 10,000s	0.000306	0.000292	0.000133	0.000121	0.000227	0.000195	0.000133	0.000200*
	(0.00056)	(0.00058)	(0.00011)	(0.00010)	(0.00017)	(0.00016)	(0.00010)	(0.000099)
Area in 1,000s of Square Kilometers	0.0138	0.0155	0.00763*	0.00767*	0.00608*	0.00730*	0.00767*	0.00616*
	(0.012)	(0.013)	(0.0022)	(0.0022)	(0.0022)	(0.0023)	(0.0022)	(0.0020)

TABLE 3 (Continued)

	2003		Year Dummies		Robust			
Variable Labels	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**	**(16)**	**(17)**	**(18)**
International Border (Dummy)	−0.0933*	−0.0944	−0.0457*	−0.0451*	−0.0451*	−0.0454*	−0.0448*	−0.0376*
	(0.055)	(0.059)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.012)
Number of Compatriots in Cabinet	−0.00847	−0.00812	0.00831	0.00941	0.00683	0.00833	0.00904	0.00222
	(0.019)	(0.020)	(0.0077)	(0.0071)	(0.0075)	(0.0075)	(0.0071)	(0.0056)
% of Minorities in Province	0.0205	0.0154	0.00236	0.00271	0.00343	0.00452	0.00283	0.00490
	(0.021)	(0.018)	(0.0050)	(0.0050)	(0.0058)	(0.0057)	(0.0050)	(0.0049)
Natural Log of GDP per Capita	−0.128*	−0.119	−0.0184*	−0.0170*	−0.0212*	−0.0185*	−0.0167*	−0.0155*
	(0.075)	(0.076)	(0.0088)	(0.0085)	(0.0087)	(0.0087)	(0.0085)	(0.0083)
% if Population in Urban Areas	0.00154	0.00114	−0.000381	−0.000378	0.000399	−0.000126	−0.000381	−0.000547
	(0.0019)	(0.0018)	(0.00034)	(0.00033)	(0.00037)	(0.00032)	(0.00032)	(0.00036)
Lagged Party Congress (Dummy)			0.0107*	0.0104*	0.00972*	0.0105*	0.0104*	0.00963*
			(0.0046)	(0.0046)	−0.0047	(0.0047)	(0.0046)	(0.0044)
South (Dummy)	0.0478	0.0567	0.00331	0.00334	−0.00548	0.00638	0.00457	0.000563
	(0.072)	(0.079)	(0.012)	(0.012)	(0.014)	(0.014)	(0.013)	(0.011)
Party Rank of People's Committee Chair								−0.00175
								(0.0067)
1990 (Dummy)			0.0215	0.0585	0.0748	0.0583	0.0551	
			(0.037)	(0.066)	(0.070)	(0.067)	(0.0063)	
1991 (Dummy)			0.160*	0.234*	0.196*	0.233*	0.221*	0.235*
			(0.054)	(0.093)	(0.090)	(0.092)	(0.089)	(0.093)
1996 (Dummy)			0.142*	0.0324	0.0316	0.0327	0.0315	0.0333
			(0.045)	(0.039)	(0.039)	(0.039)	(0.038)	(0.039)
2003 (Dummy)			0.0679*	0.0674*	0.0698*	0.0681*	0.0672*	0.0668*
			(0.030)	(0.037)	(0.040)	(0.038)	(0.037)	(0.037)
1990 (Dummy) *SOE Share>50% (Dummy)				−0.0635	−0.0662	−0.0622	−0.0600	
				(0.080)	(0.091)	(0.082)	(0.078)	
1991 (Dummy) *SOE Share>50% (Dummy)				−0.128	−0.101	−0.121	−0.110	−0.125
				(0.11)	(0.12)	(0.11)	(0.11)	(0.11)
1996 (Dummy) *SOE Share>50% (Dummy)				0.209*	0.239*	0.217*	0.218*	0.207*
				(0.086)	(0.092)	(0.088)	(0.087)	(0.086)
2003 (Dummy) *SOE Share>50% (Dummy)				−0.00236	−0.00393	−0.00224	−0.00234	−0.00221
				(0.057)	(0.058)	(0.057)	(0.057)	(0.057)
Constant	0.218	0.169	0.0149	0.0165	0.00915	−0.000883	0.0132	0.0131
	(0.19)	(0.18)	(0.024)	(0.024)	(0.036)	(0.034)	(0.024)	(0.024)

TABLE 3 (Continued)

	2003		Year Dummies		Robust			
Variable Labels	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**	**(16)**	**(17)**	**(18)**
Number of Observations	61	61	830	830	768	815	830	790
R-squared	0.22	0.21	0.20	0.23	0.23	0.24	0.23	0.24
Root Mean Squared Error	0.213	0.214	0.148	0.146	0.145	0.146	0.145	0.139

Robust Standard Errors in Parentheses; *Significant at the 0.1 level or less.
Linear probability models with OLS were used in place of PROBIT as (previous split = 0), (sixty five = 0) perfectly predicts separation in 1990 and 1991, and (minority = 0) perfectly predicts separation in 1996. Dropping these variable introduces omitted variable bias.
When previous split, sixty five, and minority are dropped, results are replicable in probit analysis. Please see Robustness Test 1.
1990 is a cross-sectional analysis for the year 1990. Model 1 includes structural determinants of separations, Model 2 adds political variables, and Model 3 replaces share of SOEs with a dichotomous measure of SOE share above 50%.
1992 is a cross-sectional analysis for the year 1992. Model 4 includes structural determinants of separations, Model 5 adds political variables, and Model 6 replaces share of SOEs with a dichotomous measure of SOE share above 50%.
1996 is a cross-sectional analysis for the year 1996. Model 7 includes structural determinants of separations, Model 8 adds political variables, and Model 9 replaces share of SOEs with a dichotomous measure of SOE share above 50%.
2003 is a cross-sectional analysis for the year 2003. Model 10 includes structural determinants of separations, Model 11 adds political variables, and Model 12 replaces share of SOEs with a dichotomous measure of SOE share above 50%.
Models 13 is a panel, linear probability model over the time period (1990–2004), with year dummies added for the years in which separations takes place (implemented in *xtreg* with robust standard errors).
Model 14 interacts year dummies with high SOE share in Model 17.
Model 15 tests whether the Model 14 is robust to dropping national-level cities; model 16 drops Ho Chi Minh City; Model 17 re-codes Ho Chi Minh City as Non-State province for the entire time period.
Model 18 tests whether the theory is robust to a measure of party rank. No rank measures are available for 1990, thus dropping 40 observations.

be the sign of deals arranged during the Party Congress. Another dummy captures whether the province is the result of a *Previous Separation*, as provinces are unlikely to be split twice.[14]

Finally, A_{ij} is a matrix of tests of alternative theories of provincial splitting. A dummy for whether the province is in the *South* captures whether regional considerations prevail in the determination of new provinces. Conventional political wisdom is that separations followed a norm of maintaining a majority of northern provinces after the war, so that southern provinces did not come to dominate key political institutions (Cohen 2003). If this theory is true, we should expect a negative sign on the *South* coefficient. I also add three theories from the comparative literature. *Minority* captures the ethno-nationalism argument by measuring the number of ethnic minorities in the province on a 5-point scale, where 1 represents no minorities at all, 2 equals (1–25%), 3 is (25–50%), 4 (50–75%), and 5 (75–100%). *Border* is a dummy capturing whether provinces share a border with Laos, Cambodia, or China. *GDP per capita* measures wealth in the provinces. We should expect both of these variables to be negative, as Vietnamese leaders are likely to keep their thumbs firmly upon potential national security threats and rich provinces. *Percentage of urban population* measures whether urban-rural political disputes within the province influenced national decisions to separate.

As in the China literature, there is a large literature in Vietnam on the role of local connections in central government politics (Kerkvliet 2001; Turley and Womack 1998; Vasavakul 2003). *Cabinet* is the number of current provincial compatriots serving in the Vietnamese Ministerial Cabinet. *Party Rank of the People's Committee Chairmen* follows the Huang (1997) coding to gauge how important a local leader is in Party Politics (NGTCHCV 1997–2005; VNA 2004). The expectation is that more connected provinces are less likely to be split.

Model Results

Table 3 depicts the results of the statistical analysis. Models 1–12 depict cross-sectional analysis within the year of provincial separations. Noticeably, SOE share appears to have a differential impact across years. In fact, controlling for other factors, the marginal probability of provincial separation is 27% lower for SOE-Dominant Provinces in 1991 and 32% higher in 1996. These results confirm our original analysis that conservative dominance of the CCOM benefited from the 1991 separations and that reformers did not gain a majority until the 1996 divisions.

Several control variables, including (*population, surface area, 1965 borders, and previous separation)* are also important, though their relative importance varies across years. How much does adding the SOE share variable to the control variables improve our analysis in each year? Table 4 answers this question through a common test of goodness of fit—the predictive ability of the model. By counting all predicted values from Models 3, 6, 9, and 12 that were greater than or equal to 0.5 as correct predictions, we can demonstrate the influence of adding SOE share to the empirical specification. SOE output plays no role in the correct prediction of provincial separation in 1990 and 2003. In 1991 and 1996, however, the restricted models excluding SOE share are able to predict seven (78%) and four (50%) of the actual separations, respectively. Adding SOE share to the model improves the predictive capacity in 1991 only slightly, offering one additional correct prediction. Most of the separations are predicted by structural controls. In 1996, simply adding SOE share adds an additional three correct predictions for a highly significant proportional error reduction of 75%.

Model 14 of Table 3 builds on the yearly analysis by interacting the dichotomous measure of SOE share with the four years of separation in order to calculate predicted probabilities of high and low SOE Provinces for each of the four years of provincial separation. In this fully specified model, we see that provinces which resulted from previous separations, have already been trimmed back to their 1965

TABLE 4 Correctly Predicted Separations

Year	Total Separations	Without SOE Share		With SOE Share		Error Reduction
		No.	%	No.	%	
1990	3	2	66.7%	2	66.7%	0%
1991	9	7	77.8%	8	89.9%	50%
1996	8	4	50%	7	87.5%	75%
2003	3	0	0%	0	0%	05%

Results are derived from models 3, 6, 9, and 12 in Table 3. Predicted values (yhat) were taken from a linear probability regression without the dichotomous measure of SOE Share (the restricted model) and including it (the full model). Correctly predicted was defined as yhat>=.5. No false positive recorded. Proportional power over a restricted model (R) (Slantchev 2004). It is calculated as PRE=1 - ($Error_F/Error_R$).

[14]There are only two known cases Can Tho/Hau Giang in 1991 and 2006 and Nam Dinh/Ha Nam in 1991 and 1996.

borders, share an international border, or have a high GDP per capita, are significantly less likely to be split. Geographically large provinces are significantly more likely to be split. Finally, separations are most likely to take place immediately after Party Congresses. The share of minorities in the province has no significant effect in the fully specified models.

Most importantly for this analysis, only one of the year interactions (1996) is statistically significant at traditional confidence levels. This is more clearly shown in Figure 3, which displays predicted probabilities along with confidence intervals after 1,000 simulations using the *Clarify* procedure in *Stata* (King, Tomz, and Wittenberg 2000). Predicted probabilities are calculated with the assumption that a province is not the result of a previous separation or already at its 1965 borders. All other values are held at the mean. In 1991, Nonstate Provinces have a 25% predicted probability of separation, but the confidence interval is quite large and includes the predicted probability of provinces with high SOE shares (12%). As a result, we cannot be certain that there is a statistically significant difference between Nonstate and SOE-Dominant Provinces in 1991; both types of provinces were targeted in relatively high numbers. The slight bump for conservative voters in 1991 may have been an accident.

In 1996, by contrast, the predicted probability of provincial separation for a province with SOE share above 50% was 25%; over twice as high as any other year. A province with a small SOE share stood only a 3% probability of separation. The 22-point gap between the types of provinces is far larger than any other year and the confidence intervals of provinces with high and low SOEs shares in 1996 do not overlap at all. In short, the analysis provides empirical support for the theory that provinces with large state sectors were only intentionally targeted for separation in 1996.[15]

While the 2003 separations do not show evidence of targeting, they do not need to. Reformers already had a majority of votes. The 2003 separation only added to the nonstate advantage by creating four Nonstate and two SOE-Dominant Provinces. Had the separation favored conservatives, it would have offered clear falsification for my theory.

Despite its reputation as a bastion for economic reformers, between 1990 and 1998, SOEs were responsible for a majority of industrial output in Ho Chi Minh City (HCMC). To maintain consistency, I coded HCMC as an SOE Province for those years. This decision actually biases against a significant finding on SOE share, as officials were unlikely to divide a geographically concentrated metropolitan area. Nevertheless, in Models 15-17, I double-check that the HCMC decision did not significantly alter the results. Model 15 drops all national-level cities; Model 16 drops just HCMC; and Model 17 recodes HCMC as a Nonstate Province throughout the time period. As expected, in all three cases, the alterations increased the substantive effect of the 1996*SOE interaction. Finally, Model 18 tests that the empirics are robust to including the VCP rank of the People's Committee Chairman.

Further Observable Implications of the Theory's Micrologic

Despite the robust results above, the unreliability of data and the opaque Vietnamese government require that a researcher bolster the argument with additional observable implications. One important link in my causal logic is that the fiscal targeting mechanism will ensure that Nonstate Provinces are likely to support reform strategies which undermine SOEs. If this is true, we should expect to find evidence that Nonstate Provinces have adopted pro–private sector reform strategies within their own borders.

H2: Provinces receiving the majority of revenue from nonstate business activity should demonstrate a positive bias toward the domestic private sector in their local policies.

Recent survey data of the private sector confirms this hypothesis. In 2006, the Vietnam Chamber of Commerce's Provincial Competitiveness Index (PCI) ranked the economic governance for private sector development of 64 provinces based on 10 subindices, including among others, entry costs, access to land, transparency, lack of bias toward SOEs, and corruption (VNCI 2006). Data for the ranking is derived from a survey of 6,319 private firms conducted by the Vietnamese Chamber of Commerce and Industry. Notably, five of the top 20 provinces were Nonstate Provinces created in the 1996 separation (See Table 2).[16] On the 100-point weighted scale, Nonstate Provinces received an average score of 53.8 points, while the newly created SOE-Dominant Provinces received an average score of

[15]Cox Nonproportional Hazard Models in Robustness Test 2 (online appendices) confirms these results. In the years before 1995, provinces with high SOE shares have a hazard ratio of 0.137 (Model 8), indicating a very low probability of separation (1 is considered neutral). In the years after 1995, however, the hazard ratio is 7.32 indicating a very high danger of division.

[16]These are Binh Duong, Vinh Phuc, Quang Nam, Bac Ninh, and Hung Yen.

50.4. The difference is statistically significant at the .01 level. Nonstate Provinces also outperformed SOE-Dominant units on all but one of the subindices—Labor Policy.

Aggregate indices can be misleading, however, so Table 5 studies the impact of revenue sources on individual indicators of the business environment. For this analysis, I use a more direct measure of the key causal variable. Beginning in 2002, the Vietnamese Ministry of Finance released detailed data on provincial-level budgets. Using the 2004 (immediately after the 2003 divisions), I calculate a dichotomous measure of whether a province receives the majority of its budget revenue from nonstate sources or SOEs. Controlling for a range of structural factors, I find strong evidence that the investment environment for private firms is highly correlated with revenue from nonstate sources. Specifically, I find that in Nonstate Provinces, 5% more firms rank their province as having a positive attitude to the state sector; 6% less enterprises see bias toward SOEs as an obstacle to their business; 16% more firms are likely to have formal property rights over their business premises; and private firms are about 40 million VND ($2,500) more profitable annually. Though slightly above traditional significance levels, firms in Nonstate Provinces also wait 24 less days for land introductions. These results confirm a similar study by Nguyen Van Thang (2005) using 2005 PCI data. Because endogeneity is a concern, these results are better thought of as correlations, but they are compelling.

Secondly, provinces should not simply have better attitudes at home; they should be more likely to vote for national-level reforms in CCOM policy debates. This is much more difficult to prove because debates in the CCOM are highly secretive; there is no official record of province-level voting data. While we don't know how specific provinces voted, we do know who they sent as delegates. Each province elects several representatives to the annual Party Congress and from that provincial delegation, one representative (or two from national-level cities) are selected to the CCOM. Anecdotal evidence indicates that reformist provinces are likely to push forward a representative from the government apparatus, rather than an official whose sole responsibility is with the VCP. While members of the VCP, local government officials, especially People's Committee Chairmen (PCOMs), are more likely to come into contact with private businessman and foreign investors, as part of their daily activities. They generally have a better sense of the overall business environment than Party Chairmen, who tend to be slightly more ideological and more closely connected to SOEs (Phong and Beresford 1998, 38). Moreover, because the appointment and management of the PCOM falls under the jurisdiction of the government rather than the VCP, according to the 1992 Constitution (Phong and Beresford 1998, 52),

FIGURE 3 Predicted Probability of Separation and Confidence Intervals by Province Type

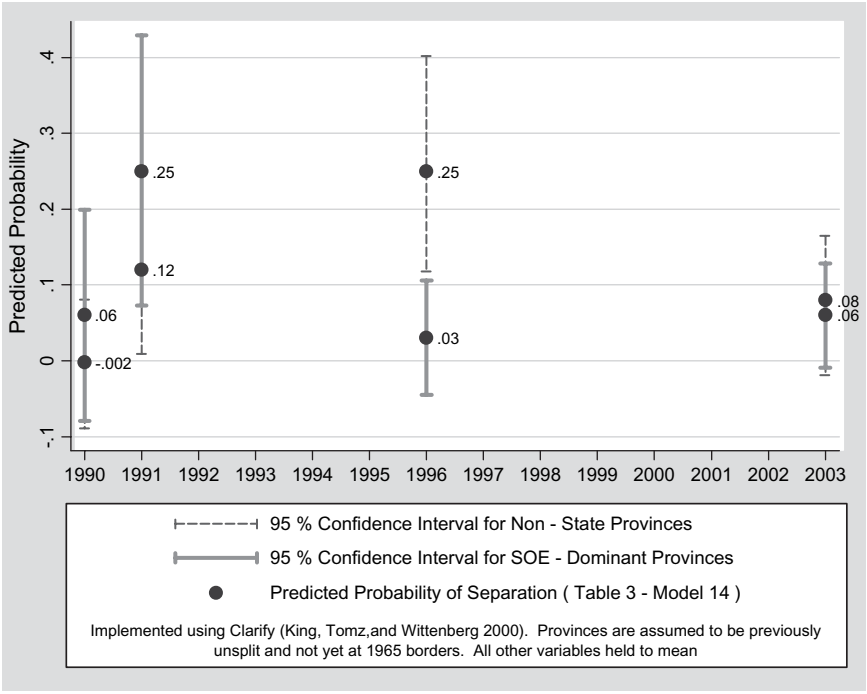


TABLE 5 Determinants of Private Sector Investment Environment

Variable Labels	Attitude (1)	Obstacle (2)	Property Rights (3)	Land Wait (4)	Profit (5)
Province receives majority of 2004 revenue from Non-State Sector$^{\Omega}$	5.022* (2.34)	−5.744* (1.83)	15.51* (7.28)	−24.03 (15.6)	39.64* (14.9)
Telephone per 1,000 Citizens	0.00108 (0.041)	0.0109 (0.018)	−0.138* (0.068)	0.144 (0.100)	0.0891 (0.14)
South (Dummy)	2.209 (3.60)	−0.381 (2.18)	−11.87* (6.86)	0.0309 (20.2)	13.30 (19.9)
Population in 10,000s	−0.0206 (0.014)	0.0338* (0.0094)	−0.0873* (0.037)	0.0192 (0.059)	0.127* (0.074)
% if Populations in Urban Areas	−0.0838 (0.18)	−0.0120 (0.082)	0.585* (0.31)	−0.752 (0.48)	−0.0959 (0.56)
Distance from Major Cities (km)	−0.00143 (0.0062)	−0.00216 (0.0037)	−0.0212 (0.017)	−0.00746 (0.025)	−0.00848 (0.031)
Percentage of Secondary School Graduates	0.168 (0.14)	0.0263 (0.095)	0.0942 (0.40)	−0.00491 (0.97)	−0.554 (1.10)
Constant	34.86** (13.3)	42.30* (9.62)	70.88* (39.8)	18.33 (97.8)	70.02 (101)
Number of observations	64	64	64	64	64
R-Squared	0.15	0.43	0.32	0.08	0.22

All analysis performed using OLS regression in *Stata*. Robust standard in parentheses. *Significant at the 0.1 level or less. Dummy denotes dichotomous variable.

$^{\Omega}$Key causal variable calculated from Ministry of Finance. 2004. "State Budget-Final Accounts and Plan." Hanoi: Financial Publishing House. Province with majority of revenue from non-state sector receive a 1, other receive a 0.

Dependent Variables obtained from Vietnam Provincial Competitiveness Index (Vietnam Competitiveness Initiative 2006). Data available at http://www/pcivietnam.org/

Model 1 (Question H1): What do you think is the attitude of provincial government officials private business? (Percentage of private firms answering (4) Somewhat Positive or (5) Positive on 5-Point Scale).

Model 2 (Question H6_12): Favoritism toward the state sector is an obstacle to my business (Percentage of private firms answering (3) Agree (4) Strongly Agree).

Model 3 (Question B4_1a): Percentage of firms with official Land Use Rights Certificate, granting long-term sale, mortgage, and exchange rights over land.

Model 4 (Effective wait for land): Residual of regressing question (B4_3_3-median wait for land introduction) on a average plot price and land availability.

Model 5 (Average profit per enterprise in 2004): Author's calculation from General Statistical Office Enterprise Census. Data available at www.gso.gov.vn.

they have a stronger clientelistic incentive to vote along with the reformist Prime Ministers Kiet, Khai, and now Dung. This is a general tendency, however, and not firmly fixed in stone. It is common for PCOMs to move to their Party Secretary's office after the conclusion of their terms, and there have been well-known reformers in the office of the Party Secretary. Nevertheless, the fact that a province would privilege a government official over a sitting Party Secretary in its CCOM delegation is a very strong sign of a reformist bent. Consequently:

H3: Nonstate Provinces are more likely to send government officials than VCP officials to the CCOM as delegates.

To test H3, I create a 4-point index of the employment status of provincial CCOM representatives. PCOMs receive a 4. Heads of local government agencies or the People's Council, who hold a VCP position, but are not heads of Secretariats, receive a 3. Party Secretaries who hold concurrent government positions score a 2. And finally, representatives who are solely Party Secretaries or lower-ranked VCP officials receive a 1. Too much missing data on provincial careers prohibits analysis of 1991, but we do have detailed information for the 1996, 2001, and 2006 Party Congresses. Alternate representatives are not considered, as they have no formal vote, and cities are dropped in the final model, as they are allowed to appoint two representatives.

Holding constant a range of other factors for determining selection of leaders, Table 6 uses an ordinal probit model to show that Nonstate Provinces were 8% more likely to send a PCOM as their official representative and 14% less likely to send a delegate with only VCP Status. The two central categories are statistically indistinguishable. Performing the analysis on individual years, we find that the gap between Nonstate and SOE Provinces narrowed in

TABLE 6 Determinations of Local Leadership Representation on Central Committee (1996, 2001, 2006)

Marginal Probability of Status of Provincial Representative in Central Committee (Standard Errors in Parentheses)

Status of Provincial Representative	Model 3: SOE Share		Model 6: High SOE	
	25th Per. = 31%	75th Per. = 63%	SOE Share < 50%	SOE Share > 50%
1. Solely Party Secretariat in Member	.39 (.04)	.53 (.04)	.40 (.04)	.53 (.05)
2. Concurrent Party & Local Government Leadership	.41 (.04)	.36 (.04)	.40 (.05)	.35 (.04)
3. Head of Local Government Agency and Party Secretariat Member	.04 (.02)	.03 (.01)	.04 (.02)	.03 (.01)
4. People's Committee Chairman	.16 (.03)	.08 (.02)	.15 (.04)	.08 (.02)

Ordinal Probit Model

Variable Lables	State Owned Enterprise Share (Continuous)			High State Owned Enterprise (Dummy)		
	Baseline (1)	Full (2)	No Cities (3)	Baseline (4)	Full (5)	No Cities (6)
SOE Share of Provincial Industrial Output	−0.00701* (0.0040)	−0.00958* (0.0038)	−0.0104* (0.0040)			
SOE Share of Industrial Output above 50% (Dummy)				−0.203 (0.15)	−0.269* (0.15)	−0.281* (0.16)
South (Dummy)	−0.0811 (0.17)	−0.170 (0.15)	−0.188 (0.17)	−0.0417 (0.16)	−0.130 (0.16)	−0.135 (0.18)
Distance from Major Cities (km)	0.000457 (0.00053)	0.000944* (0.00051)	0.000948* (0.00057)	0.000374 (0.00051)	0.000808 (0.00050)	0.000795 (0.00056)
International Border (Dummy)	0.0340 (0.19)	0.00233 (0.18)	0.0123 (0.19)	0.0209 (0.19)	−0.00532 (0.18)	0.00348 (0.19)
Natural Log of GDP per Capita		−0.0575 (0.14)	−0.0553 (0.15)		−0.0166 (0.15)	−0.0158 (0.16)
Population in 10,000s		0.00147* (0.00062)	0.00168* (0.00072)		0.00118* (0.00066)	0.00134* (0.00073)
Cut Point 1	−0.292 (0.24)	−0.222 (0.29)	−0.241 (0.31)	−0.0716 (0.19)	0.0882 (0.27)	0.0931 (0.29)
Cut Point 2	0.750* (0.24)	0.800* (0.28)	0.805* (0.31)	0.967* (0.18)	1.104* (0.25)	1.132* (0.27)
Cut Point 3	0.930* (0.25)	0.970* (0.29)	0.992* (0.31)	1.145* (0.19)	1.271* (0.25)	1.315* (0.28)
Observations	183	183	172	183	183	172
panels	62	62	58	62	62	58
Pseudo R-Squared	0.00736	0.0171	0.0187	0.00472	0.0124	0.0128
Log Likelihood	−193.7	−201.0	−188.1	−194.3	−202.0	−189.2
χ^2	3.974	12.40	11.09	3.267	8.958	6.748

Ordinal Probit Model coefficents with Standard Errors in Parentheses. *Significant at the .1 level or less. Dummy denotes dichotomous variable.
All models performed in *State* using the *oprobit* procedure. Marginal probabilities calculated using *Clarify* from (King, Tomz, and Wittenberg 2001).
The dependent variable is coded by the author using a self-collected database, based on newspaper accounts and lists of Central committee Membership (available upon request).
Model 1-3 use a continuous measure of SOE Share.
Model 4-6 use a dichotomous measure of whether SOE Share is above 50% or not.

the most recent CCOM. Nonstate Provinces were 12% more likely to send a People's Committee Chairman in 1996 and 2001, but only 3% more likely to do so in 2006. The strong impact in 1996 and 2001 is critical, as these are the reference points reformers would have had in mind when they decided on the divisions and the result of their gerrymandering activities, respectively. It is not clear why there has been an across the board decline in PCOM representation in 2006, but it may indicate that conservative officials caught on to the gerrymandering strategy and moved to counterbalance it. As evidence for this, General Secretary Manh's speech at the closing session of the 2006 Party Congress emphasized a need to enhance the Party's leadership role in policy formation (Nong 2006; Thayer 2007).

A final portion of my argument is that reformers in Hanoi were able to win acquiescence from conservative central officials by offering them personal gain from the huge transfers involved in creating new provinces. If this is true, we should expect to find large transfers to new provinces with compatriots in the central government. Remember, all new provinces were certain to receive more in state investment and transfers than older entities. New office buildings and infrastructure had to be created everywhere. The Office of Government has been clear about the vast amounts being transferred to new subnational units, offering detailed reports on the divisions of the budget, property, and administrative systems (VIR 1996; Vietnam News 2003). If conservatives did acquiesce as a result of targeted transfers, however, there should be evidence that provinces with compatriots in the central VCP received significantly more than other new provinces.

H4: New provinces with compatriots in the central VCP hierarchy received more in state investment and transfers than new provinces without such connections

In Table 7, I present the predicted transfers for each province-type. These scores result from panel models, employing an interaction of *Politburo* (a dummy for whether a province has a compatriot in the highest echelon of the VCP) and *Split96* (whether a province resulted from a split in 1996), along with time variant and invariant control variables.[17] A dummy for national-level cities is added, as these metropolises are provided with special funding to address urbanization problems. *Politburo* is preferred to cabinet officials from the province, which would include too many members of the reform coalition. But it is still not ideal, as it only captures only the very top tier of the VCP. Unfortunately, biographical data on lower-level VCP members is not uniformly available, so *Politburo* is the best available proxy. I study four different measures of transfers. Column 1 analyzes public investment for new construction and infrastructure per capita (GS0 1997–2004). This is not just a measure of SOE investment, which would be tautological, as it measures construction contracts to private and foreign firms as well. Column 2 tests total transfers from the central budget to provincial coffers per capita (MOF 2006). Total transfers include compensatory spending to alleviate provincial budget deficits. Column 3 disaggregates only central government transfers for national programs in education, environment, and health (MOF 2006). Finally, Column 4 studies the average annual salary of provincial officials to see if leaders of new provinces were compensated directly (GSO 2006). All models specify dependent and independent variables as first differences to address nonstationarity.

The first thing to notice about Table 7 is that the *Politburo* coefficient is statistically insignificant in every specification. This implies that there is no difference in transfers between old provinces that have connections and old provinces that do not. *Split96* is significant in two models (state investment and national programs), but insignificant in the other two. This implies that newly created provinces in 1996 without a Politburo member received significantly more funding in these two areas than unconnected older entities. This result makes sense. New provinces were in immediate need of state investment for construction to build new offices and infrastructure. We can imagine that they were privileged over their older peers.

Most importantly, we can see that the interaction between *Politburo* and *Split96* is statistically significant in every specification. Thus, the impact of *Politburo* is conditional on whether the province was established in 1996. Connected older provinces did not receive such munificence. This clearly demonstrates that new provinces with compatriots serving in the VCP received a bonus in transfers that was additional to the funding they would have received for being new. This "connection premium" resulted in 1% faster growth in state investment per annum, 1.8% faster growth in national transfers, 2.3% faster growth in national program spending, and a whopping 3.4% faster growth in local government salaries, continuing long after the initial separation. By 2004, the total difference in absolute transfers to the five newly created provinces with central benefactors and

[17]Full regression results undergirding Table 7 are available in the online appendices.

TABLE 7 Transfers by Province Type Predicted Effects from OLS Regression with Panel Corrected Standard Errors

Province Created in 1997	Compartriot on Politburo	# of Panels	1. Public Investment per Capita (Annual Growth (%), 1997–2004)	2. Total Transfers per Capita (Annual Growth (%), 2000–2004)	3. Health, Education, & Environment Transfers per Capita (Annual Growth (%), 2000–2004)	4. Average Salary for Provincial Officals (Annual Growth (%), 1997–2004)
Yes	Yes	5	10.39	3.47	5.93	21.10
Yes	No	11	9.33	1.68	3.65	17.73
No	Yes	7	7.95	1.94	3.04	12.90
No	No	38	7.87	1.40	2.84	16.10
Standard Error (*p value*) of Politburo Dummy			0.29 (0.78)	0.58 (0.35)	0.5 (0.69)	0.29 (0.15)
Standard Error (*p value*) of Split96 Dummy			0.27 (0.00)	0.21 (0.17)	0.39 (0.04)	0.27 (0.39)
Standard Error (*p value*) of Dummy Interaction			0.54 (0.007)	0.77 (0.10)	0.85 (0.02)	0.54 (0.06)
Number of Observations			427	244	244	427
R^2 of Model			0.91	0.67	0.75	0.45

All results are the predicted effects resulting from the following interaction specification, implemented with STAT *xtpcse* function and fit with panel-specific AR 1 process.
$y_u = \beta_0 + \beta_1 Politburo_u + \beta_2 Split96_u + \beta_3 Politburo_u * Split96_u + \beta_4 X_4 + \beta_{5u} + u_u$
y represents four transfer types specificied above, indexed by province (i) and year (t). *Politburo* denotes whether compatriot of provinces sits on Politburo, *[Split 96]* is a dummy variable marking whether a province resulted from a separation in 1996. X is matrix of time invariant control variables, including: surface area, distance from HCMC and Ha Noi, and a dummy for whether province is a national–level city. Z is a matrix of time variant properties, including: share of state sector/gdp, share of population urban, gdp per capita, infrastructure, percentage of secondary school graduates. First differences were taken to assure a stationary process.
Full Model Results are available in Robustness Test 3 of the Online Appendices.

the 11 without, across all four dependent variables, was about $2.4 million per province.

These results provide support to the notion that conservatives in central positions acquiesced because of the potential perks that separations would provide in their homeland, granting them with lucrative opportunities for clientelist exchange and perhaps even kick-backs on some of the construction contracts.

Conclusion

I have argued and tested the proposition that faced with a classic case of the PRE, reformers in Vietnam relied on an institutional strategy well known to scholars of western democracies. They used gerrymandering to carve out Nonstate Provinces in 1996 and secured a majority of delegates in the CCOM by 2001, allowing them to pursue a host of radical policies that propelled Vietnam to an 8% growth rate and the registration of nearly 200,000 new private firms by 2007. Gerrymandering even led to the rejection by the CCOM of an active General Secretary of the Communist Party—an unprecedented victory. All of these events took place without any changes in Vietnam's institutional design or the share of SOEs in the Vietnamese economy. The reformers simply took control of their Constitutional right to administer the government apparatus.

Tests of further observable implications of the gerrymandering theory are upheld. Newly created Nonstate provinces were more likely to favor reform within their own borders and more likely to send reform-oriented delegates to represent them in the Central Committee. The evidence also illustrates that conservatives, who might have been expected to oppose the new borders as a group, acquiesced individually, due to the possibility of pecuniary benefits from the large transfers involved in the creation of new subnational units.

Despite new challenges, reformers have managed to maintain a majority and Vietnam remains a stunning example of how PRE can be overcome in a nondemocratic context. While the tactic cannot be duplicated exactly in other states, the underlying theoretical principle can certainly be emulated. Reformers wishing to overcome an entrenched opposition and unite a disparate coalition of potential beneficiaries from future reform must take advantage of existing institutional levers. Understanding how to export this theory requires that the political science discipline take formal political institutions more seriously when studying authoritarian countries.

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References

Abrami, Regina M. 2004. "Bottlenecks, Beliefs, and Breakthroughs: The Normative Logic of Economic Reform in Vietnam." Harvard Business School Working Paper Series 05–007.

Abuza, Zachary. 1998. "Leadership Transition in Vietnam since the 8th Party Congress." *Asian Survey* 38 (12): 1105–21.

Abuza, Zachary. 2001. *Renovating Politics in Contemporary Vietnam*. Boulder, CO: Lynne Reiner.

Abuza, Zachary. 2002. "The Lessons of Le Kha Phieu: Changing Rules in Vietnamese Politics." *Contemporary Southeast Asia*, 24 (April 1).

African Research Bulletin 2006. "Uganda" August 1–31.

Barron, Patrick Kai Kaiser, and Menno Pradhan. 2003. "Local Conflict in Indonesia," Measuring Incidence and Identifying Patterns," Presented at UNDP Conference on Conflict in Asia: Conflict in Asia-Pacific: State of the Field and the Search for Viable Solutions in New York.

Beresford, Melanie, 2003. "Economic Transition, Uneven Development, and the Impact of Reform." In *Postwar Vietnam: Dynamics of a Transforming Society*, ed. Hy Van Luong Lanham, MD: Rowman and Littlefield, 55–80.

Bird, Richard M., Litvak, Jennie I. and Rao, M. Govinda. 1995. "Intergovernmental Fiscal Relations and Poverty Alleviation in Viet Nam." *World Bank Policy Research Working Paper* 1430, March.

Brown, Fredrick Z. 1996. "Vietnam's Tentative Transformation." *Journal of Democracy* 7 (4): 73–87.

Cohen, Margot. 2003. "Bridging the Great Divide."*Far Eastern Economic Review*. April, 4.

Chỉ Thị 857/TTG [Directive 857 from the Office of the Prime Minsiter]. 1996. "Về chỉ đạo tổ chức thực hiện việc chia điều chỉnh địa giới hành chính một số tỉnh." [Regarding the concrete guidance for organizing the implementation of separation and fine-tuning the administration of some

provinces], November 15. http://www.ciren.gov.vn/lawdata/857_TTg_1996.htm (May 7, 2008).

Dang, Phong and Melanie Beresford. 1998. *Authority Relations and Economic Decision Making in Vietnam: A Historical Perspective*. Cophenhagen, Denmark: Nordic Institute of Asian Studies.

Đầu Từ [Investment] 1997. "*Phát Huy Thế Mạnh*" [Bringing Strengths Into Play,] April 24, 1.

De Melo, Martha, Cevdet Denizer, Alan Gelb, and Stoyan Tenev. 1997. "Circumstance and Choice: The Role of Initial Conditions and Policies in Transition Economies." *World Bank Working Papers 1866*, Washington D.C.

Dent, Martin. 1995. "Ethnicity and Territorial Politics in Nigeria." In *Federalism: The Multiethnic* Challenge, ed. Graham Smith. New York: Longman Press, 128–54.

Doyle, Edward, and S. Lipsman. 1981. *Setting the Stage*. Boston: Boston Publishing.

Dyckman, Martin. 2003. "In Florida, We Don't Choose Our Legislators, They Choose Us." *St. Petersburg Times*. October 12: D3.

Economist. 2006. "Good Morning at Last." August 5, 37.

Economist. 2004. "The Good Pupil." May 8, 2004, 39.

Fforde, Adam. 1993. "The Political Economy of 'Reform' in Vietnam—Some Reflections." In *The Challenge of Reform in Indochina*, ed. Bjorn Ljunggren. Cambridge: Harvard University Press, 293–326.

Fforde, Adam, and Stefan de Vylder. 1996. *From Plan to Market: The Economic Transition in Vietnam*. Boulder, CO: Westview Press.

Fforde, Adam. 2004. "Vietnamese State Owned Enterprises: 'Real Property, Commercial Performance, and Political Economy." *City University of Hong Kong Working Paper Series* (69), August.

Fforde, Adam. 2007a. *Vietnamese State Industry and the Political Economy of Commercial Renaissance: Dragon's Tooth or Curate's Egg?* Oxford: Chandos Publishing.

Fforde, Adam, 2007b. "Vietnam Politics and Puzzle in Mid-2007." *Aduki, Commentary* #1.

Frye, Timothy. 2008. *Incredible Transformation: Building States and Markets in the Postcommunist World*. Draft Manuscript. Columbia University.

Gainsborough, Martin. 2007. "From Patronage to Outcomes: Vietnam's Party Congress Reconsidered." *Journal of Vietnamese Studies* 2 (1): 3–26.

General Statistical Office (GSO). 1995–2003. *Statistical Handbook*. Hanoi: Statistical Publishing House.

Groffman, Bernard. N. 1985. "Excerpts from the First Declaration of Bernard Grofman in Badham v. Eu," *PS: Political Science & Politics* 18 (Summer): 544–50.

Hale, Henry A. 2004. "Divided We Stand: Institutional Sources of Ethnofederal State Survival and Collapse," *World Politics* 56 (2):165–93.

Hanai, Kiyohito, and Bach Thi Minh Huyen, 2004. "Revenue Assignment between the Central and Local Budgets in Vietnam." In *Reform of the Vietnamese Tax System*, ed. Eiji Tajika and Quach Duc Phap. Hanoi: Ministry of Finance, 219–60.

Hellman, Joel, Geraint Jones, and Daniel Kaufman, 2000. "Seize the State, Seize the Day: State Capture, Corruption, and Influence in Transition." *World Bank Policy Research Working Paper 2444*, September.

Hellman, Joel. 1998. "Winners Take All: The Politics of Partial Reform in Post-communist Transitions." *World Politics* 50 (2): 203–34.

Hoff, Karla. 2000. "The Logic of Political Constraints and Reform: With Application to Strategies for Privatization." *World Bank Working Paper*, October.

Horowitz, Shale. 2004. "Sources of Post-Communist Market Reform: Economic Structure, Political Culture, and War." *International Studies Quarterly* (48): 755–78.

Kerkvliet, Benedict J. Tria. 2001. "An Approach for Analyzing State-Society Relations in Vietnam." *Sojourns* 16 (2): 238–78.

King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44 (2): 347–61.

Kitschelt, Herbert. 2003. "Accounting for Post-communist Regime Diversity. "What Counts as a Good Cause?" In *Capitalism and Democracy in Central and Eastern Europe: Assessing the Legacy of Communist Rule*, ed. Grezgorz Ekiert and Stephen Hanson. Cambridge: Cambridge University Press, 49–88.

Klinken, Gerry. 2004. "Return of the Sultans." *Inside Indonesia* 78, April–June.

Kolko, Gabriel. 1997. *Vietnam: Anatomy of a Peace*. New York: Routledge.

Kopstein, Jeffrey, and David Reilly. 2000. "Geographic Diffusion and the Transformation of the Post-Communist World." *World Politics* 53 (1):1–30.

Lan, Anh. 2004. "*Cả Lai Châu mới và cũ đều có huyện Mường Lay*," [Both the new and old Lai Chau equally possess Muong Lay District." *Vietnam Net*, November 8. http://www.vnn.vn/thoisuquochoi/vandekhac/2003/11/35926/. May 7, 2008

Law, Gwillim. 1995–2005. *Administrative Subdivisions of Countries*. Jefferson, NC: McFarland & Company, Jefferson. www.statoids.com (May 7, 2008).

Le, Dang Doanh. 1992. "The Vietnamese Economy—One Year after the 7th CPV Congress." In *Vietnam: One Year After the Seventh Party Congress*. Hanoi, Vietnam: The Gioi Publishers, 42–64.

Leff, Carol Skalnik. 2001. "Democratization and Disintegration in Multinational States: The Breakup of the Communist Federations." *World Politics* 51 (2): 205–35.

Marr, David. 2004. "A Brief History of Local Government in Vietnam." In *Beyond Hanoi: Local Government in Vietnam*, ed. Ben Kerkvliet and David Marr. Singapore: Institute of Southeast Asian Studies, 29–53.

Marelius, John. 2005. "Governor, Democrats, Spar over Redistricting." *San Diego Union Tribune*. February 25, A1.

Mawdsley, Emma. 2002. "Redrawing the Body Politic: Federalism, Regionalism and the Creation of New States in India." *Commonwealth and Comparative Politics* 40 (3): 34–54.

McCarty, Adam. 2002. *The Policy Making Process in Vietnam: Public Administration Reform Study*. Hanoi, Vietnam: Asian Development Bank.

Meligrana, John. 2005. *Redrawing Local Government Boundaries: An International Study of Politics, Procedures, and Decisions*. Seattle: University of Washington Press. Ministry of Finance (MOF)-Vietnam, 2002–2004. "State Budget-Final Accounts and Plan." Hanoi: Financial Publishing House.

Mitra, Pradeep, and Marcelo Selowsky, 2002. "Lessons from a Decade of Transition in Eastern Europe and the former Soviet Union." *Finance and Development* 39 (2). http://www.imf.org/external/pubs/ft/fandd/2002/06/mitra.htm (May 7, 2008).

Ministry of Finance. 2000–2006. "State Budget-Final Accounts and Plan." Hanoi: Financial Publishing House. www.mof.gov.vn.

Murphy, Kevin, Andrei Shliefer, and Robert Vishny. 1992. "The Transition to a Market Economy: The Pitfalls of Partial Reform." *Quarterly Journal of Economics* 107 (3): 889–906.

Nguyen, Thanh Tam. 2003. "*Không nên tách tỉnh*," [No Need to Separate Provinces]. *Vietnamnet*, November 6. http://www.vnn.vn/bandocviet/2003/11/35663/. May 8, 2008.

Nguyen, Van Thang. 2005. "Is The Development of State-Owned Enterprises (SOEs) Crowding Out The Private Sector? Evidence from PCI Survey." Hanoi, Vietnam: US-AID.

Nong, Duc Manh. 2006. "*Diễn văn Bế mạc Đại hội X của Tổng Bí thư Nông Đức Mạnh*," [Closing Speech of 10th Party Congress by General Secretary Nong Duc Manh], June 1. http://www.cpv.org.vn/tiengviet/tulieuvankien/vankiendang/?topic=191&subtopic=8. accessed May 8, 2008.

Niên Giám Tổ Chức Hành Chính Việt Nam (NGTCHCV). 1997–2005. [Compendium of Administration in Vietnam]. Hanoi, Vietnam: Statistical Publishing House.

Pei, Minxin. 2006. *The Limits of Developmental Autocracy*. Cambridge: Harvard University Press.

Pham, Cuong. 2007. "Lập vùng đô thị thay vì chia nhỏ tỉnh," [Create urban zones rather than separating provinces], January 13, 2007. http://www.vietnamnet.vn/chinhtri/2007/01/653412/ (May 7, 2008).

Pritchett, Lant. 2003, "A Toy Collection, A Socialist Star, and A Democratic Dud? Growth Theory, Vietnam, and the Philippines." In *Search of Prosperity: Analytic Narratives on Economic Growth*, ed. Dani Rodrik. Princeton, NJ: Princeton University Press, 123–52.

Rao, Govinda M., Richard M. Bird, and Jennie I. Litvack, "The Changing Requirements of Fiscal Relations: Fiscal Decentralization in a Unified State." In *Market Reform in Vietnam*, ed. Jennie I. Litvack and Dennis A. Rondinelli. Westport, CT: Quorum Books, 145–60.

Reut, Andrei, Konstantin Permyakov, Timur Dugarzhapov Vitalina Masterova, Svetlana Bogovaya, Igor Saskov, and Sergei Shevaldin. 2003. "A New Map for Russia: 40 New Regions. *Gazeta* 93 (June).

Riedel, James. 1995. "The Transition to a Market Economy in Vietnam." *Hong Kong Letters* 34, September.

Riedel, James, and William S. Turley. 1999. "The Politics of Economic Transition to an Open Economy in Vietnam." *OECD Development Center Technical Paper* 152, September.

Roeder, Philip G. 1991. "Soviet Federalism and Ethnic Mobilization." *World Politics* 43 (2): 196–232.

Ross Schneider, Ben. 1993. "The Career Connection. A Comparative Analysis of Bureacratic Preferences and Insulation." *Comparative Politics* 25 (3): 331–50.

Schmidt, Uwe. 2004. "Vietnam's Integration into the Global Economy. Achievements and Challenges." *Asia Europe Journal* 2: 63–83.

Searing, Donald. 1994. *Westminster's World. Understanding Political Roles*. Cambridge, MA: Harvard University Press.

Shanks, Ediwn, Cecila Luttrell, Tim Conway, Vu Manh Loi, and Judith Ladinsky. 2004. "Understanding Pro-Poor Political Change: The Policy Process—Vietnam." London: Overseas Development Institute.

Shih, Victor. 2007. "Partial Reform Equilibrium, Chinese Style: Political Incentives and Reform Stagnation in Chinese Financial Policies" *Comparative Political Studies* 40 (10): 1238–62.

Shirk, Susan, 1993. *The Political Logic of Economic Reform in China*. Berkeley: University of California Press.

Sidel, Marc. 1997. "The 1996 Congress and Beyond." *Asian Survey* 37 (5): 481–95.

Slantchev, Branislav. 2005. "The Political Economy of Simultaneous Transitions: An Empirical Test of Two Models." *Political Research Quarterly* 58 (2): 279–94.

Soloman, Matthieu, and Vu Doan Ket. 2004. "Strategic and Foreign Relations of Vietnam since Đổi Mới: The Case of the National Assembly." Presented at the annual Vietnam Update Conference, Institute of Southeast Asian Studies in Singapore.

Stern, Lewis. 1989. "Conflict and Transition in the Vietnamese Economic Reform Program." *ISIS Paper* 3. Institute of Security and International Studies: Chulalonkorn University.

Stern, Lewis. 1993. *Renovating the Vietnamese Communist Party*. New York: St. Martin's Press.

Thanh Niên [Young People], 2001. "*Công ty thiết kế tư vấn xây dựng Ninh Thuận chi sai hàng tỷ đồng*." [Construction Design Consulting Company's Expenditures Off by Billions of Dong], July 2.

Thayer, Caryle A. 1988. "The Regularization of Politics: Continuity and Change in the Party's Central Committee, 1951–86." In *Postwar Vietnam: Dilemmas in Socialist Development*, ed. David G. Marr and Christine P. White. Ithaca, NY: Cornell University Press, 177–93.

Thayer, Carlyle A. 1995. "Mono-Organizational Socialism and the State." In *Vietnam's Rural Transformation*, ed. Benedict J. Kerkvliet and Douglas J. Porter. Boulder, CO:Westview Press: 39–64.

Thayer, Carlyle A. 1997. "The Regularization of Politics Revisited: Continuity and Change in the Party's Central Committee, 1976–96." Presented at annual meeting of Association of Asian Studies, Chicago.

Thayer, Carlyle. A. 2002. "Vietnam in 2001: The Ninth Party Congress and After." *Asian Survey* 42 (1): 81–89.

Thayer, Carlyle A. 2007. "Vietnam: The Tenth Party Congress and After." In *Southeast Asian Affairs 2007*, ed. Daljit Singh and Lorraine Salazar. Singapore: Institute of Southeast Asian Studies, 381–297.

Tonneson, Stein 2000. "The Layered State of Vietnam." In *State Capacity in East Asia*, ed. Kjeld Erik Brodsgaars and Susan Young. New York: Oxford University Press, 236–68.

Tran, Hoang Kim 2002. "Socio-Economic Statistical Data of 631 Rural Districts, District Towns, and Cities under Direct Authority of Provinces in Vietnam." Hanoi, Vietnam: Statistical Publishing House.

Tuổi Trẻ [Youth], 2004. "*Hậu Giang sốt đất sau khi tạch tỉnh*," [Hau Giang Land Fever after Province Separated]. February 5.

Turley, William, and Brantly Womack, 1998. "Asian's Socialism's Open Doors: Guangzhou and Ho Chi Minh City." *The China Journal* 40: 95–119.

Van Arkadie, Brian, and Ray Mallon. 2003. *Viet Nam: A Transition Tiger?* Canberra: Asia Pacific Press.

Vasavakul, Thaveeporn. 1997. "Sectoral Politics for State and Party Building." In *Đổi Mới: Ten Years After the 1986 Party Congress*, ed. Adam Fforde. Canberra: Australia National University, 80–136.

Vasavakul, Thaveeporn. 2003. "From Fence-Breaking to Networking: Interests, Popular Organizations, and Policy Influences in Post Socialist in Vietnam." In *Governance in Vietnam: The Role of Organizations*, ed. Ben Kerkvliet, Russel Heng, and David Koh. Singapore: Institute of Southeast Asian Studies, 25–61.

Việt Luận [Vietnamese Essays] 1053, January 5, 1996 quoted in Vasavakul 1997.

Vietnam Investment Review (VIR). 1996. "National Assembly Creates New Vietnamese Provinces." November 13: *Vietnam Investment Database (5.0)*. Pacific R.I.M and Ministry of Planning and Investment: Hanoi.

Vietnam Investment Review (VIR). 1997. "Provinces Face Up to Capital Crunch." May 19. *Vietnam Investment Database (5.0)*. Pacific R.I.M and Ministry of Planning and Investment: Hanoi.

Vietnam Investment Review (VIR). 1999. "Assembly Debates Multi-Sector Move." November 29. *Vietnam Investment Database (5.0)*. Pacific R.I.M and Ministry of Planning and Investment: Hanoi.

Vietnam Investment Review (VIR). 2000. "Some Foreign Partners Were Unfair, Says Minister." May 29. *Vietnam Investment Database (5.0)*. Pacific R.I.M and Ministry of Planning and Investment: Hanoi.

Vietnam News Agency (VNA) and Government Office. 2004. *The Vietnamese Government 1945–2003*. Hanoi, Vietnam: VNA Publishing House.

Vietnam Competitiveness Initiative (VNCI). 2005–2007. *The Vietnam Provincial Competitiveness Index 2005, 2006, 2007: Measuring Economic Governance for Private Sector Development*. Hanoi, Vietnam. http://www.pcivietnam.org/ (August 30, 2008).

Vo, Van Kiet. 2006. "Letter to Politburo of Vietnam." March 16. http://www.vnnnews.com/article.php3?id_article=1524 (May 8, 2008).

Vu, Hoang Cong. 2002. 'The Public Policy Making Process and Its Characteristics in Vietnam." Unpublished mimeo. Hanoi, Vietnam.

Vu Quang Viet. 2006. "Chuyển biến trong lãnh đạo và hệ thống lãnh đạo Đảng và Nhà nước Việt Nam từ sau 1945: Khả năng cải cách thể chế quyền lực để chống tham nhũng." [The Evolution within the Leadership and Leadership System of the Party and State of Vietnam from 1945: The Probability of Reforming Institutions of Power to Stop Corruption." Thời Đại Mới [New Era], 9, 1–33.

Vuving, Alexander L. 2004 "The Two-Headed Grand Strategy: Vietnamese Foreign Policy *Since Đổi Mới*." Presented at the annual Vietnam Update Conference, Institute of Southeast Asian Studies in Singapore.

World Bank. 1996. *Vietnam: Fiscal Decentralization and the Delivery of Rural Services*. Hanoi, Vietnam: World Bank Country Operations Division, East Asia and Pacific Region.

World Bank. 2002. *Transition: The First Ten Years- Analysis and Lessons for Eastern Europe and the Former Soviet Union*. Washington DC: World Bank.

Xinhua, 2006. "Vietnam Plans to Equitize over 1,500 SOEs by 2009." September 23, 2006.

Yan, Qing. 2006. "Socialist Vietnam Tests Political Reform." *Nanfang Zhoumo*, April, 20. http://www.nanfangdaily.com.cn/ZM/20060420/xw/tx2/200604200012.asp (May 8, 2008).

Yang, Dali L. 1996. "Governing China's Transition to the Market: Institutional Incentives, Politicians' Choices, and Unintended Outcomes." *World Politics* 48 (3): 424–52.

Zhou, Ruijin. 2006. Vietnamese Reform Worthy of Attention. *Yangcheng (Guangzhou) Evening News*. July 12, 2006.

Zorn, Christopher. 2005. "A Solution to Separation in Binary Response Models." *Political Analysis* 13 (2): 157–70.

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Gerrymandering – Vietnamese Style:

Escaping the Partial Reform Equilibrium in a Non-Democratic Regime

Online Appendices

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Appendix 1: Summary Statistics and Sources of Key Variables

Linear Probability Cox Non-Proportional Hazard Models					
Variable Label	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**Source (Notes)**
_t	6.76	4.07	1	15	Dependent variable in hazard analysis measuring time of entry to time of failure (separation). New provinces enter at t+1, where is equal to the year after separation.
Split	0.03	0.16	0	1	1 if Province *(i)* separated in year *(t)*
Province the Result of Previous Split (Dummy)	0.57	0.50	0	1	1 if Province the creation of previous separation
Province Already at 1965 Borders (Dummy)	0.60	0.49	0	1	Law, Gwillim. 1995-2005. Administrative Subdivisions of Countries. North Carolina: McFarland & Company, Jefferson.
Area in 1,000s of Square Kilometers	5.49	4.14	0.75	22.38	Data available at www.statoids.com.
Lagged Party Congress (Dummy)	0.20	0.40	0	1	Year after Party Congresses in 1991, 1996, 2001, and 2006
South (Dummy)	0.54	0.50	0	1	Province below 17th Parallel
International Border (Dummy)	0.44	0.50	0	1	Province shares a border with China, Cambodia, or Laos.
Population in 10,000s	133.86	83.24	26.21	573.07	
Natural Log of GDP per Capita	0.98	0.63	-0.60	4.28	General Statistical Office (GSO). 1995-2005. *Statistical Handbook.* Hanoi: Statistical Publishing House. Data online at www.gso.gov.vn.
% of Population in Urban Areas	20.26	14.80	1.58	93.06	
Agriculture Output as a Percentage of GDP	41.90	24.49	1.31	377.00	
SOE Share of Provincial Industrial Output	47.61	21.24	0.00	99.33	
SOE Share of Industrial Output above 50% (Dummy)	0.46	0.50	0	1	Share of State Sector/Industrial Output above 49.6
% of Minorities in Province	1.86	1.30	1	5	1. No minorities at all; 2. 1-25%; 3. 25-50%; 4. 50-75%; and 5. 75-100%.
Number of Compatriots in Cabinet	0.64	1.11	0	7	Nien Giam To Chuc Hanh Chinh Vietnam (NGTCHCV). 1997-2005. [Compendium of Administration in Vietnam]. Hanoi: Statistical Publishing House.
Party Rank of People's Committee Chair	1.14	0.39	1	4	Author's coding based on Sheng (2005) and Huang (2003): (4. The Provincial Party Secretary holds a concurrent central position; 3. A Central Minister or Vice Minister was transferred to lead the province; 2. A Provincial Party Secretary from another locality was transferred to lead the province; 1. The Party Secretary has never held a government position outside of his province). Data not available for 1990.
Local Representative Status in Central Committee					
Distance from Major Cities	197.31	200.52	0	835	Distance in kilometers between provincial capital and Ho Chi Minh City or Hanoi.
Status of Local Representative on Central Committee	1.88	1.06	1	4	Author's Database based on media coverage of Central Committee (1. Solely Party Secretariat Member; 2. Concurrent Party & Local Government Leadership; 3. Head of Local Government Agency and Party Secretariat Member; 4. People's Committee Chairman)
Revenue and Private Sector Business Environment					
Province receives majority of 2004 revenue from Non-State Sector	0.61	0.49	0	1	Ministry of Finance. 2004. "State Budget-Final Accounts and Plan." Hanoi: Financial Publishing House. Province with majority of revenue from non-state sector receive a 1, other receive a 0.
Attitude	48.96	8.86	30.21	71.56	Obtained from Vietnam *Provincial Competitiveness Index* (Vietnam Competitiveness Initiative 2006). Data and survey available at www.vnci.org. Attitude (Question H1): What do you think is the attitude of provincial government officials toward private business? (Percentage of private firms answering (4) Somewhat Positive or (5) Positive on 5-Point Scale); Obstacle (Question H6_12): Favoritism toward the state sector is an obstacle to my business (Percentage of private firms answering (3) Agree or (4) Strongly Agree). Property Rights (Question B4_1a): Percentage of firms with official Land Use Rights Certificate granting long-term sale, mortgage, and exchange rights over land. Land Wait: Residual of regressing question (B4_3_3 - median wait for land introduction) on average plot price and land availability.
Obstacle	45.39	7.13	31.00	63.59	
Property Rights	66.15	23.37	11.30	96.50	
Land Wait	0.00	46.42	-52.66	218.96	
Profit	72.95	55.87	-16.04	244.96	Average profit per enterprise in 2004): Author's calculation from General Statistical Office Enterprise Census. Data available at www.gso.gov.vn.
Central Transfers					
Politburo	0.17	0.38	0	1	Author's Coding based on Central Committee Lists
State Investment Per Capita (Natural Log)	8.04	2.05	0.00	14.13	General Statistical Office. Multiple Years. Statistical Handbook. Hanoi: Statistical Publishing House. State Investment, Telephones, and Secondary School from years 1990-1999. Salary data from 1999-2001. Not that State investment only includes government expenditures and not SOE investment, which is calculated separately.
Annual Change Salary of Government Officials	14.65	13.57	-29.49	70.80	
Telephones per 1,000 Citizens	84.79	11.07	46.26	99.50	
Percentage of Secondary School Graduates	6.32	0.23	5.80	7.03	
Net National Transfers Per Capita (Natural Log)	7.72	1.53	1.41	9.989065	Ministry of Finance. 2000-2006. State Budget-Final Accounts and Plan. Hanoi: Financial Publishing House. www.mof.gov.vn
Net Program Transfers Per Capita (Natural Log)	5.73	3.38	0.00	9.49	

Robustness 1: Determinants of Provincial Separation (PROBIT), 1990 to 2005

Variable Labels	1990	1991	1996	2003	Years	Interact
	(1)	(2)	(3)	(4)	(5)	(6)
SOE Share of Industrial Output above 50% (Dummy)	0.904	-1.920*	1.422*	1.723*	-0.224	-5.688*
	(1.64)	(0.78)	(0.57)	(0.63)	(0.35)	(0.97)
Province the Result of Previous Split (Dummy)					-1.168*	-1.543*
					(0.40)	(0.35)
Province Already at 1965 Borders (Dummy)					-1.534*	-2.395*
					(0.35)	(0.47)
Population in 10,000s	-0.0100	0.0190*	0.00637*	0.0117*	0.00139	0.00369
	(0.0064)	(0.0054)	(0.0035)	(0.0041)	(0.0026)	(0.0030)
Area in 1,000s of Square Kilometers	0.980*	0.380*	0.172*	0.0252	0.104*	0.119*
	(0.33)	(0.12)	(0.069)	(0.061)	(0.050)	(0.060)
International Border (Dummy)	-9.310*	-3.604*	-1.163	-0.0489	-0.712*	-0.517
	(2.82)	(1.24)	(0.72)	(0.51)	(0.36)	(0.41)
Number of Compatriots in Cabinet		-0.250	-0.0997	-0.254	-0.129	-0.214
		(0.35)	(0.28)	(0.20)	(0.18)	(0.17)
% of Minorities in Province					-0.756*	-0.856*
					(0.24)	(0.24)
Natural Log of GDP per Capita	3.639*	-5.623*	0.729	-3.616*	-3.101*	-4.304*
	(1.21)	(2.07)	(0.55)	(1.25)	(0.73)	(0.96)
% if Population in Urban Areas		0.0329	-0.0602*	0.0331	0.0139	0.0224
		(0.055)	(0.024)	(0.025)	(0.019)	(0.021)
South (Dummy)	-1.741*	0.857	0.455	1.968*	-0.0334	0.265
	(0.91)	(0.78)	(0.54)	(0.72)	(0.32)	(0.39)
1990 (Dummy)					0.218	-0.0679
					(0.41)	(0.78)
1991 (Dummy)					1.854*	2.863*
					(0.40)	(0.67)
1996 (Dummy)					2.918*	2.329*
					(0.54)	(0.81)
2003 (Dummy)					4.883*	5.370*
					(0.80)	(1.06)
1990 (Dummy) * SOE Share>50% (Dummy)						5.522*
						(1.32)
1991 (Dummy) * SOE Share>50% (Dummy)						3.813*
						(1.16)
1996 (Dummy) * SOE Share>50% (Dummy)						7.506*
						(1.10)
2003 (Dummy) * SOE Share>50% (Dummy)						7.952
						(4.32)
Constant	0.150	0.0537	0.361*	0.169		
	(0.16)	(0.17)	(0.19)	(0.18)		
Number of Observations	40	44	53	61	830	830
Pseudo R-squared	0.606	0.663	0.364	0.510	0.363	0.372
Log Likelihood	-4.194	-7.502	-14.30	-5.866	-44.81	-34.13

PROBIT Coefficient with robust standard errors (clustered at panel level) in parentheses. * Significant at the .1 level or less.
In yearly models 1-4, previous split, sixty-five, and minorities and number of compatriots in cabinet are dropped, as they perfectly predict failure in 1990 and 1991 respectively.

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Robustness 2 : Cox Non-Proportional Hazard Model of the Determinants of Provincial Separation, 1990 to 2004

Variable Labels	Cox Baseline	Cox Full	Cox Baseline w/lnT Interactions	High SOEs w/lnT Interactions	High SOEs w/lnT Interactions (t<5)	High SOEs w/lnT Interactions (t>5)	Full w/lnT Interactions (t<5)	Full w/lnT Interactions (t<5)	Full w/lnT Interactions (t>5)	Robust to People's Committee Rank	Robust to Dropping Cities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
SOE Share of Industrial Output above 50% (Dummy)		1.494		0.381	4.481*	0.654	0.388	4.996*	0.683	0.651	0.757
		(0.81)		(0.53)	(2.89)	(0.41)	(0.54)	(3.63)	(0.47)	(0.37)	(0.46)
Province Already at 1965 Borders (Dummy)	0.119*	0.114*	0.106*	0.0888*	0.0982*	0.0982*	0.0812*	0.102*	0.102*	0.0739*	0.0519*
	(0.066)	(0.076)	(0.064)	(0.054)	(0.054)	(0.054)	(0.063)	(0.071)	(0.071)	(0.061)	(0.039)
Lagged Party Congress (Dummy)	1.754	1.734	1.726	1.730	1.978	1.978	1.870	2.109*	2.109*	2.278*	2.903*
	(0.70)	(0.65)	(0.69)	(0.76)	(0.86)	(0.86)	(0.76)	(0.83)	(0.83)	(1.00)	(1.45)
Area in 1,000s of Square Kilometers	1.135*	1.170*	1.140*	1.131*	1.127*	1.127*	1.145*	1.151*	1.151*	1.131*	1.261*
	(0.053)	(0.063)	(0.055)	(0.055)	(0.057)	(0.057)	(0.068)	(0.072)	(0.072)	(0.070)	(0.087)
South (Dummy)	2.044	2.066	2.041	2.482	2.423	2.423	2.071	2.016	2.016	1.702	2.445
	(1.13)	(1.49)	(1.15)	(1.68)	(1.56)	(1.56)	(1.18)	(1.20)	(1.20)	(1.12)	(1.88)
International Border (Dummy)	0.221*	0.198*	0.227*	0.294*	0.326*	0.326*	0.291	0.293*	0.293*	0.384	0.308
	(0.12)	(0.17)	(0.13)	(0.16)	(0.17)	(0.17)	(0.23)	(0.21)	(0.21)	(0.28)	(0.27)
Population in 10,000s	1.007*	1.010*	1.007*	1.007*	1.007*	1.007*	1.010*	1.010*	1.010*	1.014*	1.018*
	(0.0028)	(0.0035)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0032)	(0.0034)	(0.0034)	(0.0026)	(0.0034)
Natural Log of GDP per Capita	0.0928*	0.0670*	0.283	0.414	0.0695*	0.113*	0.150	0.0551*	0.0657*	0.0593*	0.291
	(0.074)	(0.058)	(0.30)	(0.46)	(0.067)	(0.13)	(0.23)	(0.056)	(0.081)	(0.080)	(0.44)
% if Population in Urban Areas		1.018					1.021	1.024	1.024	1.013	1.033
		(0.018)					(0.015)	(0.017)	(0.017)	(0.019)	(0.025)
% of Minorities in Province		1.008					0.757	0.986	0.954	1.242	1.997
		(0.47)					(0.35)	(0.45)	(0.36)	(0.60)	(1.11)
Number of Compatriots in Cabinet		0.755					0.879	0.781	0.799	0.625	1.410
		(0.16)					(0.30)	(0.13)	(0.22)	(0.19)	(0.46)
Party Rank of People's Committee Chair										0.656	0.631
										(0.30)	(0.25)
Interactions with Natural Log of Time											
SOE Share of Industrial Output above 50% (Dummy)				2.615	0.146*	6.847*	2.833	0.137*	7.319*	6.387*	7.717*
				(1.92)	(0.12)	(5.47)	(2.08)	(0.12)	(6.50)	(5.86)	(7.37)
Natural Log of GDP per Capita			0.557	0.415*	1.625	0.615	0.694	1.193	0.838	1.260	0.253
			(0.26)	(0.19)	(1.94)	(0.73)	(0.47)	(1.40)	(0.98)	(1.56)	(0.41)
% of Minorities in Province							1.239	0.968	1.033	0.948	0.578
							(0.22)	(0.26)	(0.28)	(0.33)	(0.27)
Number of Compatriots in Cabinet							0.885	1.023	0.977	1.048	0.471**
							(0.16)	(0.28)	(0.27)	(0.33)	(0.14)
Number of Observations	830	830	830	830	830	830	830	830	830	790	734
Number of Panels	87	87	87	87	87	87	87	87	87	84	77
Log Likelihood	-69.18	-67.86	-68.88	-67.66	-66.97	-66.97	-66.27	-65.97	-65.97	-55.38	-46.39
χ^2	70.59	89.89	67.81	99.31	115.1	115.1	166.8	139.2	139.2	161.6	274.5
DF	7	11	8	10	10	10	15	15	15	16	16
Prob. > χ^2	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001

Hazard ratios are displayed with robust standard errors, clustered at the provincial, in parentheses. * Significant at the .1 level or less. Dummy signifies dichotomous dependent variables.

Hazard ratios < 1 indicate decrease in risk of separation. Hazard ratios > 1 indicate increase in risk of separation.

Non-proportional Hazard analysis implemented in Stata using the stxcox procedure. For model 3-11, the function tvc was used to allow for interactions with the natural log of time (lnT). Failure set to equal the time (t) province (i) is divided into new provinces.

New provinces enter the model one year after the separation of their mother province. Thus, 40 provinces enter in 1990, 6 new provinces enter in 1991, 12 new provinces enter in 1997, and 6 new provinces enter in 2004. Time is set to 0 upon entry.

Models 5 and 8 interact high SOE share with natural log of time for t<5, while Models 6,9,10, 11 interact high SOE share with natural log of time for t>5 in order to capture the non-proportional effects of SOE share over the time period.

Model 10 uses the Party Rank of the Provincial People's Committee Chairman. Data is not available on this variable in 1990, thereby dropping 40 observations and 3 provinces, which were separated in 1990.

Model 11 drops the national level cities of Ho Chi Minh City, Hanoi, Haiphong, Da Nang (after 1997), and Can Tho after (2003).

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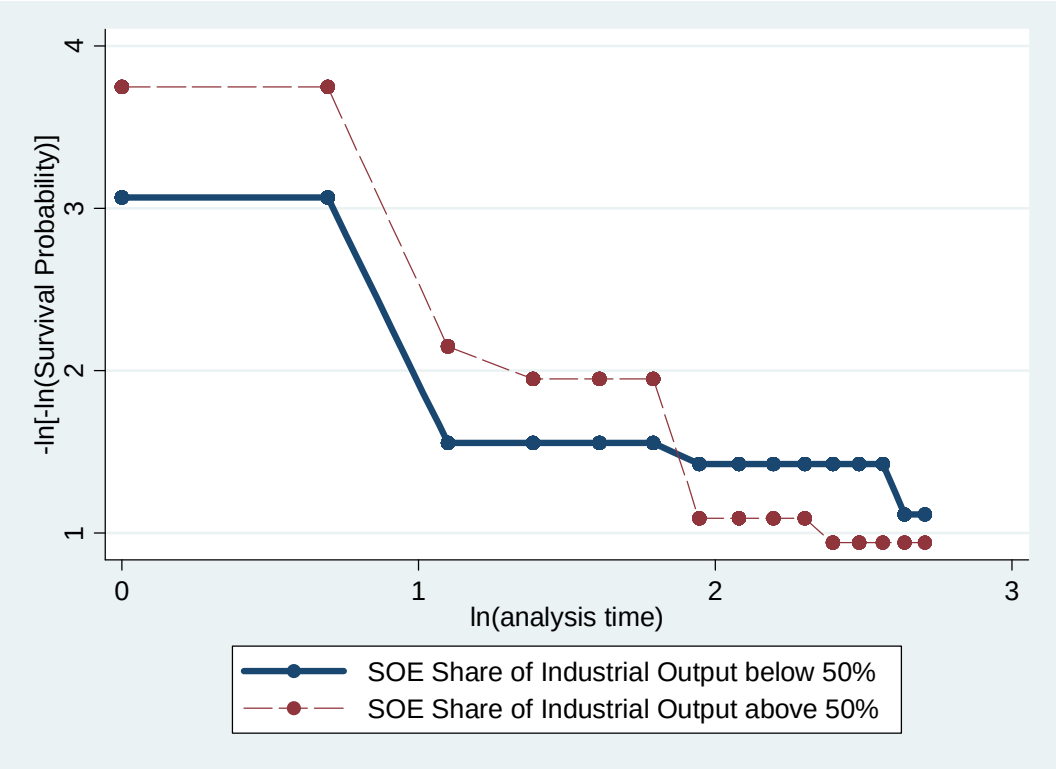
Robustness Test 2B: Survival Probabilities of Non-State and SOE Provinces (1990-2004)
(Derived from Robustness Test 2 – 7)



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Robustness Test 3: Determinants of Central Transfers

Variable Labels	1. State Investment per Capita	2. Total Transfers per Capita	3. Health, Education, & Environment Transfers per Capita	4. Average Salary for Provincial Officials
	(Annual Growth (%), 1997-2004)	(Annual Growth (%), 2000-2004)	(Annual Growth (%), 2000-2004)	(Annual Growth, (%), 1997-2004)
Province Created in 1997	1.463*	0.803*	0.283	1.556
	(0.27)	(0.39)	(0.21)	(1.81)
Provincial Compatriot on Politburo	0.0835	0.201	0.539	-3.279
	(0.29)	(0.50)	(0.58)	(2.26)
Interaction Split97*Politburo	0.971*	2.079*	1.253	6.644*
	(0.54)	(0.85)	(0.77)	(3.55)
SOE Share of Industrial Output above 50% (Du	-0.239*	0.643**	-0.154	1.440
	(0.13)	(0.27)	(0.16)	(1.46)
Secondary School Graduates (%, fd)	0.00702*	0.0380*	0.0179	0.191*
	(0.0030)	(0.021)	(0.015)	(0.063)
Telephone per Capita (%, fd)	0.0254*	-0.103*	-0.0364*	-0.0783*
	(0.0038)	(0.0074)	(0.0049)	(0.029)
GDP per Capita (fd)	0.300*	-0.313	0.115	-1.437*
	(0.059)	(0.32)	(0.16)	(0.32)
% of Population in Urban Areas (fd)	0.0115	0.130	0.0177	-0.281*
	(0.0078)	(0.087)	(0.061)	(0.17)
Distance from major market	0.00170*	0.00273*	0.000386	-0.000948
	(0.00053)	(0.00055)	(0.00029)	(0.0029)
Area (thousands of square kilometers)	0.0110	-0.0392	-0.0244	0.281*
	(0.020)	(0.046)	(0.025)	(0.17)
City Dummy	1.773*	-0.152	0.151	4.290*
	(0.87)	(0.69)	(0.41)	(2.32)
Ba Ria-Vung Tau Dummy	0.305	5.036*	0.197	20.72*
	(0.52)	(2.45)	(1.14)	(4.16)
	7.218***	2.852*	1.703*	15.46*
	(0.17)	(0.37)	(0.22)	(1.33)
Observations	427	244	244	427
R-squared	0.91	0.67	0.75	0.45

OLS Models with Panel Corrected Standard Errors in parentheses; * Significant at the .1 level or less. Dummy denotes dichotomous variable. (Fd) implies first difference taken
Dummies for National-level cities and oil-rich Ba Ria-Vung Tau used due to disprop

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