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# INFLATION AND INSOUCIANCE: THE PECULIAR BRAZILIAN GAME\*

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The politics of inflation typically have been cast as reflecting an underlying "collective-action problem," in which actions that would benefit the entire group are irrational from the viewpoint of each individual.<sup>1</sup> Everyone would be better off without inflation. But in the absence of a mechanism that would permit social groups such as workers and owners to construct a lasting bargain, each group finds itself structurally obliged to push for higher money incomes, even if each one knows that any temporary gains in real income will be inflated away. Brazilian inflation has been described in these terms (Franco 1989). This article will suggest instead that the attitudes of one key Brazilian social group may be better understood as a case of "rent seeking." In other countries, financial capital as a net-creditor sector opposes inflation. But because of Brazil's unique set of financial regulations, Brazilian bankers and upper-income investors have reaped substantial economic benefits from inflation in recent decades. Although they might prefer as citizens to have lower inflation, their rational economic interests give them few strong reasons to make sacrifices in the interest of solving society's "collective-action problem." Because not all important actors desire stabilization, bringing prices down becomes intrinsically more difficult than if the problem were simply one of finding a means of overcoming mutual distrust to reach a cooperative solution.

This essay will analyze Brazilian inflation as four simultaneous two-player games. Three of them—Industry versus Government, Labor versus Government, and Government versus Government—exemplify a game that is called "Prisoner's Dilemma," which is a classic problem of collective action. In the fourth matchup, however, the game becomes "Deadlock" for one partner. In the game of Banks versus Government,

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1. On "collective action," see Olsen (1965).

banks prefer mutual defection, an outcome that allows the inflationary status quo to continue, over mutual cooperation, which would require the banks to accept reform of Brazil's unique national system of financial regulations. This system has perpetuated both inflation and extraordinary returns to financial capital.

Thus a lasting solution to the problem of Brazilian inflation must be political. Sectors that do not benefit from inflation—principally labor and industry—will have to amass enough power to coerce banks into accepting alterations of the financial rules necessary for stabilization. Three major factors suggest that a future political solution to Brazil's "peculiar game" is no longer impossible to imagine: the return of democracy in 1985 after twenty years of military rule; dramatic expansion of the voting franchise in 1986, which incorporated illiterates for the first time; and the recent electoral successes of at least one programmatic, mass-based political party on the Left. The conclusion of this article will consider briefly the first year of the Plano Real, the stabilization package inaugurated in July 1994 and still in place a year later. I will also discuss some implications of the Brazilian case for theories of inflation and the interaction between democratization and economic reform.

#### INFLATION AND INSOUCIANCE

By anyone's standards, Brazil has endured extremely high rates of inflation. Annual inflation averaged 39 percent in the 1970s and 328 percent from 1980 to 1991 (World Bank 1993b). In four of the six years between 1988 and 1994, annual inflation hit four-digit rates, and in 1994 (one of the two remaining years), prices rose by more than 900 percent. Moreover, inflation has been extremely volatile, especially since the mid-1980s. In 1986 monthly inflation shot up and down between 18 percent and minus 1 percent; in 1987, between 28 percent and 5 percent; and in 1990, inflation hit almost 80 percent one month but then plummeted to 10 percent.<sup>2</sup>

Brazil's failure to stabilize its economy is a puzzle. One might imagine that inflation would have been considered the country's principal economic problem. By many measures, it is. A leading Brazilian economist recently speculated that the annual costs to economic actors of coping with inflation amounted to "10 percent to 15 percent of the gross domestic product."<sup>3</sup> For decades, successive central governments have embarked periodically on economic reform programs aimed at stabilizing

2. These peaks and troughs correspond to the various stabilization plans (see Zini 1992, 216).

3. According to Edmar Bacha, in informal remarks that he should not be held to in any rigorous fashion, at the conference "Interactions between Market-Oriented Economic Reform and Democratic Consolidation," sponsored by the Overseas Development Council in Washington, D.C., 8–9 Mar. 1993.

the currency.<sup>4</sup> From 1979 to 1984, fiscal and monetary policies followed a stop-and-go pattern, alternating periods of fiscal orthodoxy with demanded expansion (Fishlow 1989). After civilian democratic government returned to Brazil in 1985, stabilization plans turned to "heterodox shocks," from the Cruzado Plan of 1986 to the two Collor plans of 1990–1991. Most plans involved a large external devaluation, a new currency, a wage and price freeze, and cuts in government spending. Despite the fact that the plans tended to become progressively more draconian, none of them held inflation down once the price-freeze period ended (Bresser Pereira 1993; Zini 1992). In mid-1994, President Itamar Franco's government announced a new stabilization effort, the Plano Real, which derived its name from the new currency, the *real*. This plan was ostensibly a close copy of the orthodox and seemingly successful stabilization instituted in Argentina in 1990. Observers of this sixth major stabilization plan since 1986 remained, as of this writing in mid-1995, hopeful but skeptical.<sup>5</sup>

Brazilian inflation has not been decisively tamed, but by some measures, it hardly seems to matter. Growth has continued to be adequate in most years. In the 1970s, the gross domestic product expanded by nearly 10 percent, while industry grew even faster. In the difficult early 1980s, when the U.S. recession was followed by generalization of the Mexican debt crisis throughout Latin America, growth plummeted to 1.6 percent. Brazil nonetheless did better than most of its neighbors. During the late 1980s, inflation continued to escalate, but economic growth rebounded to a mean annual rate of 4.3 percent. After three years of stabilization-related recession in the early 1990s under President Fernando Collor (1990–1992), Brazil returned to de facto pro-growth policies under President Franco (inaugurated in January 1993). Inflation in 1993 doubled in comparison with 1992, but economic growth increased slightly to 5 percent, the best yearly figure since 1986.<sup>6</sup>

International investors have continued to bet on Brazil. For example, in both 1992 and 1993, a billion dollars (U.S.) in net new direct investments by foreigners entered the country.<sup>7</sup> The net inflow of all capital, long- and short-term, was 8.8 billion dollars in 1992 and 3.5 billion in 1993 (CEPAL 1993).<sup>8</sup> Another source notes that in 1993, Brazilian firms raised 7.6 billion

4. From 1950 through the 1970s, stabilization programs appeared and reappeared, but only those of 1954–1955 (under interim President João Café Filho), 1964–1967 (under military President Humberto Castelo Branco), and 1974 (under military President Ernesto Geisel) continued to dampen inflation after temporary price controls were lifted.

5. The others were the Cruzado Plan of February 1986, the Bresser Plan of July 1987, the Summer Plan of February 1989, the Collor Plan of February 1990, and the Collor Plan II of February 1991.

6. James Brooke, "Brazil's Market Boom Is Not for Faint-Hearted," *The New York Times*, 25 Feb. 1994.

7. Internal memo, Institute for International Finance, Washington, D.C.

8. The World Bank registered a net long-term capital inflow for 1992 of \$19.9 billion (1993b).

dollars in international bond issues, although the Brazilians paid higher interest rates than Chilean or Argentine borrowers.<sup>9</sup> Regardless of whose precise numbers prove to be correct, these capital inflows are impressive.

Even with triple-digit annual inflation, stabilization policies implying a transitional recession were distinctly unpopular with Brazilian industrialists and other elite actors.<sup>10</sup> Academic analysis frequently has mirrored this carefree attitude toward high inflation. Policy discourse in Brazil has sometimes appeared to operate in a world of its own. For example, economists who study other countries often define "hyperinflation" as any rise in prices greater than 50 percent per month. By the usual Brazilian definition, in contrast, as long as the economy continues to function (as it manifestly has), there can be no hyperinflation. Economists discuss "super-inflation" and "strato-inflation" instead. Two explanations are possible: either Brazilian elites cannot recognize their own interests and many Brazilian economists and policymakers are delusional, or Brazil has been genuinely different.

In comparative perspective, Brazil's reasonably good record in maintaining growth and attracting foreign investment during the wildly inflationary 1980s and 1990s as well as the generally blasé attitude of Brazilian elites toward price rises are bizarre. An important piece of the proximate explanation for why and how the Brazilian economy continues to function lies in the country's unique institutional framework of financial regulations. The main provision has been indexation (to past rates of inflation) of virtually all medium- and long-term contracts in the formal sector. For example, an individual in Brazil does not earn a salary of a certain number of currency units; rather, one earns three, ten, or sixteen "minimum wages." Political battles are fought over which of many available inflation indices will be used to calculate the exact rate at which the minimum wage moves upward. The same is true for rents, mortgage payments, invoices for goods supplied on credit, and other future payments. The Brazilian financial sector functions because of the availability of indexed assets to savers and lenders (see Baer and Beckerman 1974, 1980). Across the years and under military governments (beginning in 1964) as well as their democratic successors (since 1985), the actual workings of indexation have protected upper-income groups better than poorer citizens (Zini 1992). Yet most Brazilians who have access to "political voice"—including not only elites but the middle class and (beginning in the 1980s) even the formal-sector industrial working class—have enjoyed substantial protection from inflation.<sup>11</sup>

9. Internal memo, Institute for International Finance.

10. On attitudes in the business sector, see "Industry Is Poised for Growth, a Survey Shows," *Gazeta Mercantil International Weekly Edition*, 24 May 1993, p. 13. For an academic economist's version of industry's views, see Braga (1987).

11. On the subject of political voice, see Hirschman (1981a).

The puzzle remains unsolved, however. Indexation enables individuals to cope with a problem that otherwise would surely defeat them. But why has Brazil not bitten the bullet and implemented a successful stabilization plan?<sup>12</sup> Brazilian governments have indeed instituted stabilization plans. Each one works for awhile but ultimately serves only to keep the lid on loosely rather than to end the inflationary spiral. Meanwhile, life and economic activity go on somehow. Perhaps the key to Brazilian inflation lies in the incentives for various political and social actors, incentives that are in some way unusual.

#### "SOCIOLOGICAL INFLATION" VERSUS "RENT-SEEKING INFLATION"

What Albert Hirschman once called the "sociological" or "tug-of-war" theory of inflation suggests that social groups will seek to keep the prices of their outputs (their incomes) high and the prices of their inputs (their costs) low (Hirschman 1981b). Thus labor would like relatively high wages but prefers that the prices of finished consumer goods remain comparatively low. Capitalists who own businesses engaged in manufacturing consumer goods will prefer the opposite: high prices for the shirts or refrigerators they make and sell while paying low wages. Even if each group recognizes that any gains it achieves by negotiations, strikes, or oligopolistic market power will inevitably be competed away as opposing groups exercise their own power resources, the game of pushing for nominal income gains (without any enduring shifts in real income) continues nonetheless. Unilateral abdication from the game of trying to raise one's relative prices would be irrational, resulting in a permanently lower income for one's group. By participating in the game of bargaining up one's relative income share, each group achieves an income that cycles higher and then lower, fluctuating around a mean that is higher than the low income probable if the game ceases while the opponent is temporarily ahead.

Even if each competing group recognizes that relatively higher income streams will inevitably be transitory, each group is nonetheless obliged by the structure of the situation to persevere in trying to improve its relative position. Inflation eventually produces problems for everyone, however, an unwanted and costly outcome of the bargaining process among economically differentiated groups.<sup>13</sup> Here is a perfect problem of collective action, a situation in which an outcome that is economically worse for all participants is perpetuated simply because it is irrational for

12. For related discussions, see Bacha and Lamontier (1993), Bresser Pereira (1993), Faucher (1994), and Weyland (1994), as well as the explicitly game-theoretic essays cited hereafter.

13. Hirschman (1981) notes that in some cases, other non-economic payoffs to groups (or their leaders) may keep them from engaging in the symbolically important struggle for a better relative income. In economic terms, however, there is no long-term payoff.

any player to desist unless all the others desist also. Possible solutions to the dilemma involve overcoming problems of mutual distrust in order to enforce a stabilization that would make society as a whole (as well as each participating group) better off than it would be in an inflationary spiral.

Are all cases of demand-led inflation therefore problems of collective action?<sup>14</sup> Inflation-generating conflicts over relative prices between classes (capitalists and workers) or sectors (importers and exporters, industry and agriculture) easily fit the model of "sociological inflation." Yet at least one classic case of group conflict may seem not to fit this model. Net debtors (sometimes including the government itself) may rely on inflation to erode the real value of their liabilities. But debtors prefer inflation only to the point at which the real value of their debts has been inflated away: once the favorable shift in relative prices has been reached, former debtors prefer stable prices. The only exception would be a player who, consistently and over time, was able to position itself as a net debtor despite inflation. Government is probably the only player able to achieve this position. Consequently, as Hirschman notes, the government often gains from mild inflation.

But what if an actor, group, or sector desired inflation for its own sake? That is, what if an actor did not find inflation to be an unwanted outcome of its rational attempts to improve its relative position vis-à-vis other social groups? What if this actor benefited either from the situation of inflation itself or from some other circumstance that occurred only with inflation? This essay will argue that financial capital in contemporary Brazil meets these conditions and that its preferences and behavior cannot be encompassed within the sociological model of inflation. Before proceeding, however, I will briefly consider "tug-of-war inflation" from the alternative perspective of the problem of bringing down existing inflation, that is, from the perspective of stabilization.

Several recent attempts to understand stabilization clearly view the problem as one of collective action among differing social groups, usually classes. According to these analyses, stabilizations are delayed because despite the fact that a rapid end to inflation would be best for all, groups cannot agree over how to apportion the inevitable costs of stabilization. Alberto Alesina and Allan Drazen (1991), for example, have noted the puzzling fact that successful stabilizations frequently are preceded by several failed attempts that substantively resemble the earlier failed policies. Because society as a whole loses due to the disruptions and uncertainties of inflation, it seems collectively irrational for a country to delay

14. Most analyses of national inflation patterns seem to fit within the category of "problem of collective action" (see Hirsch and Goldthorpe 1978; Lindberg and Maier 1985). Charles Maier, however, recounts several stories of past hyperinflations that may have appeared to key actors as "zero-sum games" (Maier 1978).

and suffer until it eventually implements a "solution" not unlike those that earlier proved politically impossible. Alesina and Drazen comment, "[T]he timing of stabilizations and, in particular, their postponement cannot be easily understood in terms of models in which the policymaker is viewed as a social planner maximizing the welfare of a representative individual. On the contrary, heterogeneity in the population is crucial in explaining these delays. In many cases, the process leading to a stabilization can be described as a war of attrition between different socioeconomic groups with conflicting distributional objectives" (1991, 1171). Stabilization finally occurs when one player eventually concedes after finding the costs of continued inflation greater than the costs of bearing a disproportionate share of the costs of stabilization. Alesina and Drazen note that the societal choice of stabilization often coincides with the political victory of one social group over its rival or rivals.

Raúl Labán and Federico Sturzenegger (1992) have observed that actual stabilizations are often "conservative" in that they place most of the transition costs on the shoulders of poorer groups or classes, even though it is technically possible to design a stabilization program that is more distributively neutral. They explain that lower-income groups are almost always less able to protect themselves from the direct costs of inflation because they are "agents without access to capital flight, financial adaptation, and other ways of inflation tax evasion" (Labán and Sturzenegger 1992, 2). Thus lower-income groups' costs from continued inflation increase faster than those of higher-income groups. Not only will lower-income groups be the first to concede, but the higher the inflation rate at which they capitulate, the worse becomes the distribution of costs that they will have to accept. Labán and Sturzenegger (1992) and Adam Przeworski (1991) have introduced the realistic complication that social groups may also delay in accepting reforms because the eventual success of any given attempt at stabilization is much less certain than the fact that it will involve current transition costs. Despite their differences, all these analysts conceive of inflation as being a net loss for society as an aggregate and for each player. Different players resist ending inflation to avoid an adverse distribution of stabilization costs but never because they intrinsically prefer inflation itself.

Other theorists have employed a model with different underlying assumptions from those of "collective action" to generalize about other types of common economic distortions. An array of policy problems, ranging from the political economy of tariffs to the efficiency of state-owned enterprises, have been modeled in terms of "rent seeking" (Krueger 1974; Bates 1988). An economic rent has been defined as "any income received by a factor [of production] over the amount necessary to keep that factor in its present employment" (Hanson 1977, 395). As in the "sociological model" of inflation just discussed, suboptimal outcomes



under conditions of rent seeking result when diverse social groups try separately to better their own positions. Public policies that are individually rational for a social group (such as preserving its employment at all costs, or preventing competition in its sector of economic activity) are irrational (economically suboptimal) from the point of view of society. For example, "rents" are created by laws and institutions that entrench chronic overemployment in the public sector, artificial restrictions on trade such as tariffs and quotas, or large grants of regulatory discretion to bureaucrats. In each instance, the economic regulatory regime allows one social group—civil servants, uncompetitive producers, or license-granting functionaries—to receive returns above those that it would garner under a more market-friendly set of economic rules.

The politics of economic reform under conditions of "rent seeking" is a zero-sum game: society as a whole improves its welfare, but the receivers of "rents" are worse off than before. Unfortunately, gains from potential reforms often are diffused across society but are relatively small for each individual. Losses, in contrast, are large and concentrated in the group of previous receivers of "rents." Because the losers are a relatively small group and because each group member can expect significant costs from reform, organizing the group of potential losers to oppose the reform is comparatively easier than organizing the much larger group of potential small gainers to fight for the reform. Intrinsically, the politics of reform becomes harder for would-be reformers to negotiate than the situation in which the proposed economic reforms would solve a collective-action problem.

The institutional peculiarities of Brazilian financial regulation, when considered together as a system, create an anomalous situation in which Brazil's financial sector, along with individual investors who are well-informed about financial assets, benefits (receives "rents") from inflation. The empirical basis for this assertion will be explored in the "Banks versus Government" game to be described. It should be noted, however, that no claim is being made that Brazilian bankers overtly organize or collude to perpetuate inflation. Financiers are members of the larger society, with noneconomic and cooperative interests in such goals as preserving democracy and generating economic growth for the nation as a whole. But under the unique institutional conditions prevailing in contemporary Brazil, the material interests of financial capital should lead that group to "prefer" inflation, if it is a rational actor.

#### THE PECULIAR BRAZILIAN GAME AND ITS SUB-ROUTINES IN FOUR VERSIONS

A different, although related, set of models will now be employed to describe patterns that began to characterize Brazilian political economy in the 1970s and became more pronounced as inflation accelerated in

the early 1980s and thereafter.<sup>15</sup> I use game theory here as an alternative metaphor that allows a closer look at the incentives of social actors. Four such actors have played a major role in perpetuating Brazilian inflation: Industry, Labor, Banks, and Government. Their preference structures at different times resemble those of the games known as Prisoner's Dilemma, Chicken, and Deadlock. Because in practice the government draws up any stabilization plan, I represent national bargaining over stabilization as four simultaneous two-player games, three between each sectoral actor and the government, and the fourth (in two versions) within the government itself. The outcome of each two-player game forms a piece of the eventual stabilization plan. Jointly, the four games determine when and whether stabilization is achieved and how its inevitable costs will be distributed among the players.

### *Game Theory and the Political Economy of Inflation*

The first task is to review the structures of three simple two-player games—"Prisoner's Dilemma," "Chicken," and "Deadlock"—in order to show how each relates to the theories of "sociological inflation" and "rent seeking" summarized in the previous section.<sup>16</sup> The game known as Prisoner's Dilemma describes the following situation. Two players must cooperate in order to avert a bad outcome that will hurt them both. Cooperation is costly, however, and therefore each player would prefer to have the other player cooperate unilaterally while he or she "defects" (does not cooperate). Both players fear being tricked into unilateral cooperation, and consequently, both defect. In a single round, therefore, the outcome is mutual defection, an outcome unfortunately worse for both players than mutual cooperation. The preferences of an actor playing Prisoner's Dilemma can be ranked from most-desired outcome number 4 to least-desired number 1:

- 4 = "I do not moderate my inflationary demands, but you, my opponent, do," that is, I defect, you cooperate [D,C].
- 3 = "We both moderate our inflationary demands" [C,C].
- 2 = "We both do not moderate our inflationary demands" [D,D].
- 1 = "I moderate my inflationary demands, but you do not" [C,D].

Prisoner's Dilemma is a symmetrical game in that both players have the same preference structure. Clearly, "sociological inflation" is analogous to this game: each actor would like the others to avoid pushing their relative prices up but is unwilling to cease his or her inflationary

15. Formal game-theoretic analyses of Brazilian inflation include Arce (1994), De Castro (1991), Fraga and Werlang (1983), and Franco (1989). Arce modeled stabilization as two simultaneous games between Government and Industry and between Labor and Industry. None of these analyses consider financial capital as a distinct player.

16. For summaries of simple games, see Snyder (1971) and Stein (1990).

behavior for fear of having others profit at his or her expense. If Prisoner's Dilemma is played once or only a few times, the equilibrium solution is mutual defection. But this game exemplifies a problem of collective action: both players would be better off if they could cooperate. Multiple iterations of the game allow the players to develop a strategy of reward and punishment ("tit for tat") whereby each rewards the opponent with a return of the opponent's last move. In this way, the mutually cooperative solution can eventually be reached.

The game of Chicken is the same as Prisoner's Dilemma, with one change: each actor recognizes that mutual defection is a worse outcome for him or her than unilateral cooperation. If a player fears that the opponent might really have the preference structure of Prisoner's Dilemma, then the first player is willing to capitulate without a quid pro quo. In Chicken, the actor's preference structure, moving from best to worst outcomes, is:

- 4 = "I do not moderate, you do" [D,C].
- 3 = "We both moderate" [C,C].
- 2 = "I moderate, although you do not" [C,D].
- 1 = "We both defect" [D,D].

The game of Chicken models the outcome of an inflationary tug-of-war in which the players have different abilities to tolerate continued inflation—that is, mutual defection. Assuming that Labán and Sturzenegger are correct in believing that upper-income groups are generally better equipped to cope with high inflation, then lower-income groups can be said to begin by playing Prisoner's Dilemma but to switch from Prisoner's Dilemma to Chicken at a certain level of inflation. For example, at an annual inflation of 100 percent, lower-income groups will accept the identical compromise that they refused while annual inflation was only 50 percent (meaning they will "cooperate").

The third game is Deadlock, so named because in a symmetrical game there can never be a cooperative solution even if the game is repeated many times. The Deadlock player would be happy for his or her opponent to cooperate unilaterally. But even assured cooperation by the opponent offers the Deadlock player insufficient benefits for ceasing to defect. This game models the position of the actor obtaining "rents" from a regulatory regime that is suboptimal from the viewpoint of society as a whole. For example, the local computer manufacturer who benefits from a high tariff on computer imports would be happy in his or her private identity as consumer to see trade barriers fall on imported bicycles and ski suits, but it would still be economically irrational for the manufacturer to give up the "rents" in the protected home computer market in exchange. The preferences for the game of Deadlock are:

- 4 = "I do not moderate, but you do" [D,C].
- 3 = "We both do not moderate" [D,D].

2 = "We both moderate our inflationary behavior" [C,C].

1 = "I moderate, but you do not" [C,D].

If any actor gains "rents" from inflation, then that actor probably is playing deadlock and would therefore be unwilling to stabilize voluntarily, no matter what other players do.

### *Government, the Common Player*

One could begin by modeling Brazilian inflation of the 1980s and 1990s in terms of the usual three players: Industry, Labor, and Government. For reasons peculiar to Brazil, I have added a fourth player, here called "Banks." Each player has significant independent influence over the continuation of inflation or the timing of stabilization or both, an independent set of preferences among various possible stabilization alternatives, and enough power to resist being coerced by other groups into capitulating first. These players combine in four games: Industry versus Government; Labor versus Government; Government versus Government (in two versions, Finance versus Planning, and the Executive versus the Legislature plus the States); and Banks versus Government. The initial three games are played by most contemporary industrial capitalist countries, but the game of Banks versus Government as played in contemporary Brazil may be *sui generis*.

Government, the common player in all these games, represents the executive branch of the central government, headed by the president and cabinet. Government is simultaneously a self-regarding player and an intermediary between other players. The president and cabinet want to maintain political popularity. Because most voters want successful stabilization, ending inflation becomes an important goal for political leaders. As a self-interested actor, Government wants the sacrifices necessary for stabilization to be made by others and would prefer not to tie its own hands. As an intermediary, Government needs to obtain cooperation from others. A sacrifice or cost accepted by Government generally implies a cost imposed on a societal actor as well. Government's first contribution to inflation is to fail to keep spending demands in line with revenues.<sup>17</sup> To stabilize, Government can bring its fiscal deficit down by imposing a defeat on (getting cooperation from) Industry, Labor, or itself (as defined subsequently). Government also generates inflation when it funds deficits in an inflationary fashion. The problem of ending inflationary patterns of public finance requires imposing defeat on banks. The power of government derives from its role as umpire among various societal ac-

17. Total "revenues" include taxes, fees, profits of state firms, and the small amount of noninflationary seigniorage that comes to government as it expands the money supply roughly in rhythm with real economic growth.

tors, each one competing for an economic regulatory system biased in its own favor.

Government's preferences vis-à-vis each of its opponents (Industry, Labor, Government itself, and Banks) are, proceeding from the most to the least attractive outcome:

- 4 = Government makes no promises other than to "try" to obtain concessions from third parties; the opponent capitulates unilaterally [D,C].
- 3 = Government arranges a pact that allocates joint sacrifices among various societal interests, receiving a promise of cooperation from its opponent [C,C].
- 2 = Status quo; no one is willing to bear the costs of stabilization, and therefore inflation continues [D,D].
- 1 = Government so fears that the opponent with whom it is bargaining may engage in worse behavior (such as capital flight or mass protests) if inflation is not conquered that Government agrees unilaterally to impose concessions elsewhere [C,D].

The central government here is playing Prisoner's Dilemma in each of the component games. Although each opponent perceives that Government wishes only for it to capitulate first, the Government's true preference is for joint sacrifice, that is, for solving the societywide collective-action problem (a point that will be discussed further subsequently).

### *The Industry versus Government Game*

The first sectoral actor is nonfinancial capital or Industry (its dominant member). Although the examples used to illustrate this game draw on the experience of large-scale manufacturing industry, similar games occur between the interests of other producers and the government.<sup>18</sup> During much of the military period, interest conflicts took place through direct but discreet contacts between powerful entrepreneurs and senior government officials. Since democracy has returned to Brazil, such conflicts have occurred to a greater degree in open fora, such as the Brazilian Congress. The fact that Brazilian business interests are more fragmented than many Western European industrial sectors does not alter the nature of the fundamental game of Industry versus Government, although the mutually cooperative solution becomes incrementally more difficult to reach.

Brazilian manufacturers historically have wielded a great deal of market power, often enough to engage in cost-plus pricing. They also have enjoyed political power, which has kept taxes relatively low. Their main contribution to inflation, however, may have been employment of their political power to secure a vast array of subsidies, from credit to sector-specific tax breaks to below-market prices for goods and services

18. See, for example, "Bancada de interesse," *Veja*, 4 May 1994, pp. 28–30; or "A turma do calote," *Veja*, 17 May 1995, pp. 30–37.

produced by state-owned enterprises. Moreover, unlike businesses in other newly industrializing countries (such as South Korea), Brazilian private industry often has had enough clout to retain subsidies that no longer serve any plausible "developmental purpose." In the aggregate, such behavior destroys public finances because new and old subsidies alike must be paid for (Weyland 1994). One concession that industrial capital could make toward stabilization is to let go of its various subsidies, a course that would reduce budget deficits. It also could agree to pay more taxes or refrain from passing on to customers any increase in its costs (such as those arising from higher wages, taxes, or prices for outputs of state-owned enterprises). The power of industry is the power to invest voluntarily in plants and equipment—or not to invest. Other options for industry are investing in financial assets in Brazil or abroad (meaning capital flight).

In the first game of Industry versus Government, the preferences of industry are, in descending order:

- 4 = Industry holds firm to its subsidies and other privileges; Government balances the budget by exacting concessions elsewhere (for example, from labor) [D,C].
- 3 = Industry enters into an effective "social pact,"<sup>19</sup> brokered by Government, in which all players give up some benefits for the sake of stabilization [C,C].
- 2 = Status quo; no one is willing to bear the costs of stabilization, so inflation continues [D,D].
- 1 = Industry suffers loss of subsidies and other benefits, without any guarantees that Government will require others to do likewise [C,D].

Clearly, the game of Industry versus Government is an instance of symmetrical Prisoner's Dilemma. If played once or only a few times, it probably has a noncooperative outcome (both actors defect). If iterated, however, the game can reasonably be expected to lead to a mutually cooperative outcome (both actors cooperate), given that both players prefer this outcome.

### *The Labor versus Government Game*

Labor, as used in this discussion, includes all white-collar workers (many of whom work for the central government) plus formal-sector industrial labor. Into the early 1990s in Brazil, other groups in the economically active population have had little impact on public policy choices at the national level. The main contribution to inflation made by formal-sector workers in Brazil has been made via their organized and some-

19. I use the term *social pact* loosely, to refer to any kind of formal or informal agreement among economic interests or among political parties or factions that represent them, brokered by the government. The term can also mean a series of formal bilateral pacts between each interest and the government.

what successful pressure for “stability of employment” (job security), whether the enterprise needs their services or not, and then for indexation of their wages to inflation. The sacrifices that labor could make to bring down inflation are (in rough order of importance) to relinquish job security, to accept lower or imperfectly indexed wages, to pay higher taxes, and to receive fewer or more costly government services.<sup>20</sup>

The power of labor has been transformed since about 1980. Throughout the era following World War II, the political support or at least the acquiescence of the growing urban middle class has been crucial for all national governments, whether under the semi-elite democratic government between 1945 and 1964 or the modernizing authoritarian regime thereafter. Formal-sector industrial workers, another small and comparatively privileged group, also participated in the political support coalition during the 1950s. Since Brazil’s gradual shift to a mass electoral democracy,<sup>21</sup> labor has increased its power resources. The Constituent Assembly of 1987–1988 wrote many economically populist clauses into the new constitution, including job security after two years of employment. Even illiterate workers in the informal sector can now vote, a situation that may increase labor’s bargaining power vis-à-vis the other major players in Brazil’s inflationary game. The Partido dos Trabalhadores (PT), created only in 1980, elected a mayor in São Paulo, the country’s largest city, and nominated a credible candidate for president in 1989 and again in 1994.

The game of Labor versus Government looks remarkably similar in structure to the first game of Industry versus Government. The preferences of Labor are, in descending order:

- 4 = Labor keeps all benefits newly won under democratic government, plus its old privileges; Government secures agreement on sacrifices elsewhere (from industry and banks) to bring down inflation [D,C].
- 3 = Labor participates in a “social pact” negotiated by Government, in which all relevant players jointly agree to sacrifice [C,C].
- 2 = Status quo; no one is willing to bear the costs of stabilization, so inflation continues [D,D].
- 1 = Labor bears the brunt of the pain of stabilization [C,D].

The game of Labor versus Government is also symmetrical Prisoner’s Dilemma. Thus there is every reason to expect that time and repeated negotiations should yield an acceptable stabilization compromise.

20. Brazilian labor is, like Brazilian industry, only a fitfully unitary actor. From the 1980s onward, labor’s preferences (or the policy choices of various workers’ groups) increasingly have been expressed through party politics rather than through a combination of mass action and coalition formation with (or in opposition to) nonfinancial capital to bargain with government. The fundamental incentives to the players (and thus the nature of the game) are not altered by acknowledging these nuances.

21. I usually date the Brazilian transition to democracy as starting around 1980. The formal inauguration of an indirectly elected civilian president occurred in 1985; the first direct presidential election in Brazil since 1961 was held in late 1989. Frances Hagopian (1992) dates the transition from the early 1970s.

*The Government versus Government Game (in Two Versions)*

Industry, labor, and the banks negotiate with the government. But government branches and agencies also bargain among themselves. Within the executive branch of the central government, ministries responsible for monetary and financial control (call them "Finance") battle with bureaus charged with accomplishing tasks requiring spending (call them "Planning").<sup>22</sup> Finance includes the finance minister and ministry, the central bank, and sometimes income and other tax bureaus. Planning includes ministries charged with managing industry, infrastructure, agriculture, and labor as well as all social welfare agencies. In the Finance versus Planning intragovernmental game in contemporary Brazil, three basic means of achieving stabilization exist: fiscal policy, monetary policy, and reform of financial regulations. Finance can cooperate in stabilizing by running a surplus or funding any deficits in noninflationary ways (in effect, the position of Government in the other games). In the short to medium term, Finance cooperates by leaning on other players (mainly Banks) to reduce the government's current outlays on servicing domestic debt, perhaps by partial default on outstanding debt. Over the longer run, Finance successfully funds any deficit by stable long-term borrowing, which in the contemporary Brazilian context may imply following tight monetary policy but also negotiating a dramatically different financial regulatory framework with other societal actors (especially Banks). Planning can stabilize by reducing its outlays, either by making do with fewer employees and other internal cost-cutting measures or by reducing the services provided to society.

The preferences of Finance are the same as in Prisoner's Dilemma:

- 4 = Finance does not adjust; Planning makes permanent cuts in the federal budget [D,C].
- 3 = Finance stabilizes via monetary policy or financial reform; Planning reduces current and capital spending [C,C].
- 2 = Status quo: Finance continues to fund deficits in inflationary ways; Planning does not cut spending sufficiently to run an operational surplus; inflation continues [D,D].
- 1 = Finance takes drastic measures to contain the money supply; Planning does not act to improve the fiscal balance [C,D].

Meanwhile, the preferences of Planning also parallel the game of Prisoner's Dilemma:

- 4 = Planning does not cut "essential spending"; adjustment occurs through financial reform and monetary policy only [D,C].

22. For purposes of my analysis, all spending agencies within the executive branch of the central government are lumped into "Planning." Thus, for example, the federally owned Banco do Brasil, which usually has advocated expenditures benefiting rural producer interests, would fall within the planning part of government.



- 3 = Stabilization occurs through a combination of fiscal, monetary, and financial policies [C,C].
- 2 = Status quo: no enduring policy change; continuing inflation [D,D].
- 1 = Planning makes large cuts in current and capital spending; Finance enacts no serious financial or monetary reforms [C,D].

The Finance versus Planning intragovernmental game has the same structure as the other games presented thus far and appears to be susceptible to a cooperative solution under conditions of repeated play.

On the Brazilian national scene, another battle within government emerged in the 1980s and 1990s. Intragovernmental relations between the Executive, on the one hand, and the Legislature plus the States (defined here as regionally loyal politicians, whether in the National Congress or state and local governments) on the other, are the players in the Executive versus Legislature plus States intragovernmental game. The Executive takes on the role of Government in the other games. From the viewpoint of the Executive, the Legislature and the States are both budget-busting claimants on scarce resources. From the viewpoint of regionally accountable politicians, in contrast, the central government Executive is a unitary opponent that wishes to impose all the sacrifices necessary for stabilization on those politicians.

The preferences of the Executive are the same as in Prisoner's Dilemma:

- 4 = The Executive makes no promises to legislative blocs or to governors or mayors; States accept new responsibilities commensurate with any revenues they take from the center, pay their debts to it, and the Legislature acts "responsibly" in congress [D,C].
- 3 = The Executive admits a moral obligation to redistribute revenues in the direction of subnational governments, to make up for the "social deficit" of the military regime; States balance their budgets and the Legislature goes along with austerity plans [C,C].
- 2 = Status quo; inflation continues [D,D].
- 1 = The Executive unilaterally yields to the profligacy of States (presumably because the president needs friends), trying to contain inflation through monetary policy or "shock treatment" plans with price freezes [C,D].

The preferences of the Legislature plus the States mirror those of the Executive, but in reverse order.<sup>23</sup> The preferred option of the Legisla-

23. One reader of a draft of this article suggested that the weakness of Brazilian political parties has meant that national legislators are significantly less likely than state and local politicians to cooperate with the executive branch of the central government in cutting spending. He argues that federal senators and deputies can be credited with their pork-barrel successes without being tarred with the failures of the Brazilian Congress as a whole to cut spending, given that almost everyone can claim minority party status and thus helplessness in controlling the overall level of largesse. State governors, in contrast, can scarcely duck responsibility for bankrupt state treasuries. I would argue instead that fragmentation within the player I call "Legislature plus the States" makes cooperation tougher

ture plus States is for the Executive to accept the redistribution of fiscal revenues toward the States and then to end inflation by leaning on some other actor (probably Industry or Banks). The States' preferences also are those of Prisoner's Dilemma.

Thus far, all the national battles over how to stabilize—the games of Industry versus Government, Labor versus Government, and Government versus Government in both versions—are cases of Prisoner's Dilemma. Together they suggest that Brazilian inflation is "sociological" and that stabilization is indeed a problem of collective action. The return to democracy in the 1980s in Brazil made some of these games harder to resolve, at least temporarily. Empirically, democratization in the 1980s increased spending pressures on Government by increasing the relative power of the actors labeled here as Labor and States. Nonetheless, the fact that all groups would benefit from mutual cooperation to achieve stabilization and that the negotiations in all cases have been iterated many times makes the nonachievement of stabilization under extremely high rates of inflation surprising. The catch lies in the final game.

#### *The Banks versus Government Game*

The fourth important actor in contemporary Brazil is financial capital (here called Banks), which includes the owners of private financial institutions as well as large net holders of financial assets (rentiers).<sup>24</sup> I will analyze some macroeconomic consequences of the financial regulatory framework that has developed in Brazil since the mid-1960s, the sources of the structural power of banks, and then the game itself. Discussion of the macroeconomic consequences of financial regulations hinges on two theses: first, that Brazilian financial regulations, when taken together as a system, represent an important cause of inflation; and second, that the same sys-

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but does not alter the underlying incentives or the game. Voters can, after all, decide to throw the entire National Congress out. Thus at some point, even federal deputies in a weak party system have a positive incentive to cooperate.

24. Approximately half of the commercial banking sector consists of private banks (mostly Brazilian-owned), and the other half is made up of public-sector banks. Since at least the early 1980s, most of the public-sector banks (excepting the country's largest bank, the federally owned Banco do Brasil) have been technically insolvent due to poor management and misuse of funds for political purposes by the state governments. Yet due to their extraordinary inflation-related opportunities for earnings, many "bankrupt" public-sector banks have limped along, at least until the Collor government in the early 1990s intervened forcibly in several of the weakest. In terms of the games described here, the Banco do Brasil, best known for its national branch network and below-market credits for agribusiness, is part of the collective actor I call "Planning." The commercial banks owned by the individual state governments are under the control of "States." Through their ownership of financial institutions, therefore, various levels of government have managed to capture part of the inflationary "rents" for themselves, although not enough to offset all the other ways in which they lose, both fiscally and politically, from continuing inflation.

tem of financial regulations that produces inflation also has operated to allow extraordinarily high returns ("rents," in effect) to Brazilian banks.

In Brazil, unlike other countries, the system of financial regulation itself became a major and independent cause of inflation. The core anomaly of Brazil's financial regulations has been the indexation of financial assets to past rates of inflation.<sup>25</sup> Indexation, originally conceived of in the mid-1960s as a way of encouraging financial savings by allowing for positive real rates of interest on financial assets, had become a key cause of inflation by the middle to late 1970s. One problem with it is that if today's financial assets automatically include a corrective for, say, the past month's inflation, then indexation slows any drop in the underlying real rate of inflation that may be occurring this month. Indexation thus interacts with the related but separate problem of inflationary expectations: the rational assumption by economic actors that this month's inflation will be equal to last month's inflation—plus something extra (Bresser Pereira 1987b). As rational actors, industry and labor, in situations of high inflation with indexation of their incomes and any financial assets they may hold, build an extra "inflation-protection factor" into their relative price bargaining with one another and with the government.

An even more serious problem with Brazilian financial regulations is that when taken together, they render traditional monetary policy impotent. Monetary economist Alvaro Zini has flatly asserted, "[P]rinting money and issuing debts are equal means of inflationary financing in Brazil" (Zini 1992, 213). In other countries, if the government sells treasury bonds and bills to the public, the government thereby shrinks the money supply. Yet since at least the early 1980s, the system in place in Brazil is one in which holders of government debt (that is, banks and, indirectly, industry and labor) own an asset almost as liquid as cash or funds held in checking accounts in other countries. Two reasons can be cited to explain this situation: first, indexed treasury bonds have largely substituted for currency as Brazil's unit of account; and second, the regulatory framework has operated to link ordinary checking accounts closely with ostensibly long-term public-debt securities. The secondary market in treasury bonds and bills trades most of its holdings daily: each bank, after meeting that Monday's reserve requirements (fulfilled mainly through holding treasuries), sells its assets to the Banco Central do Brasil, with an option to repurchase them on Tuesday. Meanwhile, checking accounts of firms and individuals have automatic overdraft access to a companion money-market account. Brazilians keep only tiny nominal balances as cash or in checking accounts; most checks draw indirectly on a money-

25. On Brazil's financial system, see especially Zini (1992), also Armijo (1993), Baer and Beckerman (1974, 1980), Gleizer (1991), Kandir (1989), Lees, Botts, and Cysne (1990), Moura da Silva (1980), and Welch (1988).

market account. It is no use for the government to "sop up" liquidity through selling bonds when they are tightly coupled to ordinary demand deposit accounts and when financial institutions adjust their bond holdings daily (Zini 1992; Lees, Botts, and Cysne 1990). Banks, in turn, accrue a large share of their profits from the spread between the interest rate they pay depositors and the higher interest rate offered them by the central government.

Conventional treatments of inflation assume that banks, as a net-creditor sector, oppose inflation because it hurts their bottom line. But in fact, Brazilian banks have gained as inflation has accelerated (Ness 1994; Zini 1992; Lees, Botts, and Cysne 1990). They have profited in at least five ways. First, financial institutions have gained from citizens holding funds as non-interest-bearing deposits because the real value of such deposits erodes rapidly. Close to 5 percent of the total funds managed by banks in 1993 accrued no interest.<sup>26</sup> With inflation rates frequently exceeding 1 percent daily, extremely high profits were possible. Second, banks have profited from the "float" while a check cleared—that is, the time between the dates the money is withdrawn from one account and deposited to another. Brazilians, not trusting that checks sent in the mail will arrive safely, pay their electricity, gas, and telephone bills, installment payments on purchases, and often other bills as well at their local bank branch. In the early 1990s, these transactions, although among the most rapid and highly computerized in the world, still required from two to five days in Brazil. One study found that in 1987 (the final year for which the authors had data), the inflationary transfer to banks from the rest of Brazilian society via mechanisms like non-indexed deposits and the float totaled fully 4 percent of the gross domestic product (Lees, Botts, and Cysne 1990, 38).

Third, society's need to cope with inflation has bid up the value of the financial sector's consulting services. Fourth, rapidly changing prices disguise high service charges and spreads. For example, annual fees charged customers for administering mutual funds in Brazil range from 4 percent to 8 percent, compared with 1 to 2 percent in the United States (Ness 1994, 5). Finally, owners of financial capital, including financial institutions and individual investors, have gained dramatically from the willingness of the Brazilian government to pay steep real rates of interest to induce banks and the public to hold the domestic public debt. In early 1994, medium-term Brazilian treasury debt, indexed to the U.S. dollar, was offering interest rates of around 25 percent annually, while similar U.S. government notes paid only 4.5 percent (Ness 1994, 5). In 1987 private commercial banks held approximately twice the total deposits of public-sector commercial banks but had only about half the total loans on their books,

26. See Ricardo Galuppo, "Caixa alta na terra da inflação," *Veja*, 11 Aug. 1993, p. 80.

suggesting that private banks were increasingly using their funds for the lucrative purpose of investing in government debt.<sup>27</sup>

Comparative statistics on the financial sector show that it has prospered with inflation. Brazil's financial sector accounted for only 4.4 percent of gross domestic product in 1965 but expanded steadily to 11.1 percent by 1990 (Zini 1992, 208). By comparison, the U.S. financial sector generates about 3 percent and the German about 4 percent of national income.<sup>28</sup> From 1984 to 1992, private Brazilian banks averaged 13.9 percent profits on net worth, and public-sector banks made 10.1 percent. Meanwhile, private industrial firms' chalked up returns of only 4.6 percent, and state-owned enterprises, 4.0 percent (Ness 1994, 5). Similarly, Ricardo Galuppo reported private Brazilian banks' returns of 13 percent from 1987 to 1991, as compared with 9 percent for European and 7 percent for U.S. banks.<sup>29</sup>

What would cooperation with the government on stabilization mean for Brazilian banks? They could accept larger taxes on windfall profits associated with inflation; accept a tax on financial transactions, which if large enough might reduce their incentives to trade almost the entire stock of public debt on a daily basis; acquiesce in partial repudiation of the public debt or its conversion into physical rather than financial assets (via a swap of domestic debt for equity); or choose any combination of these courses. Most significantly, banks could cooperate with permanent deindexation of financial assets, despite the fact that it would cause a large contraction in the Brazilian financial sector.<sup>30</sup> Brazilian administrations in the 1980s and 1990s have tried to impose all these sacrifices on banks, but with little success.

For example, one widely discussed alternative (a perennial favorite with finance ministers and academic economists) would be a hefty tax on financial transactions, known as the *imposto de operações financeiras* (IOF), intended to cool the hectic daily trading in the "overnight" or "open market" in government bonds.<sup>31</sup> This tax has been passed, delayed in implementation, reimposed, and then watered down numerous times, mainly due to fierce resistance by the financial sector. In the early 1990s, its proponents temporarily gave up, imposing instead the *imposto provisório*

27. See *Gazeta Mercantil*, *Balanço Anual 1987*, p. 350.

28. Galuppo, "Caixa alta," *Veja*, 11 Aug 1993, p. 78.

29. *Ibid.*, p. 77. Admittedly, there is a chicken-and-egg problem here. Brazilian bankers argue that government deficits and the resulting inflation require banks to demand both high returns and very short commitments (as in the daily funding of ostensibly long-term government securities) in exchange for their willingness to hold public debt. I am skeptical of this argument.

30. Walter Ness predicted recently that many Brazilian banks would not survive a permanent end to inflation (Ness 1994).

31. These terms are used interchangeably in Brazil. The "open market" refers to both primary and secondary market operations.

*de mercado financeiro* (IPMF), a temporary tax on checks. The IPMF discouraged the middle class and businesses from writing so many checks (which are accepted in lieu of cash in restaurants, gas stations, and other business establishments), but it did nothing to cool the frenetic money market. Similarly, between 1990 and the end of 1992, the Collor administration privatized state-owned enterprises for a total price of \$3.9 billion (World Bank 1993b, 9). More than four-fifths of the funds were raised by swapping domestic-debt securities, including debentures of state-owned enterprises and "privatization certificates." Banks had been obliged to accept these certificates in a compulsory exchange for about a fourth of their holdings of treasury bonds in their own portfolios, as part of the Collor Plan stabilization of 1990–1991 (Baer and Villela 1992). Banks fought the imposition of these "privatization certificates" with partial success.

Brazil thus offers an extreme version of the familiar story in the comparative study of political economy in which private financial capital in one way or another holds the central government hostage, implicitly threatening capital flight or an investment strike if its "needs" are not met. A recent vignette captures the flavor of this bargaining. In early September 1994, the Banco Central do Brasil tightened liquidity by increasing banks' reserve requirements. Private banks immediately raised interest rates to borrowers. The first big customers to be hit were the Brazilian states, who had financed their large debts with borrowed private funds. Also hurt was Banespa, the bank owned by the government of the state of São Paulo, which had been rolling over about five billion U.S. dollars' worth of state government debts daily. Banespa's stock dropped 20 percent in a single day, and the São Paulo stock exchange index fell 3.5 percent. The federal-government-owned Banco do Brasil, although often at odds with the executive because of the bank's strong ties to rural producers' interests, came to Banespa's aid. Within the week, the Banco Central had diluted its new reserve requirements.<sup>32</sup> In this instance, the government tried to impose a sacrifice on banks for the sake of stabilization; banks retaliated by transferring the costs to state governments and the Banco do Brasil; and the government then backed down.

The sources of banks' power are fourfold. Brazilian banks have two kinds of influence that accrue to private financial capital anywhere but also two specifically Brazilian levers that give them additional bargaining strength. First, financial capital is liquid, being easily drained away to foreign economies. In dealing with capital in general, the government must always be wary of provoking capital flight, a recourse typically easier for banks than for industry. Banks in any country hold this type of power.

Second, the operations of financial markets are opaque to most

32. See "Brasília Backtracks on Liquidity Squeeze" and "Central Bank Moves to Halt Upturn," both in *Gazeta Mercantil International Weekly Edition*, 19 Sept. 1994, pp. 1, 8.

citizens, although high inflation has obliged Brazilians to become infinitely more sophisticated than most populations. For example, in 1986 President José Sarney announced the first major “heterodox shock” stabilization program, the Plano Cruzado, which had as a key component an interim wage-price freeze designed to end expectations leading to “inertial inflation.” Within a month and while all major industrial, agricultural, and commercial businesses continued to have the prices of their outputs frozen, the federal authorities quietly allowed commercial banks to impose new service charges on accounts to compensate for bank losses during the (temporary) end to inflation. This change in the rules was not presented to the public as a price increase, and most Brazilians remained unaware of it. The intrinsic opacity of financial markets also is common across countries.

Third, as inflation has soared higher and indexation spread more widely, both of the other two relevant political actors in society—non-financial capital and formal-sector labor—have sought to protect themselves by holding financial assets. Private investment in plant and equipment by industrial firms has dropped, as firms have found better and safer returns in money-market funds tied to treasury securities. Working-class and middle-class Brazilians now keep money in indexed savings accounts. Although real returns to passbook savings accounts have been far lower than those available to larger investors (actually falling below inflation in some periods), savings accounts nonetheless provide those with moderate incomes some protection. The fact that individuals and firms whose basic loyalties lie elsewhere hold more and more indexed financial assets as inflation accelerates means that the incentives to these groups are altered, at least at the margin. Banks can mobilize nonfinancial firms and small investors to resist the “expropriation of deindexation.” Brazil’s pervasive indexation thus has operated to strengthen the bargaining power of private financial capital. Brazilian banks have become more influential than those in other countries with some similar institutional features, which include a historically weak central bank and vigorous public-sector industrial-development banks.

Fourth, beginning in the late 1960s and continuing through the early 1980s, the Brazilian government financed industry through foreign borrowing. But as international capital dried up after 1982, the government increasingly turned to banks to finance its domestic debt. Over 40 percent of central government expenditure from 1985 to 1993 took the form of interest paid to private holders of federal securities.<sup>33</sup> Govern-

33. Measuring the government’s deficit is a notoriously controversial undertaking. Figures for the operational deficit provided by the Brazilian Banco Central show a mean deficit of only 3 percent for these years, but the operational deficit constructed from Brazilian national income accounts comes to about 12 percent as an annual average for 1985–1992. These figures and the 40 percent estimate cited in the text come from a seminar given by a senior World Bank economist at Brown University, 21 Oct. 1994.

ments of many individual states, whose solvency ultimately is underwritten by the Banco Central do Brasil, are even more dependent on private financial capital.<sup>34</sup> Public-sector enterprises also issue debt securities. The level of dependence by the Brazilian government on voluntary private funding is not unique in the world, but it is comparatively high and reinforces the influence of banks.

The game of Banks versus Government thus differs from the four games previously discussed. Government continues to play Prisoner's Dilemma, preferring as its first and best option unilateral and unconditional capitulation by Banks but willing to impose cooperation on other sectors (Labor, Industry, and Government itself) as an acceptable second choice in order to obtain reciprocal cooperation by Banks. Banks, however, are playing Deadlock, a game in which mutual defection is preferred to mutual cooperation. Banks have their own descending order of preferred outcomes in dealing with Government:

- 4 = Banks resist permanent deindexation of financial assets; Government exacts sufficient concessions from others so that hyperinflation is avoided [D,C].
- 3 = Status quo: neither party is willing to bear the costs of stabilization, so inflation continues [D,D].
- 2 = Banks agree to permanent changes in financial regulations, including deindexation and partial repudiation of the domestic public debt; Government exacts concessions from others also [C,C].
- 1 = Banks unilaterally accept changes in financial rules sufficient to generate huge losses for financial capital; Government does not oblige others to cooperate [C,D].

In other words, Banks in Brazil will not voluntarily make significant concessions for the sake of controlling inflation. The reason is that for Banks alone, among all the players discussed, the outcome of continued inflation is more favorable than making mutual concessions for the sake of stabilization.

#### THE METAGAME OF STABILIZATION IN BRAZIL

What does all this game playing mean? How do the four simultaneous games described herein combine into what can be called "the metagame of Brazilian inflation"? Rather than attempt to come up with a formal solution to the metagame, I will highlight the reasons why achieving a solution has been difficult. As my deductive argument will demon-

34. In early 1995, the debt of the state of São Paulo reached 55 billion dollars. See "São Paulo Faces Financial Difficulties," *Gazeta Mercantil International Weekly Edition*, 29 May 1995, p. 2. For purposes of comparison, the total outstanding federal debt held by the public was 73 billion dollars as of December 1994. See *Indicadores IESP* for June 1995 (published by the Instituto de Economia do Setor Público, Governo do Estado de São Paulo).



strate, stabilization in contemporary Brazil is not merely a problem of collective action but something worse.

First, if all the component games had been symmetrical versions of Prisoner's Dilemma (as are Industry versus Government, Labor versus Government, and the two versions of Government versus Government), then stabilization would be a genuine problem of collective action. Given that each game occurs repeatedly over time and that game theory suggests that iterated Prisoner's Dilemma games often are easier to solve, stabilization should be achievable. If one assumes that the cost structures of each major actor and their relative power vis-à-vis one another are very similar, then one should expect a mutually cooperative outcome with a relatively equitable distribution of costs. A formally negotiated Western European-style "social pact" among representatives of the federal government, major industrial associations, and the main labor confederations is only one possibility for a solution to the collective-action problem. The Collor administration tried this approach, but thus far it has not worked well in Brazil. Bilateral arrangements with the government or an agreement among representatives of the executive branch and the legislature plus the states, negotiated by leaders of the major political parties or by interest-group blocs in Congress, would seem more probable.

Second, if all the component games are Prisoner's Dilemma, but one relaxes either the assumption of equivalent cost distributions for different players or the assumption of equivalent power among different players, then stabilization still should be achievable. The distribution of costs, however, will be unequal.

The argument is as follows. If stabilization is not achieved, then inflation probably increases over time. Each player has a level of inflation above which the costs of enduring the inflationary status quo exceed the costs associated with stabilization. If different players have different degrees of tolerance for inflation, then those with lower tolerance can be expected to capitulate first. In game-theoretic terms, when a player's costs of mutual defection (the inflationary status quo) come to exceed its costs of unilateral cooperation (stabilization primarily at its own expense), then that player has switched from playing Prisoner's Dilemma to playing Chicken. Empirically, unilateral or at least unequal payment of the costs of stabilization has been common in Brazil. For reasons discussed by Labán and Sturzenegger (1992), Labor typically switches from Prisoner's Dilemma to Chicken at a lower absolute level of inflation than does Industry (see also Bresser Pereira 1993). Thus Brazil in the 1980s witnessed considerable cooperation by Labor during the various stabilization plans. For example, the Cruzado Plan of 1986 involved a forced loan (to be repaid after eighteen months) from all new car buyers, which constituted a tax on the middle class (in Brazil a crucial member of the player here called Labor). Meanwhile, passbook savings accounts held by

the working and middle classes, although indexed, never fully kept up with inflation (Zini 1992). Real industrial wages in Rio de Janeiro in 1991 reached only 84 percent of their 1980 level, although the better organized São Paulo unions received real wages amounting to 121 percent of their 1980 level (CEPAL 1991, 41).

Alternatively, even if players' tolerances for inflation do not differ, their power resources and ability to coerce cooperation from one another may. If both players continue with the preference hierarchy typical of Prisoner's Dilemma, one (usually Government) may be able to force unilateral capitulation on the other, particularly as everyone's costs of continuing with the status quo rise along with inflation. Thus Brazilian inflation was high enough by the early 1980s for the Finance part of Government to oblige the Planning part to adjust: the government's primary budget balance went from deficit to surplus and has remained there. Similarly, in early 1994, the Executive, in the person of Finance Minister Fernando Henrique Cardoso, obliged the States to agree to forego (for a year at least) some of the additional tax revenues granted them by the Constitution of 1988.

Third, by definition, a player whose preference structure is that of Deadlock is unwilling to compromise, even if others do. Brazilian banks play Deadlock. The analysis already presented suggests three possible forms of adjustment in contemporary Brazil: fiscal policy, monetary policy, and financial reform. But traditional monetary policy has been ineffective in reducing liquidity. Therefore in a desperate attempt to tighten the effective money supply, President Collor's Economy Minister Zélia Cardoso decreed in 1990–1991 an extraordinary out-and-out freeze of more than 70 percent of all financial assets. Banks and upper-income groups soon outwitted the new restrictions nonetheless.<sup>35</sup> Because financial capital has resisted serious reform of financial regulations, most of the actual adjustment has come via fiscal policy. Unfortunately, cuts in

35. The purpose of the freeze was to cause a radical monetary contraction, given that Brazil's financial regulatory peculiarities made the conventional options of selling government bonds and raising the discount rate relatively ineffective. But government planners allowed three categories of exceptions, each intended to mitigate undue hardship on an important social group or player: blocked *cruzados* still could be used to pay tax liabilities to states and municipalities, firms' debts to other business firms incurred before the freeze, and charitable contributions. Immediately, a vigorous black market in predated tax and suppliers' invoices (some genuine, many forged) sprang up, while charity officials accepted generous donations in exchange for large kickbacks to "donors." Once funds had been laundered in this fashion, they could be redeposited in unblocked accounts. Within two months, all but about 20 percent of the blocked deposits had been returned to the money supply. In terms of the categories analyzed in this article, the main losers were labor (smaller individual depositors, mainly middle-class given that the meager deposits of the working class had been exempt from the initial freeze), and the weakest members of industry (small businesses that lacked the financial sophistication and contacts to participate in the schemes to outwit regulators). See "Torneiras e goteiras," *Isto É*, 9 May 1990.

spending and tax increases have been more than canceled by steep and rising costs of placing the domestic public debt.

Does this outcome imply that banks never cooperate? Banks will make sacrifices for the sake of stabilization under two conditions: when they are coerced by government and when hyperinflation looms. Financial capital possesses a great deal of power. It can engage in capital flight, politicians rely on it for financing, and in Brazil, bankers traditionally have had the ear of the military. Although the military is not a player in the inflation-cum-stabilization game, it has inevitably been an important participant in politics. Each of the shock plans since 1985, especially the Cruzado Plan of 1986 and the Collor Plan of 1990, attacked the interests of financial capital. Yet each time, financial capital managed to wriggle free of the new restrictions within a month or two through a combination of stealth, fleetness, and political contacts. Moreover, it is not in the banks' interest to have the Brazilian economy crash, although since the 1970s financial profits have remained high, even during periods when industry and labor experienced recession. In game-theoretic terms, when hyperinflation threatens, Banks' preference ordering of alternative outcomes switches from the game of Deadlock to Prisoner's Dilemma: as long as other actors signal their willingness to sacrifice, Banks also will accept some costs of stabilization. But when hyperinflation ends and some stabilization occurs, Banks revert to playing Deadlock and try to reverse their earlier concessions.

Fourth, if Banks indeed play Deadlock except at levels of inflation approaching hyperinflation and if their cooperation in revising financial rules is required for stabilization, then over time, one might logically expect these outcomes: continuing high inflation, interrupted by periodic stabilization attempts just as the economy appears ready to slip into hyperinflation, each of which brings inflation down drastically for a while, after which prices begin to climb again. This pattern describes precisely the scenario in contemporary Brazil. Philippe Faucher, writing about inflation and the general difficulties of achieving a social and politically viable consensus around any consistent economic policy framework, speaks of Brazil's "non-fatal chronic illness" (Faucher 1994, 11). This phrase seems an apt metaphor for a country that repeatedly draws back from the brink of hyperinflation, only to approach it once more a year or so later.

#### CONCLUSIONS: STABILIZATION, DEMOCRACY, AND THE PLANO REAL

This article began with several related observations: Brazil has experienced high inflation for over two decades (possibly ending in mid-1994); the Brazilian economy continues to function, although not without significant distortions, even at triple- and quadruple-digit levels of annual inflation; and successive and mostly ineffectual stabilization programs have

nevertheless avoided true hyperinflation thus far. Furthermore, Brazilians, especially elites, display a lack of concern about inflation that is remarkable in cross-national perspective. This analysis has uncovered one cause of Brazilian insouciance: pervasive wage and price indexation has shielded most formal-sector incomes against the worst effects of inflation, while indexed financial assets have enabled individuals to save and the financial system to function. True, the financial system's support of real productive investment has kept on dropping, while the domestic public debt has grown and grown (Zini 1992, 210). But even at steep levels of inflation, many Brazilians (especially the more affluent) have preferred to live with the manifest inconveniences of inflation rather than lose their jobs (due to stabilization via concessions by labor), their businesses (due to stabilization via concessions by industry), or their bank savings (due to stabilization via deindexation, or concessions by banks).

As noted, most accounts of the political economy of inflation present it as a problem arising from collective action: various groups, each seeking a larger share of the pie, together raise prices without any group becoming permanently better off. If players could cooperate, no single group would be able to raise its relative prices vis-à-vis others, but at least they all could avoid the common costs of inflation. An alternative model of political economy, one seldom applied to cases of inflation, is that of "rent seeking," in which a group could receive higher-than-average returns from a situation that aggravated the economy as a whole, as in inefficient domestic producers benefiting from a high external tariff. I argue that unusual financial regulations have allowed Brazilian financial capital to receive "rents" from inflation, or at least from a regulatory regime that has generated high inflation. Banks thus would be worse off after a stabilization that would benefit everyone else.

Relations among four major economic actors in Brazil also were examined through the alternative lens of game theory. The metagame of Brazilian inflation exhibits several characteristics. At very high rates of inflation, each player would become willing to cooperate, with Industry, Labor, and Government shifting from playing Prisoner's Dilemma to Chicken, and Banks shifting from Deadlock to Prisoner's Dilemma. Hyperinflation thus would be avoided. But as soon as inflation eased downward, the old preference orders would obtain once again, and inflation could recommence. Unfortunately, once the immediate threat of economic meltdown passes, banks appear to have few incentives to continue to accept voluntarily the sacrifices required for stabilization. Thus no lasting solution may be possible to the peculiar Brazilian game unless the rest of society makes a political decision to coerce the banks. This structure of incentives in the metagame is consistent with observed results: repeated stabilization efforts, each one followed by a return to high inflation, which in turn is stopped before true hyperinflation is reached.

The Brazilian case has implications for theories about the political economy of inflation. It suggests that unlike financial capital in most countries, Brazilian bankers and rentiers have operated within an institutional framework that allows them to accrue large gains (rather than losses) from inflation. At the least, this finding should inspire analysts to reexamine our ready assumptions about the generic preferences of financial capital. For example, Sylvia Maxfield (1991) suggested that persistently loose monetary policy in Brazil results from the weakness of private financial capital in that country. My article argues the opposite: that politically strong Brazilian banks have favored inflationary policies.<sup>36</sup>

In addition, most analyses of the sociology of inflation have assumed that inflation itself was an unintended and unwanted by-product, an "externality" of group conflict over relative shares of income. I suggest instead that Brazilian financial capital derives "rents" from inflation, a benefit that would be lost to this player if inflation ended.

Is the fact that Brazilian banks can gain from inflation truly unique? Although debtors may gain from an inflationary episode, they are highly unlikely to profit from long-term inflation. In fact, the only player in the national inflationary "games" in other countries whose incentives resemble those of Brazilian banks at all may be Government. Government benefits from inflation through its monopoly of the right to expand the money supply (seigniorage).<sup>37</sup> Abroad, only governments have the possibility of continuing to extract resources from society as a whole for a relatively long period of time. In Brazil, however, both the government and the banks have been able to use this trick (see Lees, Botts, and Cysne 1990, 38). But governments in Brazil and elsewhere have other more compelling macroeconomic and political interests in ending inflation (or perhaps in containing it at a minimal level). Brazilian banks, in contrast, can gain from inflation (as long as hyperinflation is avoided) without worrying about having to win the next election or keep industrial production up. Only further empirical investigation could determine whether the set of incentives faced by Brazilian banks really is unique. The possibility is intriguing.

In early July of 1994, Brazil inaugurated a new stabilization plan, the sixth since the return of democracy in 1985. The Plano Real was (as of this writing) just over a year old. The reasons for pessimism about its prospects were that thus far the major adjusters have been industry, labor,

36. Barker (1990) and Makler (1985) have also emphasized the political strength of Brazilian banks.

37. Originally, *seigniorage* was the fee imposed by a government for minting into coins the gold or silver bullion brought to it by private citizens. Later the term came to mean all profits or earnings accruing to the government from its monopoly on issuing currency. More correctly, excess usage of seigniorage results in inflation. From the point of view of government's incentives vis-à-vis inflation, however, this distinction makes little difference.

and the government. Banks lost from the sharp decline in inflation but continued to benefit from indexation of government debt. Grounds for optimism can also be cited. Brazil's gradual political transition to a genuine mass democracy may ultimately provide the means by which financial capital will be obliged to accept permanent deindexation and the loss of its inflation-related special privileges. Only then will a lasting solution to the game of Brazilian inflation be possible.

The Plano Real's main technical features were a new currency (the *real*); a quasi-fixed exchange rate (actually a "float" within a narrow range) to replace the almost daily devaluations of the past decade; partial deindexation of wages, prices, contracts, and financial instruments; and promises by the central government to increase the primary budget surplus. Fernando Henrique Cardoso, who served as finance minister under President Itamar Franco, first announced the plan at the end of the first quarter of 1994. It was implemented on the first day of the third quarter. By the close of the third quarter, Cardoso had resigned to run for president. Elected in October 1994 with a majority on the first ballot, he assumed office in January 1995. Accumulated inflation in the first year of the plan was only 35 percent, a fairly good result in context. Economic growth remained vigorous, belying industry's vocal fears that adjustment would bring a recession.

The Plano Real's main achievement by mid-1995 had been to bring down inflation sharply. Three concomitant results are admittedly less positive. First, indexation decreased but was not entirely gone. For example, in late May 1995, after almost a year, Cardoso's economic team announced new regulations that the business newspaper *Gazeta Mercantil* described as just the "the first steps" toward deindexing salaries, contracts, and rents.<sup>38</sup> With respect to government debt, policymakers in the Cardoso administration (like their predecessors), found themselves forced into linguistic contortions: indexation was canceled and replaced by a "reference rate" (not an index, although it largely worked like one).<sup>39</sup> A second problem was that the combination of trade liberalization and overvaluation produced monthly trade deficits starting in late 1994. Erosion of the foreign-exchange "cushion" was particularly distressing in that Brazil's steady trade surpluses since the early 1980s had enabled it to build up international reserves of some forty billion dollars by late 1994, a useful feature in weathering the international turmoil generated by Mexico's financial crisis in late December. Third, achieving fiscal contraction was more difficult than expected. The Cardoso administration was forced instead to fall back on very tight monetary policy, inadvisable for stabili-

38. "Brasília Announces Provisional Measure," *Gazeta Mercantil International Weekly Edition*, 3 July 1995, p. 1.

39. "Loyola Approved by Congress," *Gazeta Mercantil International Weekly Edition*, 12 June 1995, p. 7.

zation in general according to many economists (see World Bank 1988) and peculiarly ineffective in Brazil.

Evidence of substantial cooperation (adjustment) from all sectors was manifest during the first year of the Plano Real. For example, the government adopted a consistently firm line with industry (including agribusiness, subsumed here under the player Industry). Economic policymakers in the Cardoso administration spoke openly about using a 30 percent overvalued exchange rate as a lever to force domestic manufacturers and retailers, who were facing cheap imports, to hold down prices. The government also maintained tight restrictions on business and consumer borrowing during most of the first year of the new currency. Yet the Cardoso administration also yielded when industry complaints became intense, devaluing the *real* three times by early July 1995 and imposing temporary steep tariffs on more than a hundred imports of consumer durables (notably automobiles) in late March 1995.

Organized white- and blue-collar labor also cooperated. A feared "black September" of strikes over wage negotiations scheduled for late 1994 with several powerful unions passed relatively uneventfully. The president stood firm against a determined two-month strike by public-sector petroleum workers in early 1995. Ultimately, many poorer Brazilians suffering from shortages of cooking gas and other necessities as a result of the strike came to view the *petroleiros* as a privileged labor elite. In 1995 Cardoso announced his intention to reduce public employees' generous pensions, although this move was resisted by trade unions and leftist political parties (mainly the Partido dos Trabalhadores and the Partido Democrático Trabalhista, which are headed by presidential rivals Luiz Ignácio da Silva and Leonel Brizola respectively).

The Intragovernmental Game also brought some victories for the inflation fighters. In fact, the planning ministry under José Serra usually allied itself with the finance ministry and the central bank, rather than epitomizing the expenditure-oriented executive branch player conventionally called "Planning" in this analysis.<sup>40</sup> Net central government fiscal adjustment was nonetheless less than hoped, partly because other ministries continued to press for their spending projects and partly because the interest costs of the public debt remained high.

The record in the game of Executive versus the Legislature plus States was perhaps the most surprising. Cardoso's own party, the Partido da Social Democracia Brasileira (PSDB), won only a small representation in the Brazilian Congress. His governing coalition, mainly the social democratic PSDB plus the conservative Partido da Frente Liberal (PFL), held merely a third of the seats in the Chamber of Deputies, only slightly more

40. See "Government-Sector Spending Squeezed," *Gazeta Mercantil International Weekly Edition*, 20 Feb. 1995, p. 6.

than the bloc of the centrist Partido do Movimento Democrático Brasileiro (PMDB).<sup>41</sup> Nonetheless, the alliance's leader in the upper house, Senator (and former President) José Sarney of the PFL, led many of the administration's economic reform measures to victory, including several difficult legislative and constitutional changes required for controversial privatizations that the administration hoped to pursue in state-monopoly sectors such as telecommunications, parts of transportation, and energy.<sup>42</sup> A bandwagon effect led other parties to seek formal alliances with the governing coalition (as did the conservative Partido Progressista Reformista) or informal ones (as did the PMDB). The government has developed another relatively cooperative working arrangement with the states, despite serious disputes over revenue sharing and debts that the states owed the central government. In sum, substantial progress could be discerned toward the mutually cooperative outcome in all the games discussed here.

Private financial capital also accepted costs under the Plano Real—at least in the sense that the banks acquiesced to the dramatic lowering of Brazilian inflation. Two and a half months into the program, the president of Unibanco (one of Brazil's five biggest commercial banks) acknowledged what everyone already knew: "The loss of income is substantial."<sup>43</sup> Financial institutions initially threatened a wave of lawsuits over their loss of inflation-related earnings during the conversion month of July but then thought better of it, perhaps because their position would have been politically untenable.<sup>44</sup> By early December 1994, eight small private banks had failed. The incoming president of the Federação dos Bancos Brasileiros (Febraban) complained bitterly of government's "fiscal wedge," threatening vaguely that it could "lead to a process of financial disintermediation."<sup>45</sup> In late 1994, the Banco Central assumed interim control of two of the largest public-sector banks, those of the states of São Paulo and Rio de Janeiro (Banespa and Banerj), as their losses under the Plano Real made them nonviable. Even the mighty federally owned Banco do Brasil, the country's largest commercial bank, announced that it would have to close almost two hundred branches.

As with previous stabilization plans, however, Brazilian banks fought hard to protect their interests, and the government reluctantly gave them much of what they wanted. The largest private banks, including the "big five" of Bradesco, Itaú, Unibanco, Real, and Nacional, returned to prof-

41. The PSDB, in fact, was only the third-largest party in Congress. See "Esperando FHC," *Veja*, 1 Feb. 1995, pp. 26–28.

42. "Sarney Clears Backlog," *Gazeta Mercantil International Weekly Edition*, 8 May 1995.

43. "Majors Survive Loss of Inflationary Free Float," *Gazeta Mercantil International Weekly Edition*, 19 Sept. 1994, p. 9.

44. "Mild Market Reaction to Inflation Purge," *Gazeta Mercantil International Weekly Edition*, 1 Aug. 1994, p. 7.

45. "'Fiscal Wedge' Warning," *Gazeta Mercantil International Weekly Edition*, 12 Dec. 1994, p. 7.



itability after a brief adjustment period, at least partly because of their genuine agility, sophistication, and competence. But unlike all other sectors, the banks also found mechanisms to increase their fees to consumers quickly. One technique was to charge fees for services that previously had been free.<sup>46</sup> Moreover, the banks could gain from the government's reaction to the consumer spending boom that, as usual, followed the sharp decline in inflation.<sup>47</sup> When policymakers imposed higher interest rates and credit controls to dampen demand, the banks increased their spreads between deposit and loan rates.<sup>48</sup> And almost as soon as the Banco Central imposed new reserve requirements on one form of lending to tax away some of the increased spread, Brazilian financial institutions designed new financial instruments not subject to the reserve requirements. Understated reports on the running battles between senior economic policymakers and the financial sector filled the business press. As the *Gazeta Mercantil* noted, "The chief executive of one investment bank said Friday that he disapproves in principle of markedly interventionist Central Bank actions such as the [recently imposed 15 percent] reserve requirement on loans. 'But as a banker,' he added, 'I've no complaints. Every time they think up a new rule, they give us a new means of earning a profit.'" The reporter then summed up the government's dilemma: "The Central Bank is well aware that whenever it widens the gap between the rates banks pay for their funding and the rates they charge on their loans, it is feeding their profits. But it went ahead with the 15 percent rule anyway, because it was bound to have some impact, helping to cool down the overheated economy."<sup>49</sup>

Unfortunately, there was no reason to believe that the stabilization plan had altered the underlying incentive structure of financial capital. Banks accepted stabilization as hyperinflation loomed—especially when others paid most of its costs. When inflation fell, competent banks reoriented their activities away from maximizing their earnings on the "float" on unremunerated deposits, checks, and payments waiting to clear. They concentrated instead on the traditional banking business of financial intermediation between savers and lenders. But if inflation returns, the banks (and those higher-income individuals who understand how to work the system) know that they could do even better. Meanwhile, de

46. "Nacional Profit up 55 Percent," *Gazeta Mercantil International Weekly Edition*, 30 Jan. 1995, p. 7.

47. Fearing that inflation will return, consumers have reacted to each of the recent stabilization plans by going on a buying spree.

48. Access to loanable funds was not a problem for banks, as deposits quickly swelled when inflation fell. Brazilian consumers are also relatively sophisticated in inflation accounting.

49. "Securities Deals Bypass 15% Rule," *Gazeta Mercantil International*, 31 Oct. 1994, p. 1. See also "Further Clampdown on Consumer Financing," *Gazeta Mercantil International Weekly Edition*, 2 May 1995, p. 6.

facto indexation in the financial sector persisted because it was essential to fund the public debt. The desires of most financiers and owners of large amounts of financial assets to be good Brazilian citizens conflicted as much as ever with their economic self-interest.

One additional puzzle remains to be solved. If nothing much has changed, then why has the Plano Real endured as long as it has? None of its predecessors lasted more than a few months.<sup>50</sup> Although developing this hypothesis fully would require another essay, one plausible answer provides grounds for optimism. The empirical account just presented indicates that the government, the common actor in the stabilization games, over a period of approximately a year (ending in mid-1995) used a combination of persuasion and coercion to get substantial cooperation from most major players. The explanation may be that Brazil's recent return to democracy empowered a previously marginalized player or players, thus shifting the balance of power among the relevant actors. Lower-income Brazilians, mainly minimum-wage workers and those marginally employed in the urban informal sector, have lacked access to indexation and thus have suffered most from inflation. Under Brazil's nonmobilizing "bureaucratic-authoritarian" political system (O'Donnell 1973, Collier 1979), the lower classes had few opportunities to make demands on policymakers. Beginning around 1980, however, the value of this social group's meager store of politically relevant resources—basically limited to voting and mass protests—has gradually increased as the political system has opened up.

In 1982, when the military allowed the first contests for governors and big city mayors in over a decade, Leonel Brizola (the generals' old enemy) was elected governor of the state of Rio de Janeiro with strong support from slumdwellers. In 1986 the newly democratic Congresso Nacional extended the franchise to illiterates and lowered the voting age to sixteen, thus strengthening the reasons for politicians to campaign in *favelas*. Slowly, the anti-inflation opinions of the lower classes have begun to matter more. In late 1989, Fernando Collor ran his presidential campaign on few specific planks other than a promise to crack down on "maharajahs," meaning white-collar civil servants who simultaneously (and illegally) hold multiple well-paid jobs in the public sector. This strategy paid off. In fact, the player called Labor throughout this essay gradually became more inclusive in its membership, as lower-income voters began to express themselves politically. Labor also has started to bifurcate, as minimum-wage workers have begun to see their interests as distinct from—and often opposed to—those of relatively well-paid union-

50. One possibility is what might be called the Argentine or Bolivian explanation: after several failed stabilization attempts, the costs of inflation were so great that the various competing economic interests finally decided to cooperate (see Sturzenegger 1995).

ized workers in industry and the public sector. Collor was elected president in late 1989 with overwhelming support from rural areas and urban lower-income neighborhoods that included few union members. In October 1994, Fernando Henrique Cardoso, a democratic socialist once exiled by the military, formed a broad coalition with the conservative PFL and won on the first ballot with 54 percent of the vote. Despite Cardoso's elite social origins, he ran very well among the Brazilian poor. Every poll suggested that the depth of his support was due to the success of his Plano Real, launched when he was finance minister for President Itamar Franco.<sup>51</sup>

Redemocratization thus has changed the incentives for would-be political elites, who must now be elected by the masses rather than be appointed by the federal executive (as often happened under military rule). Moreover, democracy has made the process of interest aggregation significantly more transparent and thus has increased the potential for curbing some of the worst abuses of the previous systems, which were run by and for economic elites. During military rule, interest aggregation occurred largely through prominent individuals directly approaching political (especially bureaucratic) officeholders to offer opinions, either informally via personal contacts or formally through such public-private consultative mechanisms as the Conselho Nacional Monetário (CMN) or the Conselho de Desenvolvimento Econômico (CDE). Because business executives felt free to telephone or visit finance or planning or industry ministers, formal interest associations were relatively unimportant.<sup>52</sup> The process of economic policy making was opaque and closed to the average Brazilian, as well as to most potential representatives of non-elite interests. But during the 1980s and 1990s, organizations like the Conselho Nacional da Indústria (CNI), the Federação da Indústria do Estado de São Paulo (FIESP), and Febraban have been forced to make much more public cases for their views (Minella 1990).<sup>53</sup>

The return to democracy has also shifted power toward the player here called "the Legislature plus the States." Democratization has similarly invigorated political parties, whose activities were severely curtailed by Brazilian military rulers. Conventional interpretations of the political economy of economic reform would predict that these shifts would undermine stabilization. It is usually assumed that governments

51. "Cardoso's 34 Million Votes," *Gazeta Mercantil International Weekly Edition*, 17 Oct. 1994, p. 3.

52. Riordan Roett concluded that industry has had relatively little economic policy influence (1992, 117–20). Others such as Evans (1979), Hewlett (1980), Martins (1985), and Werneke Vianna (1987) have stressed the benefits to economic elites from the system, which is run by powerful state bureaucratic elites on their behalf.

53. *Veja*, for example, identified a "bankers' bloc" of 70 (out of 584) members of Congress, headed by former Finance Minister Francisco Dornelles. See "Bancada de interesse," *Veja*, 4 May 1994, pp. 28–30.

simultaneously responding to demands from newly enfranchised actors while undertaking painful economic reforms have a hard time, leading presidents and prime ministers to resort to executive decrees to get stabilization and structural adjustment policies past "recalcitrant" legislatures or to backtrack on economic reforms (Przeworski 1991; Whitehead, 1989; Armijo, Biersteker, and Lowenthal 1994). For Latin Americanists, these themes hark back to an earlier literature emphasizing the presumed inflationary consequences of economic and political "populism," best personified by the policies of Presidents Lázaro Cárdenas (1934–1940) in Mexico, Juan Perón (1946–1955; 1973–1974) in Argentina, and Alan García (1985–1990) in Peru (Di Tella 1966; Ianni 1975; Weffort 1970).

Yet that dynamic does not seem to fit the political economy of stabilization in Brazil. In fact, democratization apparently has improved the chances for stabilization, precisely by making possible the fragile bargains described in this article. Some might observe that Brazil redemocratized in 1985, yet the potentially successful Plano Real was not conceived until 1994. But both democratizing and building the political consensus necessary for lasting stabilization are incremental processes. Furthermore, although social scientists dislike admitting the role of non-structural variables, political leadership obviously will have something to do with the ultimate success of stabilization in Brazil. As of mid-1995, Fernando Henrique Cardoso had been careful to build consensus and to explain everything—to a skeptical president when he was finance minister and to worried citizens and politicians since being elected president himself. Fernando Collor de Mello, on the other hand, relied on sudden executive decrees to implement his administration's plans and publicly denigrated both the congress and economic elites, who then responded in kind.

In Brazil in the 1990s, therefore, democracy and stabilization are complementary, not contradictory.<sup>54</sup> The excessive and ultimately inflationary power of financial capital in Brazil over the past twenty-odd years may yet produce a surprising silver lining. The very opening of the political system to new demand makers that in countries as diverse as Russia and the Philippines seem to threaten the prospects for successful economic reform could in Brazil actually promote essential yet elusive economic restructuring. Brazilian banks (rather than labor, as those fearing economic populism would predict) have been the primary interest group resisting the sacrifices necessary to end Brazilian inflation. The arrival of genuine mass democracy has amplified the national political voice of those who suffer most from inflation—the lower classes—and consequently has strengthened the bargaining power of government vis-à-vis economic elites, including financial capital.

54. This conclusion applies narrowly to stabilization. It may or may not be generalizable to privatization, tariff reform, and other areas.

At the same time, excessive optimism is not warranted. Although Brazilian banks have adjusted to the current environment of low inflation, their incentive structure has not changed dramatically. The fact that a decisive political defeat of financial capital had not occurred as of mid-1995 is hardly surprising. The waters are muddied considerably by the fact that deindexation, even if it hurts banks the most, also hurts industry and labor because they too hold financial assets and would prefer to have their incomes automatically "corrected" (adjusted upward) for residual inflation. In any case, despite genuine democratization, Brazil's upper classes still dominate national politics, although less so than previously. Despite the success of the Plano Real in its first year, Finance Minister Pedro Malán reportedly warned fellow economists in June 1995 against "sectors both inside and outside the government that defend the idea of inflation in terms of 10 percent to 15 percent a month."<sup>55</sup> Clearly, the battle is not over yet.

55. "Economists Discuss the Real," *Gazeta Mercantil International Weekly Edition*, 3 July 1994, p. 4.

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