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**Why the Middle is Unstable:
The Political Economy of Exchange Rate Regimes and Currency Crises***

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Introduction

The rash of currency crises during the 1990s rekindled interest in the role played by exchange rate regimes. There is now widespread agreement (at least among economists) that high capital mobility makes narrow band adjustable peg exchange rate regimes high crises prone in the absence of rigorous capital controls (Whether such controls can save adjustable pegs is still a subject to dispute).

Acceptance of this unstable middle hypothesis (whose origins go back to well before the breakdown of the Bretton Woods adjustable peg regimes) has several important issues unresolved. One is how far away from the dead center of the adjustable peg must a country go to substantially reduce the probabilities of currency crises. The popular two corners hypothesis that anywhere short of the extremes will still be highly crises prone has become a major topic of debate which has obvious importance for exchange rate policy. More surprisingly, it has recently been argued by Jeffery Frankel that we really do not have a good theoretical understanding of why the middle is unstable.

Frankel's argument that international monetary theory does not offer a solid rationale for the unstable middle hypothesis is well taken. A major argument of this paper is that we can provide a solid foundation for the unstable middle hypothesis, however, if we combine the unholy trinity analysis of standard international monetary theory with political economy consideration. Frankel is dead right that the mutual adjustment of exchange rate and monetary policies allows any degree of exchange rate flexibility to meet the unholy trinity constraint as long as monetary policy is adjusted consistently with exchange rate policy. In the absence of perfect capital mobility, however, sterilized exchange market intervention and international reserve flows allow the unholy trinity constraint to be violated in the short run. It will be

argued that the same types of asymmetric and short time horizons that can generate time inconsistency problems for domestic monetary policies make study exchange rate regimes difficult to manage in crisis avoiding ways.

This political analysis also has relevance for the two corners hypothesis and the debates about the relative merits of Band Basket and Crawl (BBC) strategies versus managed floating.

We begin with a brief review of the recent debate and Frankel's analysis of the lack of satisfactory theoretical underpinning for the unstable middle hypothesis.

Overview of the Unstable Middle and Two Corner Debates

It is widely recognized that in a world of high capital mobility, narrow band adjustable peg regimes such as were adopted at Bretton Woods are highly crisis prone. The break down of the Bretton Woods system, the crises in the European Monetary System in the early 1990s and the rash of currency crises in the second half of the 1990s and early part of the new millennium have borne out the early judgment of Milton Friedman that "the system of occasional changes in temporarily rigid exchange rates seems to me the worst of two worlds: it provides neither the stability of expectations that a genuinely rigid and stable exchange rate could provide in a world of unrestricted trade... nor the continuous sensitivity of a flexible exchange rate" (Friedman, 1953).

Some commentators have argued that to avoid currency crisis one must go all the way to one of the extremes of freely floating or genuinely fixed exchange rates. For example, Obstfeld and Rogoff have argued that "A careful examination of the genesis of speculative attacks suggests that there is little, if any, comfortable middle ground between floating rates

and the adoption by countries of a common currency” (Obstfeld and Rogoff, 1995) and the Meltzer Commission recommended that “the IMF should use its policy consultations to recommend either firmly fixed rates (currency board, dollarization) or fluctuating rates” (Meltzer, 2000).¹ This is often called the two corners hypothesis or the bipolar view. Others such as John Williamson (1996) and (2000) have argued that while the dead center of compromise intermediate regimes is clearly highly crisis prone, other forms of intermediate regimes such as crawling bands have worked well for some countries. But in other cases they have worked badly. As Jeffrey Frankel (1999) puts it, “Most of the intermediate regimes have been tried and failed, often spectacularly so.” (p.6)

We are beginning to accumulate more systematic empirical research on these issues, but such research is still in an early stage and at present we are far from reaching a consensus of informed experts. For example recent IMF studies reach seemingly contradictory conclusions. Bubula and Otker-Robe find that “pegged regimes, as a whole, have been characterized by a higher incidence of crises than floating regimes, for countries that are more integrated with international capital markets; and that intermediate regimes (mainly soft pegs and tightly-managed floating regimes) have been more crisis prone than both hard pegs and other floating regimes – a view consistent with the bipolar view of exchange rate regimes (Bubula and Otker-Robe, 2003). On the other hand, Rogoff et al (2003) conclude that “Our study suggests that the popular bipolar view of exchange rates is neither an accurate view of the past nor a likely scenario for the future.” The difference in conclusions in the two studies are more apparent than real, however, for the Rogoff et al study focuses on whether the use of intermediate regimes is disappearing – which it isn’t – while Bubula and Otker-Robe focus on whether intermediate regimes are more prone to crisis – which they are.

¹ Barry Eichengreen has also been a leading advocate of this view. See [Eichengreen \(1999\)](#)

It is the latter question which is of more direct relevance to policy makers facing the choice of what currency regime to adopt. While we can be pretty certain that narrow band adjustable pegs will be the most crisis prone type of intermediate regime, at present there is little agreement about the merits of crawling bands versus managed floats.

In other words, while most international monetary economists agree that the dead center of Bretton Woods style narrow band adjustable peg regimes are highly unstable in the absence of effective capital controls, there is little agreement about how far toward the corners countries must go to escape this problem.

Concern with the stability or instability of different types of intermediate regimes, and perhaps, more importantly the conditions necessary for them to function fairly smoothly, are especially important because an often under appreciated implication of optimum currency area (OCA) analysis is that many (most?) countries are not good candidates for either of the extremes of genuinely fixed or freely floating rates.² Thus while OCA analysis suggests that many countries should adopt some form of intermediate exchange rate regime, managing in the middle can be extremely difficult. But why this is so has been an insufficiently studied topic.

At one level we know that a crucial requirement for crisis avoidance is to keep exchange rates from becoming grossly over or under valued so that they provide speculators an easy target to shoot at. The problem of one way speculative options generated by sticky pegs is now standard textbook fare. But why do governments allow their currencies to get substantially out of line? That's the crucial question.

Jeffery Frankel in fact suggests that we do not have an answer. He writes "What is the analytic rationale for the hypothesis of the disappearing intermediate regime (or the 'missing

² See Willett (2003a), (2003b).

middle')? Surprisingly, none currently exists... There is nothing in existing theory, for example, that prevents a country from pursuing an exchange rate target zone of moderate width" (Frankel, 2003).

As Frankel (1999) correctly emphasized in earlier work, the crisis prone nature of intermediate regimes is not a logical implication of the unholy trinity analysis. The latter shows that it's not possible in the long run to have all three of fixed exchange rates, independent monetary policy, and freedom from controls. At least one of these must give in order to undertake balance of payments adjustment. This doesn't imply, however, that we couldn't have a stable intermediate regime in which exchange rate changes and monetary policy were mutually adjusted to one another.

Clearly such mutual adjustment is likely to be easier where frequent small adjustments in exchange rates are possible rather than only occasional large ones. Even with crawling pegs or bands, however, it can prove difficult to provide sufficient consistency to avoid crises. Frankel (2003) goes on to consider two other rationales and concludes "Thus, each of the three arguments offered – the impossible trinity, the dangers of unhedged dollar liabilities , and the political difficulty of exiting – contains some important truth. But none seems able to stand as a theoretical rationale for the superiority of the corners solutions over the intermediate regimes. Perhaps the corners hypothesis, then, is just a misplaced manifestation of the temptation to believe that the grass is always greener somewhere else, in this case, in the corners of the pasture?" (Frankel, 2003).³

³ Frankel (2003) notes that "Frankel et al (2000) offer another possible reason to favor the firm fix corner: verifiability. Central banks announce intermediate targets such as exchange rates so that public can judge from observed data whether they are following the policy announced. The general point... is that simple regimes are more verifiable by market participants than complicated ones."

This conclusion, while correct, could easily give a misleading impression. All intermediate regimes are not inherently crisis prone on economic grounds, but some are extremely difficult to manage in a stable manner. Frankel is right that we don't have a clearly laid out analytic model that explains why the middle is so crisis prone, but that needn't imply that good reasons don't exist. The key in my judgment is the interaction of economic and political considerations. These will often give governments' strong political incentives to postpone needed economic adjustments and in some cases even cause governments to generate the disequilibrium that leads to currency crises. A major purpose of this paper is to lay out some of the key elements in such interactions. This perspective suggests that once we move away from the dead center of a narrow band adjustable peg, the extent to which political and institutional conditions allow decision makers to base exchange rate policy on long run economic considerations rather than short run political ones is likely to be more important for stability than the particular form of the regime selected.

The Framework of Analysis

A central premise of this analysis is that consistency is a longer-term requirement and inconsistency in the short run can sometimes provide substantial benefits or allow the avoidance of substantial costs. Governments often attempt to exploit this scope for short-term inconsistencies for too long, and the results are crises. It will be argued that political considerations play a major role in this process.

A primary cause of currency crises is the emergence or anticipation of serious inconsistencies between exchange rate and domestic macroeconomic policy. In the short run, external payments imbalances can be dealt with by reserve flows and other forms of

financing, but to avoid speculative attacks this method of dealing with inconsistencies between internal and external imbalance must be viewed by private actors as being temporary. Continuing imbalances—reflecting fundamental disequilibrium in the terminology of the Bretton Woods system—require adjustment. If such adjustments are not undertaken by national authorities in a sufficiently timely manner, expectations of forced exchange rate adjustments will be generated and speculative attacks will ensue.

Fundamental disequilibrium corresponds to the types of payments imbalances analyzed in first generation crisis models.⁴ In such situations the issue is not whether there will be a crisis, only its timing. An obvious question raised by such first generation models is if the private market can see that a crisis is inevitable, why can't government authorities also see the looming crisis and take actions to forestall it.

One possible answer, that government actors are systematically less capable than private sector actors, while being true in some specific cases, is not terribly appealing as a general explanatory proposition. More likely is that government officials are more constrained in their behavior than are private agents. These constraints, or more appropriately, impediments to taking actions results both from having a broader range of (political) objectives and from having less freedom to take action, i.e., individual speculators can usually act immediately once they have decided on a preferred course of action. Government officials, on the other hand, will often face many potential veto players. For example, the finance minister must convince the chief executive who in turn may have to convince the legislature, while all through the chain the actor's decisions are likely to be subject to influence by the lobbying and prospective reactions of interest groups and also the general public. Of course, in corporate structures, analysts will typically also face veto players, but the difficulties of

⁴ For a succinct review of modern crisis models, see Eichengreen (1999) Appendix B.

getting sufficient agreement to act on the analyst's expectations will typically be much less than in the public sector. In turn the extent of difficulty in the public sector may vary considerably across countries and time based on institutional structures and configurations of interests. Likewise, while the private sector is surely not completely immune to the adoption of myopia and excessively short time-horizons, the tendency of rationally (or irrationally) uninformed voters to induce shortsighted behavior by governments has been extensively analyzed.⁵

The combination of such considerations suggests that governments will not always choose policy regimes that are ideal from the standpoint of generating economic efficiency and avoiding crises, i.e. coincide with the interests of informed median voters. Such "imperfections" in the operation of governments forces us to at least partially separate the question of the choice of exchange rate regimes (or other policies) from that of how the regime operates, and directs attention to issues of why some types of regimes appear to be more crisis prone than others.

Technical economics can shed a great deal of valuable light on this issue. For example, analysis of the incentives generated for one way speculative gambles contributes importantly to explaining why Bretton Woods type narrow band adjustable peg regimes are so prone to crisis in a world of substantial capital mobility. Economics alone, however, cannot explain why governments failed to foresee these problems. Indeed governments have frequently continued to adopt such regimes after the predictions of international monetary economists about their instability were confirmed by the breakdown of the Bretton Woods system and further confirmed by the crises in the European Monetary System in the early 1990s.

⁵ See, for example, ... Drazen, etc. [Eric]

To analyze such issues it is necessary for a broader political economy perspective to be adopted. The following sections lay out some of the considerations that are of particular importance for the development of such a perspective.⁶

The Role of Uncertainty and Modern Crisis Models

The tendency for public sectors to fail to take sufficient anticipatory actions to head off fundamental disequilibrium and the currency crises that are likely to follow is enhanced by the fuzziness in practice of the distinction between temporary and fundamental disequilibrium. How much of a current payments imbalance is due to temporary and cyclical versus more permanent factors is often difficult to assess. Does a current increase in investment reflect an increase in productivity or a speculative boom? Will current capital inflows continue or are they temporary? Such questions are often not easy to answer, either by private sector or by public sector analysts. Indeed, prior to both the Mexican and Asian crises, many private as well as public sector analysts proved to be overly optimistic.

Where adjustments are costly, uncertainty about whether current inconsistencies are temporary or permanent will generate a tendency for officials to hope that the situation is one of only temporary disequilibria so that adjustments can be avoided.⁷ As will be elaborated below, public interest optimal policy making would dictate some delay as prospective costs and benefits are balanced. However, political considerations will often generate tendencies toward excessive delay.

⁶ A start on this effort is provided in Willett (2004). It suggests using OCA theory as a starting point and then broadening the analysis to include distributional and other political considerations.

⁷ The role of uncertainty in delaying reform has been analyzed in a distributional context by Fernandez and Rodrik (1991), Rodrik (1993) and Laban and Sturzenegger (1994).

Uncertainty also helps build a bridge between first and second-generation crisis models. While in first generation models fundamentals are assumed to be either good or bad, second generation models, besides introducing an active government, also recognize that the fundamentals may fall into a third intermediate state where the country is vulnerable to a crisis, but a crisis is not inevitable. This vulnerable zone generally includes situations where shocks that would be too small to generate a crisis with strong fundamentals, would be sufficient to do so in the vulnerable zone. Formally these shocks can be treated as shifts in expectations from optimistic to pessimistic, which generate self-fulfilling speculative attacks. These shifts from a “good” to a “bad” equilibrium could be due to arbitrary swings in the moods of the market and in formal models they are often referred to as ‘sun spot’ equilibria. In reality such shifts are usually generated by developments or expectations of developments that should generate changed outlooks.⁸ A frequently noted culprit is a crisis in another country that generates speculative pressures on the country in question via rational or irrational herding or reevaluations due to wake up calls.

While this hasn’t been emphasized sufficiently, the vulnerable zone in second-generation models could also reflect a zone of uncertainty about the extent of long run inconsistency among policies. The shift in expectations that generates a speculative crisis could come from news that causes the market to shift from optimism to pessimism that a current imbalance is only temporary. Both overreaction to the news by the private sector or politically motivated sluggish adjustment by the public sector could lead to market perceived inconsistencies on which the public sector doesn’t act. This in turn generates incentives for speculative attacks. Such attacks in turn would increase the costs of further delay by the government.

⁸ See Willett et al. (forthcoming).

The major incentives for currency crisis related speculative attacks involve expectations of changes in exchange rates. For rational speculators the decision on whether to attack (or for businesses whether to hedge) is based on the assumption that insufficient financing is available to successfully ride out the attack with no change in policy and that if policy is adjusted, it will involve exchange rate changes, not just domestic policy adjustments. Unsuccessful attacks will occur because speculators underestimated the amount of speculative outflows relative to the financing available (including possible loans from the IMF) and/or because governments took more domestic policy adjustments than were anticipated.

Thus by definition unsuccessful speculative attacks involve mistaken expectations on the part of the market.⁹ With uncertainty, however, unsuccessful attacks need not imply that the attacks were unreasonable or unjustified or based on irrationality. Under uncertainty and with heterogeneity of expectations, it becomes much harder to distinguish between rational and irrational market actions. Officials clearly have incentives to argue that speculative attacks were unjustified. Often we face situations where reasonable analysts differ, ex post as well as ex ante, about the seriousness of policy inconsistencies.

Some Implications of Optimum Currency Area Analysis

The theoretical literature on optimal stabilization policy in open economies shows that it will sometimes be desirable to allow short run inconsistencies to develop between exchange rate and domestic macroeconomic policies. Using reserve fluctuations to maintain a stable exchange rate under certain circumstances (such as temporary shocks and exogenous shifts in asset preferences) can help smooth out the effects of shocks better than either exchange rate or domestic policy adjustments. Thus, for example, fixed rates may operate as an automatic

⁹ For an analysis distinguishing between successful and unsuccessful speculative attacks, see Leblang (2003).

stabilizer in the face of domestic demand disturbances. Likewise, where shocks are reversible, maintain fixed rates may avoid unnecessary adjustments.¹⁰ From this optimal policy perspective, where adjustment is the optimal response, the proportion that should be placed on exchange rate versus domestic policy actions should depend on the factors enumerated in the theory of optimum currency areas. These in turn depend on patterns of shocks and the institutional and structural characteristics of the countries in question.¹¹

Although OCA theory has traditionally been considered relevant only for the choice of whether a country should adopt a fixed or flexible exchange rate, it is actually much more general.¹² We can think of a genuinely fixed exchange rate as a system in which all of the adjustment is put on domestic policy, while with a freely floating rate all of the adjustment is put on the exchange rate.¹³ Typically, however, neither extreme solution will be optimal. For example, the relative size of the external sector is an important factor stressed in OCA theory. Few countries, however, have such a large external sector that all adjustments should be placed on domestic policy, or so small an external sector that all of the adjustment should be placed on the exchange rate. Frequently there should be some adjustment of both, with the proportion of the adjustment put on the exchange rate declining for more open economies. In other words, while this still isn't sufficiently recognized, OCA analysis suggests that many and likely most countries should have intermediate exchange rate regimes.

On the other hand, we know that many types of intermediate policy regimes have been highly crisis prone. When speculative capital flows are taken into account does the argument for intermediate exchange rate regimes break down? The answer is, not really, but this

¹⁰ Of course, these two criteria will sometimes conflict with one another.

¹¹ For reviews of OCA analysis see Frankel (1999), Masson and Taylor (1993), Tavlas (1993), and Willett (2003a).

¹² See Willett (2003a) and (2003b).

¹³ Of course the latter is somewhat of an overstatement.

conclusion rests on a particular interpretation of the meaning of intermediate exchange rate regimes, as ones where adjustments should be shared between internal and external policies in a mutually consistent way.

As Frankel has emphasized, the unholy trinity requirement can be met by any combination of exchange rate versus monetary policy adjustment. The major problem is that, as will be discussed below, intermediate regimes appear to provide stronger incentives to or weaker constraints on the propensity of governments to undertake too little adjustment in both spheres in order to better achieve short term goals.

The Roles of Political Considerations

Political considerations can influence economic policies and the probabilities of crises through several different channels. One is a direct or initiating influence on the generation of economic policies that create inconsistencies between the requirements for internal and external equilibrium. The generation of such pressures may be deliberate, such as the generation of electorally motivated economic expansion (the political business cycle), or may come as the byproduct of the pursuit of other objectives, for example, where desires to provide benefits to interest groups or the general public leads to increased government spending while avoiding increasing taxes results in budget deficits.

Political considerations can also generate incentives to fail to offset disturbances or in some cases, even to follow accommodating policies.¹⁴ This can occur whether the disturbances are generated at home or abroad and by the private sector or the government itself. For example, even though the economy is overheating, concerns about avoiding

¹⁴ For discussions of why stabilizations and reform efforts are often delayed, see Alesina and Drazen (1991), Drazen (1996) and (2000), Laban and Sturzenegger (1994) and Sturzenegger and Tommasi (1998).

politically unpopular interest rate increases may lead a government to loosen rather than tighten monetary policy.

Just as the incentives for political business cycles come from the tendency for the short-run benefits of output expansion to precede the costs of increasing inflation in the face of unanticipated expansion of demand, macroeconomic policies to offset shocks and reduce inflation tend to have their costs come first and the benefits later. Thus for policy-makers with short effective time horizons generated either by their own myopia or the political pressures from special interests and the general public, there will be a bias against taking sufficient corrective actions, i.e. a bias toward more accommodation than would be economically optimal.¹⁵ This is often referred to as the time-inconsistency problem, since what is optimal from a purely short run perspective is suboptimal from a longer run perspective. This makes it difficult for policy makers with discretionary authority to credibly commit to follow stable policies.

Biases toward both generating and failing to offset policy inconsistencies are likely to increase in the face of “weak” governments.¹⁶ It will be difficult to control government spending and to secure the coalition necessary to adopt inconsistency-removing policies. Thus weak governments are more likely both to generate inconsistent policies and to not be able to take action to remove inconsistencies in a timely fashion. On both of these counts weak governments are more likely to face currency crises.

We can distinguish among several different types of weak governments and political instability. The later term has developed two different types of meanings in the literature. The

¹⁵ See, for example, Alesina, Roubini and Cohen (1997), Drazen (2000), Persson and Tabellini (2000), and Willett (1988).

¹⁶ A weak government is generally referred as a government which lacks of capacity to implement its desired program. See, for example, [Eric].

most serious type refers to underlying social instability and the likelihood of violence and irregular changes in government. Proxies for this type of political instability include strikes and riots, the incidence of violence, and the extent of ethnic cleavages. A milder type of political instability refers to frequent changes in government. Both types of instability are likely to contribute to shortening the time horizons of governments and increasing uncertainty.¹⁷

A different type of weak government is one which has little ability to implement its desired programs.¹⁸ This could be because of weak institutional frameworks and respect for law and high levels of corruption or because of divided and/or coalition governments that generate a large number of veto players.¹⁹ A high number of veto players biases governments toward inaction and creates a hospitable environment for wars of attrition.²⁰ Such configurations will frequently, but not always, be associated also with high political instability in the sense of frequent changes in government. Andrew MacIntyre (2001) has suggested that there may be a non-linear U shaped relationship between the number of veto players and a government's ability to avoid crisis and to respond to them effectively when they occur.²¹ He argues that during the Asian crisis Thailand suffered from a weak government with a large number of veto players, while Indonesia and Malaysia suffered from instability generated by the vacillations of strong leaders who faced only weak domestic political competition. He

¹⁷ For discussion of these and other types of measures of political variables, see the papers and references on the website of the 2003 Claremont Conference on Political Economy Data http://spe.cgu.edu/econ/conferences/2003_cgped/index.html

¹⁸ A non-institutional approach to measuring government strength is provided by Organski and Kugler's concept of political capacity. For applications in economic areas, see Arbertman and Kugler (1997).

¹⁹ Azieman and Marian (2002) associate high levels of corruption with short government time horizons and find that this leads governments to hold lower levels of international reserves. This should in turn make them more crisis prone.

²⁰ See, for example, Drazen (2000).

²¹ Broader empirical support for this hypothesis is presented in [Penny]

suggests that Korea illustrated a happy middle ground with neither too many nor too few veto players.

Weak governments and political instability should increase the likelihood of crisis under any type of exchange rate regime, but it seems likely that such effects would be especially strong for sticky adjustable pegs. For these types of regimes, tendencies to exploit the short run benefits of policy inconsistencies to postpone needed adjustments are particularly likely to generate crises.

Political developments can also influence speculative pressures directly via expectations even when there is no immediate change in economic policies. Thus, for example, political instability generated by the prospect of elections can directly influence private sector expectations. These may operate both through changes in the level of uncertainty and shifts in the means of expectations.²²

Exchange Rate Adjustments

Up to this point, we have been discussing policy inconsistencies under the assumption that domestic macroeconomic policies must do the full adjustment. Now let us broaden the analysis to consider the role of adjustments in exchange rates under different types of regimes. Again political considerations may intrude through both distributional and time asymmetry effects.²³

Export and import competing industries will prefer a low external value of the currency, while consumers will prefer a high one. Thus various proxies for weak

²² Such uncertainty effects are emphasized in work by Bernhard and Leblang (2004).

²³ The role of distributional effects have been especially emphasized by Jerry Frieden and his coauthors. See Frieden and Stein (2001) and Blomberg, Frieden, and Stein (2001). Time asymmetries have been emphasized in Willett (2001).

governments are beginning to be included in empirical studies of currency crises.²⁴ The structure of economies as well as institutional and political configurations will influence the relative strength of the forces toward over or under valuation.

In addition, there is likely to be a status quo bias against major changes in the exchange rate.²⁵ The status quo bias should be less for exchange rate changes than in many policy areas since these are generally made by executive fiat rather than legislative decision. Anticipation of adverse reactions is still likely to create some bias, however. There is a widely believed political adage that for organized groups those who are hurt by an exchange rate change will tend to react more negatively than the beneficiaries are likely to react positively. Even where officials are not sure this is the case, uncertainty about responses will itself imply some degree of status quo bias. The weights given to these various groups in governments' political calculus may vary greatly across countries, time, and institutional arrangements.²⁶ Concentrated industrial exporters will be more influential than dispersed agricultural producers in developing countries. In industrial countries influence may be more balanced due to the operation of the iron law of political economy that poor countries tax their farmers while rich countries subsidize them. Likewise in developing countries, urban workers are likely to be given more weight than rural ones.

The time asymmetry effects of exchange rate adjustments will add to this bias, at least in the case of devaluations. With exchange rate adjustments, the price effects tend to show up first, with the quantity effects being lagged. This is just the opposite from the effects of

²⁴ See, for example, Leblang (1999) and (2003).

²⁵ For analysis of status quo bias, see Fernandez and Rodrik (1991) and Rodrik (1993).

²⁶ Spolaore (forthcoming) analyses the effects of different government systems (cabinet, consensus, and checks-and-balances) on conflicts over the choice of adjustment instruments in the face of shocks. Each system is found to generate inefficiencies, the relative importance of which vary with the nature of shocks and the degree of fragmentation of the polity.

changes in macroeconomic policy. With depreciation, the price effects, increases in the prices of tradable goods, tend to be passed through to consumers rather quickly, while the favorable effects of expanding net exports and hence domestic incomes, are lagged. With high information rational expectations, economic and political actors may anticipate these effects. It seems likely, however, that in a world of incomplete information, the initial political effects of these longer term favorable effects will be weaker than those of the quickly observable increases in prices.

For a number of emerging market countries a particularly important consideration is the effect of exchange rate changes on balance sheets. Corporations and financial institutions in such countries often have substantial unhedged foreign currency debt and depreciations can generate severe financial hardship. This has been another important contributor to the tendency for adjustable pegs to be excessively sticky. In Asia widespread beliefs that major exchange rate changes would be avoided encouraged the development of large unhedged foreign currency debt positions and the existence of these positions became an important reason why officials tried to avoid depreciation when it seemed clearly called for. Thailand in 1996-97 is a prime example. Such considerations generate a nasty dynamic that contributes importantly to the crisis prone nature of sticky exchange rates. The longer adjustments are put off, the more disruptive and costly their short run effects tend to be. In many cases as the exchange rate disequilibrium persists, the increase in the governments' perceptions of the probability that the disequilibrium is permanent rather than temporary, may be more than counterbalanced by increases in the perceived short run costs of making an adjustment. This creates a situation somewhat analogous to gambling for redemption.

From the standpoint of OCA efficiency theory, the effectiveness of exchange rate adjustments would be reduced by greater openness (with the exception of adjustments to offset inflation differentials). Greater openness will increase both the favorable and unfavorable distributional effects of exchange rate changes. Thus it isn't clear a priori how the political balance of these forces would change. Price and credibility effects will add to these price-quantity asymmetries of depreciation. Devaluation, while welcomed by exporters, is still widely viewed as evidence of policy failure. While the price and quantity effects of devaluation and depreciation will be similar,²⁷ devaluation is likely to be more costly politically. This is a key reason why adjustable pegs tend to be so sticky and why greater flexibility is often advocated on the grounds that it would help to depoliticize the exchange rate.

A priori, it isn't clear whether the status quo bias operates more strongly against revaluations or devaluations. Confidence and balance sheet effects suggest that the bias against devaluations would be stronger, but this may be counter balanced by mercantilist objectives and the often substantial political weight of exporter and import competitor interests. The time asymmetry bias against depreciation will be greater, the shorter the effective time horizon of political actors. These horizons are likely to be especially short before elections and this gives rise to the tendency to postpone needed depreciations until after elections.²⁸

On average developing countries seem to face trends and shocks that tend to generate over rather than under valuation at constant exchange rates (An exception is low inflation, high productivity growth economies such as China, Korea, and Taiwan). Thus the status quo

²⁷ There could be some difference due to different expectations about the permanency of the change.

²⁸ See Frieden and Stein (2001), and Blomberg, Frieden, and Stein (2001).

bias is likely to more often lead to over rather than under valuation. The stickier is the exchange rate regime, the greater is the bias likely to be.

Another type of asymmetry concerns the greater ease of defending undervalued than overvalued currencies. Speculative flows against undervalued currencies bring their own financing. The factors that limit a country's willingness to run surpluses are the limits on its ability to sterilize capital inflows and the costs of the misallocation of resources involved in excessive reserve accumulation. The former is likely to have more political salience since it would lead to inflation that is easily perceived by the public, while charges of excessive reserve holdings are seldom, if ever, a salient political issue. Even the effects of domestic inflation are likely to be weak relative to the pressures on deficit countries. (The more international liquidity is available the less this bias will be.) As a consequence of this asymmetry we see many more speculative attacks on currencies that are perceived to be overvalued than on ones perceived to be under valued.

Exchange Rate Based Stabilization

Time asymmetries are especially strong for countries following strategies of exchange rate based stabilization (ERBS). Such policies tend to have favorable initial results in leading to more rapid reduction in inflation with less costs in terms of unemployment than with contractionary macroeconomic policies. Indeed rather than recessions, this strategy often generates booms in the initial stage. However, while inflation initially tends to fall rapidly, it seldom does so quickly enough to keep pegged or slowly downward crawling exchange rates from becoming overvalued.²⁹

²⁹ On these issues see the analysis and references in Martin, Westbrook, and Willett (1999), Westbrook and Willett (1999) and Willett (1998).

Discussion of ERBS raises the broader issue of discipline and the use of exchange rates as nominal anchors. The basic idea is that by making a strong commitment to an exchange rate objective, domestic variables such as money growth, budget deficits, and labor market flexibility can be forced to adjust in favorable directions. Such possibilities have long been the source of discipline arguments for fixed exchange rates and have recently been incorporated into the OCA framework under the label of endogenous OCA theory. There can be something to such arguments, but they often tend to be abused by advocates of fixed or pegged exchange rates.

For every case such as France in the 1990s where exchange rate commitments were highly successful in promoting domestic monetary and fiscal discipline, there are many more where it is unclear how much the exchange rate commitment added to domestic discipline, such as Estonia, or where the discipline proved insufficient to avoid crisis, such as Argentina, Brazil, and Turkey. Typically we find that exchange rate discipline has stronger effects on monetary than fiscal policy.³⁰ Indeed, fixed rates may reduce discipline over fiscal policy in initial stages because of the greater ease of financing deficits with capital flows. As the case of Argentina illustrates, often the discipline of the market over fiscal policy does not come until the situation has deteriorated to the point that a crisis is generated.

Much of the literature on exchange rate discipline (and credibility effects) has failed to distinguish clearly between fixed and pegged exchange rates. Of course it is never strictly true to speak of permanently fixed exchange rates, but some commitments are so hard such as those under the classical gold standard that it would take wars or depressions to drive a country off its parity. Bretton Woods-type adjustable pegs carry much less commitment. Willett (2001) argues that the literature has generally not paid enough attention to the

³⁰ See Clark (2003) and Willett (2000).

distinction between the effects of exchange rate regimes as constraint systems and as factors influencing incentive structures. Of course, the dividing line between them is not crystal clear, but it clearly makes sense to view hard fixes primarily as constraint systems, while intermediate regimes should be analyzed primarily in terms of their effects on incentive structures. Thus Willett argues that unlike hard fixes, adjustable pegs may actually increase the incentives to generate domestic political cycles (because the slope of the short-run inflation/unemployment tradeoff will be reduced).

The evidence is clear that trying to force domestic adjustments by locking in the exchange rate is a high-risk strategy. In some circumstances there can be scope for leverage on this score, but often the power of the leverage is insufficient to avoid crises. There has been little systematic political economy analysis so far of the conditions that contribute to such discipline strategies succeeding or failing.³¹ I suspect that these conditions will not prove to be greatly different from those under which IMF conditionality loan programs can be used to tip the domestic political equilibrium in the direction of adopting more stable policies. It does seem clear that the more commitments can be connected with broader objectives, such as in France with the broader European project, the more powerful they are likely to be. The recent disregard by France and Germany of their EU budget deficit obligations under the Growth and Stability Pact shows the limits of such power, however. I would conjecture that as a general rule of thumb, the more strongly a government is counting on its exchange rate regime to be a source of domestic discipline, the greater are the odds of a crisis.

These time asymmetry cum short time horizon effects help explain both why ERBS enjoyed so much popularity in the 1980s and 90s and why so often countries failed to exit from these strategies before currency crises were provoked. Adding to this bias may be

³¹ For initial efforts along this line see Hamann (2001).

exaggerated fears by officials of how damaging a devaluation will be. It is certainly possible for government officials to also err on the side of over-optimism about the effectiveness of exchange rate adjustments, but fears of chaos resulting from damaged confidence seem to have been much more prevalent. Here again uncertainty is important. One can't prove that a depreciation won't set off a vicious cycle of damaged confidence and depreciation. Fears about the possibilities of such worst-case scenarios have sometimes proved to be very powerful in internal government debates about the pros and cons of devaluation. The longer a currency has remained overvalued, the more powerful such fears of catastrophe from devaluation or depreciation tend to become. As noted above, this helps generate a self-reinforcing process of sticky exchange rate regimes.

Such considerations led the Bretton Woods adjustable peg regime to become much stickier in practice than its designers envisioned. Likewise the supposed new look more flexible pegged regime of the European ERM became increasingly rigid over time until the currency crises of 1992 and 1993 were induced. The more a currency has become over valued and the longer this has continued, the greater the short run disruptive effects of a devaluation are likely to be. Thus, contrary to the implications of long time horizon efficiency-based behavior, with short time horizons the more over valued is a currency, the more hesitant a government may be to devalue. This is a particularly important example of how a political calculus may differ from the predictions of optimal policy models.

The Effect of Fickle Financiers (and the need for more systematic research on behavioral international finance)

Destabilizing speculation will make any exchange rate regime work worse, but the costs are likely to vary across regimes. Comparative analysis of the costs of badly behaved speculation across different exchange rate regimes will depend on the specific nature of the imperfections in speculation. There are many possible theories of irrational behavior; thus we cannot hope to cover every single type of imperfect speculative behavior. We can make a start, however, by considering a few major categories. I conjecture that under most theories of speculative imperfections, the additional costs imposed under genuinely fixed exchange rates will be less than under other systems. This conjecture rests on the assumption that under credibly fixed regimes there will be little cause for non-stabilizing speculative behavior. Under flexible rates, most types of imperfect speculative behavior would seem likely to generate excessive volatility. We should not conclude from these two propositions, however, that heavily managed intermediate exchange rate regimes would generally deal better with imperfect speculation than would flexible rates.

Of course, where the resources of the government exceed those of the badly behaved speculators, then official counter speculation to offset destabilizing speculation would improve economic welfare (and would generally be profitable as well). Almost by definition an optimally managed float is likely to be the best exchange rate regime. Whether one can count on something close to optimal management is the question and considerable experience suggests that the answer is typically no. Our political analysis offers many insights into the conditions under which discretionary management is likely to perform better or worse in practice.

It seems likely that under most theories of imperfect speculation, the effects will be worse, the greater is the likelihood of inconsistent policies. This in turn will likely depend

both on the short run incentives for inconsistent policies and the ability of officials to overcome short-run political pressures and set policy based more on concerns with reputation and longer run efficiency. Thus some policy regimes will be much more credible than others.

The greater the credibility of policy makers, the greater is the scope for them to indulge in short run policy inconsistencies without this generating strong speculative pressures. For a given level of basic policy maker credibility, alternative forms of intermediate exchange rate regimes are likely to generate different incentive structures for keeping short run inconsistencies from turning into longer term ones. From this perspective, Bretton Woods-type narrow-band adjustable pegs seem likely to generate the worst incentive structures because of the greater “fixed” political costs of making adjustments combined with the time asymmetries which causes the costs of depreciation to be front loaded relative to the benefits.

My own analysis of a number of crisis episodes suggests that while speculators seldom attack innocent victims, neither do they always provide early warning signals to policymakers that the financial markets are beginning to see the emerge of troubling policy inconsistencies that need to be addressed.³² All too often inflows of financial capital based on limited analysis contributed to the impression that all was well and helped to blunt officials’ perceptions of the magnitudes of emerging problems. The possible interaction among imperfect speculators and imperfect governments under different policy regimes is an rich area for further study.

³² See Willett (2000) and Willett et al (forthcoming).

Concluding Remarks

Where policy inconsistencies develop we can think of a government as engaged in a three way balancing of the political costs and benefits of internal (domestic macro) and of external (exchange rate) adjustments and postponing adjustment through financing.

Ceteris paribus, the greater are the perceived costs of adjustments, the lower the costs and the greater the quantity of financing available, and the higher is the likelihood that policy inconsistencies are temporary, the greater should be the tilt toward financing rather than adjustment.³³ The latter can be based on the belief that the imbalances are temporary or just the hope that “something will turn up”. Psychological defense mechanisms may begin to bias government decision makers’ perceptions of the odds that the situation will improve and they may become willing to run substantial risks of highly costly future crisis in order to get through the current movement. Thus pressures to postpone adjustments can sometimes generate government behavior akin to gambling for redemption.

Such pressure can develop under any exchange rate regime, but they are likely to have greater influence, the stickier are adjustment mechanisms. Combined with the private sector incentives generated by one way speculative gambling goes a long way toward explaining why Bretton Woods types adjustable peg regimes have proved to be so crisis prone.

Obviously the more costly are internal and external adjustments, the less likely are they to be used. Here OCA theory gives us a good start on evaluating the economic costs and

³³ There are a wide range of financing mechanisms potentially available including the use of current reserves, borrowing from private markets, other governments, and international organizations. In some cases the dividing line between financing and adjustment policies is not clear cut. For example, the use of controls can be said to suppress rather than adjust imbalances. Likewise, the initial effects of higher interest rates may be more to attract capital from abroad than to prompt domestic adjustments. Analytically, we should probably classify such policies by their intended or actual time dimensions. Temporary controls or interest rate increases then would be considered as financing while longer term use of these policies would be considered adjustment.

benefits. These in turn can be incorporated into broader political calculus that includes emphasis on distributional effects, time asymmetries, and non-economic objectives.³⁴ The more flexible are domestic economies, the less costly is the use of domestic demand management. The openness of the economy will have a major influence on the effectiveness of exchange rate adjustments. The less open the economy, the more effective and less costly economically are exchange rate adjustments likely to be. Both the absolute and comparative costs of internal and of external adjustment will vary across countries. We would expect the incidence of crisis to be lower, the greater the degree to which countries follow regimes in conformity with the criteria of OCA analysis.

Institutional arrangements are likely to have a substantial influence on the political effects of exchange rate adjustments as well. The more such adjustments are seen as being the direct result of government policies, the greater the political effects are likely to be. Thus the greater is the influence of market forces in the short run determination of exchange rates, the less politicized are exchange rate adjustments likely to be. This logic presents a strong case for flexible rates.

Countering this thrust, however, are concerns by many that market forces will often (or at least sometimes) have severe destabilizing influences on exchange rates, and the implications of OCA analysis that many countries do not meet the conditions for either a free float or a genuinely fixed rate. Thus we observe a considerable degree of both fear of floating and of fear of fixing in the behavior of governments. That the middle is highly crisis prone has frequently failed to discourage many governments from attempting to manage in the middle. The rash of recent currency crises has led to the abandonment of announced parities by many governments, but in many instances this has not meant the end of heavy exchange

³⁴ See Willett (2004).

rate management. Heavy management of exchange rates need not increase the probabilities of crisis if it's accompanied by consistent mutual adjustment of domestic policies. Thus, for example, regardless of its extent, the use of unsterilized intervention should not increase the risk of crisis.

It is the pursuit of or failure to remove policy inconsistencies that are the chief cause of currency crisis. As open economy models of optimal policy demonstrate, short run inconsistencies of policy can sometimes be socially beneficial without imposing longer-term costs or risks. For example, in the face of some types of temporary disturbances financing through sterilized intervention can be unambiguously welfare enhancing. The trouble is that even if the disturbance is not temporary, such financing strategies can often provide net short-term benefits, but now at the expense of greater long-term costs including increased probabilities of future crisis. The weaker are governments politically and the closer are elections, the more likely are governments to generate policy inconsistencies themselves and to fail to respond sufficiently to inconsistencies generated by shocks. On the other hand, the more farsighted and insulated from short run political pressure and the better the mental models adopted, the less likely are serious policy inconsistencies to emerge. Such considerations suggest a rather strong case for delegating the making of exchange rate policy to independent monetary authorities.

The political economy analysis presented here suggests that the conditions necessary for the smooth working of genuinely fixed exchange rates frequently fail to be met and that highly sticky adjustable pegs are especially difficult to operate. There are considerable short run attractions to exchange rate based stabilization policies, but the political economy of timely exit from such strategies has proven to be rather difficult.

Thus there appears to be a strong case for most countries to practice a substantial degree of exchange rate flexibility. We are still far from developing a consensus, however, on the relative merits of managing such regimes through managed floats or crawling bands.³⁵ While a topic certainly deserving a good deal more analysis, this formal institutional distinction may well prove to be of considerably less importance than the specifics of how either type of regime is managed.

Despite all of the ink that has been spilled on the topics of exchange rate regimes and currency crisis, we still face a rich agenda for political economy research. Such research will require careful attention to the classifications of exchange rate regimes. Two way classifications of pegged versus flexible rates will seldom provide useful insights. Indeed, Nitithanprapas, Rongala and Willett (2002) show that with such two way categories, the range of classifications that have been offered by researchers allows one to find either a positive or a negative correlation between pegged rates and the incidence of the Asian crises.³⁶ It is now well understood that official classifications are often highly misleading and a number of improved classifications have recently been offered. Even the best of these however, are not free of questionable entries, however. For example, both Bubula and Otker-Robe (2002) and Reinhart and Rogoff () classify Japan's current regime as freely floating despite heavy levels of government intervention. Thus researchers need to continue to pay careful attention to the classification of regimes.

The development of numerous qualitative measures of political and institutional variables offers scope for considerable fruitful testing of political economy hypothesis through large N empirical studies. Again, however, careful attention needs to be paid to the

³⁵ Witness the conflicting views of Goldstein (2002) and of Williamson ().

³⁶ See, also, Willett et al ()

quality of the proxies used. For example, NRW find a number of problems with the available quantitative measures of capital controls. Indeed, most of these measures classify the Asian crisis countries as having high levels of controls while much judgmental analysis has referred to substantial liberalization as a major contributing factor to the crises. Likewise, while indices of the degree of control back independence have proved useful for analysis of industrial countries (albeit not without some controversy), many researchers believe that the indicators for most developing countries are not sufficiently meaningful for use in empirical studies.

Even with pretty good data there will be many nuances that are too subtle to capture in large N empirical work. For such reasons, there is need for careful analytic case studies of the political and economic factors that have allowed some intermediate exchange rate regimes, e.g., Poland's crawling band for most of the 1990s and Singapore's managed float, to operate relatively efficiently while the formal crawling bands of Brazil and Mexico and the managed floats of Indonesia and Korea that operated as de facto crawling bands ended in crises.

In such analysis we must also attempt to assess the direct and indirect roles that exchange rate cum monetary regimes played in generating crisis. Thus, for example, there is widespread agreement that Thailand's adjustable, but highly sticky, basket peg (comprised mostly of the US dollar) became substantially overvalued and thus played a direct role in generating the Thai crisis. Indonesia however, was not obviously substantially overvalued before its crisis. For Korea, a wide range of judgments have been offered. In all three countries, however, exchange rate regimes likely played an important indirect role through the generation of expectations that large depreciations would be avoided. Such expectations in

turn generated the incentives for the large unhedged short-term borrowings that played such a role in the crises.

Despite the current fashion to debate methodological approaches at meetings of the American Political Science Association, I find it hard to imagine that good theoretical work (both formal and informal), large N empirical studies, and careful case studies should be seen as anything but useful complements to one another. That anyway, is the spirit in which this workshop has been conceived.

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