

CHAPTER 4

From Fiscal to Monetary Divergence

Chapter 3 established that little evidence exists to support the hypothesis of systematic monetary policy convergence among the advanced industrial democracies in the post-Bretton Woods era. Many OECD governments have opted for domestic monetary autonomy in the form of positive nominal interest rate differentials. The evidence showing a lack of external monetary policy convergence, or smaller interest rate differentials, is consistent with the data showing no trend toward greater exchange rate stability, or reduced currency variability, for the OECD governments after 1973. Thus, the post-Bretton Woods era is better characterized by the description of monetary policy divergence with international capital mobility.

Chapter 3 also ended with a puzzle: why have many advanced industrial democracies asserted domestic monetary autonomy in the form of positive nominal interest rate differentials? Put somewhat differently, why have many OECD governments chosen national interest rates that are higher on a nominal basis than the low external interest rate?¹ To help resolve this apparent puzzle, I propose that we think more about the linkages between national monetary and fiscal policy choices, theorizing about why and how the advanced industrial democracies may have used their different policy instruments to meet multiple economic policy goals in an era of international capital mobility.

As some scholars have noted (see, e.g., Way 2000), the political science discipline has not engaged in much theoretical work concerning how governments choose their fiscal and monetary policy mix. Instead, there has been a long-standing tendency to focus more on policy goals and outcomes (e.g., economic growth or inflation) while ignoring the important question of which

1. For further evidence showing that the external interest rate is low on a nominal basis, see Shambaugh 2004, 321.

policy instruments were used to achieve such objectives (see, e.g., Hibbs 1977; Alt 1985). Webb (1994, 400) has argued: “Expansion or restraint could be achieved by a variety of means, and analysts [need to] pay attention to the mix between monetary and fiscal policy instruments. Different policy mixes may have similar macroeconomic effects but different distributional effects and international effects.” These effects include those related to exchange rate stability.

Some recent work (see, e.g., Oatley 1999; Clark and Hallerberg 2000; Clark 2003) has done a much better job in focusing on the use of policy instruments, examining how governments condition their fiscal and monetary policy choices on their exchange rate regime (assumed to be either fixed or floating). This work is also a major advance because it does not build from the assumption of monetary policy convergence; thus, it departs from the third wave of political science research on this topic (see table 1 in chap. 1). Indeed, scholars have arguably launched a fourth wave of political science research on this topic, explicitly exploring the nature of monetary policy divergence with international capital mobility. But this line of research does have certain limitations, in that it treats the government’s exchange rate regime as exogenously determined and focuses primarily on *de jure* exchange rate regimes.

I thus propose a different line of research, one that focuses more directly on *de facto* exchange rate regimes, or actual exchange rate stability. Furthermore, this new line of research treats exchange rate stability as an endogenous policy outcome with regard to the government’s monetary and fiscal policy choices. Exchange rates are not fixed simply because a government declares them to be so. They become fixed—or at least more stable—when and if a government makes internal policy decisions consistent with external currency stability. If a government instead asserts domestic policy autonomy, which I will show to include certain fiscal policy choices, then exchange rates will become more variable, or unstable, with international capital mobility, despite any *de jure* commitments otherwise.

This chapter proceeds in four parts. The first part establishes some micro-foundations in discussing why governments must work toward two dominant economic policy goals—economic growth and low inflation—given international capital mobility. The important point is that governments cannot focus all their efforts on only one of these goals while ignoring the other. This fact effectively forces governments to move their fiscal and monetary policy instruments in opposite directions in an effort to achieve concurrently these two different—and often difficult to reconcile—economic objectives.

Using this logic, the second part hypothesizes that OECD governments have

moved onto a particular policy mix continuum in the post-Bretton Woods era. This policy mix continuum is defined by high government spending with high nominal interest rates on one end and low government spending with low nominal interest rates on the other end. Another policy mix continuum, where government spending moves in the opposite direction of nominal interest rates, has been foreclosed because it leaves one economic policy goal, either economic growth or low inflation, without a dedicated policy instrument. The third part of this chapter tests this hypothesis, finding strong empirical support.

The fourth part then discusses what these results mean for the trade-off between domestic monetary autonomy and exchange rate stability. If a government wishes to achieve exchange rate stability, it must reduce its spending, then permitting lower nominal interest rates in the national economy. Because the world interest rate is low on a nominal basis, lower domestic interest rates produce smaller interest rate differentials (i.e., external monetary policy convergence) and greater external currency stability. But if a government desires to increase its spending, domestic interest rates must correspondingly rise for inflation control. This situation tends to produce larger nominal interest rate differentials (i.e., greater monetary policy autonomy) and increased exchange rate variability.

Understanding this situation helps explain why many OECD governments have asserted domestic monetary autonomy in the form of positive nominal interest rate differentials. They receive many political and economic benefits associated with greater public spending and stand willing to accept the cost in terms of higher national interest rates and reduced exchange rate stability. But governments desiring greater exchange rate stability must also pay certain costs, notably those associated with less government spending. In effect, fiscal policy divergence, defined as the ability of governments to choose their preferred level of public spending, leads to monetary policy divergence—both in terms of domestic interest rates and in terms of exchange rate stability.

I. Policy Goals and Policy Instruments

Models of the domestic political economy often treat governments as if they have only one dominant economic policy goal. Literature on the political business cycle, for example, tends to treat the goal of economic growth and employment as the government's primary policy goal, especially in the run-up to an election. Similarly, the first-wave policy convergence literature focused on low inflation as the government's dominant economic policy goal, down-

playing the importance of economic growth.² While partisan models of the national political economy often consider both economic growth and low inflation, they tend to assume that leftist (rightist) governments focus on the former (latter) to the exclusion of the latter (former), thus reducing the government's economic policy objectives to a single dominant goal.

The policy mix framework presented in this chapter begins with the idea that all governments must care about both inflation control and economic growth with international capital mobility. Furthermore, the international capital mobility constraint forces them to focus on both economic objectives at the same time. The reason is relatively straightforward. With capital mobility, international investors can move their money in and out of national economies, presumably in search of the highest real returns on investment (see Andrews 1994a; Schulze and Ursprung 1999). Real returns, or real profits, can be roughly defined as nominal returns, or profits, minus inflation losses. Nominal returns tend to increase in a growing economy, which is attractive to international investors. Thus, governments given international capital mobility must be concerned about promoting economic growth. But economic expansion often leads to rising prices. The resulting inflation erodes the real returns on investment, an unattractive result from the perspective of internationally mobile capital.

A couple of examples will illustrate the point that governments must simultaneously promote both economic growth and low inflation. If international investors cared only about economic growth, the flow of money should have been much greater to the global South, where it is not unusual for developing countries to have experienced double-digit rates of growth, often with double-digit rates of inflation.³ Similarly, if international investors cared only about low inflation, then countries with negative inflation rates (or deflation), such as Japan in the 1990s, should have experienced massive capital inflows. Instead, stagnant growth in Japan led capital to exit that national economy in search of higher returns in Europe and the United States.

The political implications of this economic logic are simple. Governments experiencing the international capital mobility constraint must concurrently pursue two dominant macroeconomic policy goals: economic growth and inflation control. Tending to only one economic policy goal, while ignoring the other (except in the very short term), will induce capital flight, further damag-

2. Emblematic in this regard was the statement of Notermans (1993, 133) that "there is a general consensus amongst policy authorities in the OECD area that macroeconomic policies should have but one goal—the fight against inflation."

3. On the fact that most international capital stays in the global North, see Simmons 1999.

ing the national economy and weakening the government's reelection prospects.

If democratic governments must pursue two domestic macroeconomic objectives, then they will need at least two independent policy instruments to satisfy these goals. Much as a system of equations is "underdetermined" if it contains more variables than equations, economic policy-making usually requires at least as many instruments as goals, according to the famous Tinbergen's Law (see Tinbergen 1966). Mundell (1968, 201) concisely explained: "to achieve a given target [goal] there must be an effective instrument, and to achieve various independent targets there must be at least an equal number of effective instruments. If a program includes more targets than instruments, at least one target cannot be fully attained."

Yet this relationship between the number of policy goals and the number of policy instruments is not true simply by definition. Some policy goals, such as economic growth (the expansion of production) and fuller employment, do tend to be achievable using a single policy instrument, provided that it is properly directed. As national production expands, so do the number of jobs and the employment rate—albeit with some delay. But other policy goals, especially economic growth and low inflation, are much harder to achieve simultaneously using a single policy instrument. This is especially true when economic expansion tends to create rising prices or, at least, the expectation of future inflation.

Policymakers have sometimes expressed economic growth, employment, and inflation as a single-basket policy goal (see Mundell 1968, 204). Implicitly, such an expression makes reference to the Phillips curve, which describes the empirical relationship between employment and inflation in Great Britain from 1861 to 1957 (see Phillips 1958). Phillips's analysis showed that wage inflation increased (or decreased) with the employment (or unemployment) rate. To the extent that the relationship between employment and inflation is one-dimensional (a curve or line has only one dimension), policymakers would, in theory, need only a single policy instrument to achieve their desired combination of growth, employment, and inflation.

The problem for national policymakers is that growth, employment, and inflation outcomes have not fallen along the so-called Phillips curve for most of the post-Bretton Woods era. Stagflation (economic recession with high unemployment and high inflation), experienced by many OECD states in the mid-1970s and then again in the early 1980s, cast considerable empirical doubt on the simple Phillips curve relationship, while the monetarist revolution in economics (see M. Friedman 1968; Phelps 1968) expressed strong theoretical skepticism. If economic growth and inflation outcomes are better understood

in two-dimensional space, then policymakers in the post-Bretton Woods era required at least two independent policy instruments to achieve simultaneously the policy goals of economic growth with low inflation. One policy instrument needed to be directed at economic growth, while the other policy instrument was directed at inflation control.

On this point, governments possess two main instruments for economic policy-making: fiscal and monetary policy.⁴ Economists define the policy mix as the combination of fiscal and monetary policy choices made by government actors. It is common to treat these two policy instruments as either “tight” or “loose,” but I will avoid using these adjectives, because they are too broad for my purposes here and have implications beyond the arguments that I wish to make. For reasons that will become clearer later, I focus on the expenditure side of fiscal policy, not on the revenue side. Thus, my primary fiscal policy measure is government expenditures relative to gross domestic product (GDP). As discussed in chapter 3, my primary monetary policy indicator is short-term policy interest rate in nominal terms.

At this point, it is important to acknowledge that these operational indicators are certainly not the only ways to measure the government’s fiscal and monetary policy mix. Political scientists tend to operationalize a government’s fiscal policy in terms of its budget deficits, but this has not been the preferred measure for economists when trying to link fiscal policy instruments to particular economic outcomes, as I will be doing here. On this point, Levine and Renelt (1992) reviewed the economics literature on the determinants of long-run economic growth, reporting that government consumption expenditures, total government expenditures, and the budget balance have been the main fiscal policy indicators, in declining order of preference. This preference for spending measures over the budget balance stems from the fact that governments directly control their spending on goods and services through a usually annual appropriation process (see Melitz 2000). But governments have less direct control over the budget balance due to uncertainty regarding tax rev-

4. While political leaders theoretically possess other policy instruments, the independence and effectiveness of these instruments is very limited. Take, for example, the so-called instrument of commercial policy, which consists of export subsidies and import restrictions. At some level, export subsidies—government spending targeted on the exporting sector—can be understood as a simple extension of fiscal policy; hence, commercial policy may be nonindependent from fiscal policy. Even if independent, commercial policy may be relatively ineffective, as governments’ ability to employ import restrictions has been limited by the World Trade Organization’s rules concerning free trade. Similarly, the Mundell-Fleming framework clearly demonstrates how exchange rate policy cannot be separated at all from the monetary policy instrument given international capital mobility; hence, exchange rate policy has been completely nonindependent from monetary policy in the post-Bretton Woods era.

enues and the future state of the national economy. In this sense, budget deficits, much like public debt, are more akin to a policy outcome and less like a policy instrument. I will return to this point later.

On the monetary side, the short-term policy interest rate, not the money supply, serves as the basic instrument of national monetary policy (see Melitz 2000). When monetary authorities want to manipulate the money supply, they tend to use a short-term policy interest rate for this purpose. The money supply thus becomes endogenous to the policy interest rate. Furthermore, as Leertouwer and Maier (2002, 212) wrote, “short-term interest rates could be viewed as capturing the ‘net effect’ or the sum of all monetary instruments.”

2. The Fiscal and Monetary Policy Mix

Using the relative government spending and nominal interest rate indicators, figure 10 illustrates four possible fiscal and monetary policy mixes. Although illustrated as discrete choices for convenience, it should be obvious that both dimensions (government spending and nominal interest rates) represent a continuum of policy choices. The need to target simultaneously two different and somewhat competing economic policy goals (economic growth and low inflation) given international capital mobility suggests that OECD governments in the post-Bretton Woods era are likely to have gravitated to the policy mixes defined by cells 2 or 3—or, more correctly, into the continuum defined by the off-diagonal—in figure 10.

Each of these two different policy mix choices, or combinations of spending and interest rates, assigns a single policy instrument to a different policy goal—either economic growth or inflation control. If a government increases its spending for economic growth, monetary policy must become its dedicated instrument for inflation control, with higher nominal interest rates to promote domestic price stability and counter inflationary expectations (cell 2). Conversely, if a government chooses to spend less for inflation control,⁵ it must lower interest rates to promote economic growth (cell 3).

The fiscal and monetary combinations in cells 1 and 4 may largely be relics of the Bretton Woods system, when capital flows could be restricted. With international capital mobility, using both government spending and interest rates to achieve a single policy goal (either economic growth or low inflation), while neglecting the other, risks capital flight. Except during a deep recession, more government spending with low interest rates (cell 1) will be unattractive

5. On how the inflation rate can be potentially manipulated by fiscal policy, see O. Eckstein 1980; Jankowski and Wleizen 1993.

		Nominal Interest Rate	
		Lower	Higher
Government Spending	More	1 	2
	Less	3	4 

Fig. 10. Different Fiscal and Monetary Policy Mixes

to international capital, as unchecked economic expansion potentially leads to rising prices, with inflation eroding the real returns for capital within the national economy. Similarly, less government spending with high nominal interest rates (cell 4) will be unattractive to international capital except during periods of high inflation, as the policy mix portends a strong economic contraction with expected low returns (both nominal and real) in the national economy.

This policy mix logic can be more formally illustrated as a strategic game between elected governments, who make the annual spending decisions and, thus, control the fiscal policy instrument, and the governments' central bankers, who choose the nominal interest rate and, thus, hold the monetary policy instrument. This game is diagrammed in figure 11. Both players have two strategy options: to expand or to contract their respective policy instrument. With regard to player preferences, I begin with the notion that central banks function as agents of the government. Hence, both players have relatively harmonious preferences for achieving economic growth with low inflation. Thus, the outcome of moderate economic growth with low inflation is preferred to either the outcome of high economic growth with high inflation or the outcome of no economic growth with no inflation.⁶

6. With regard to the choice between high growth with high inflation and no growth with no inflation, governments are likely to prefer the former for electoral reasons, while central banks are likely to prefer the latter, given their mission to guarantee domestic price stability.

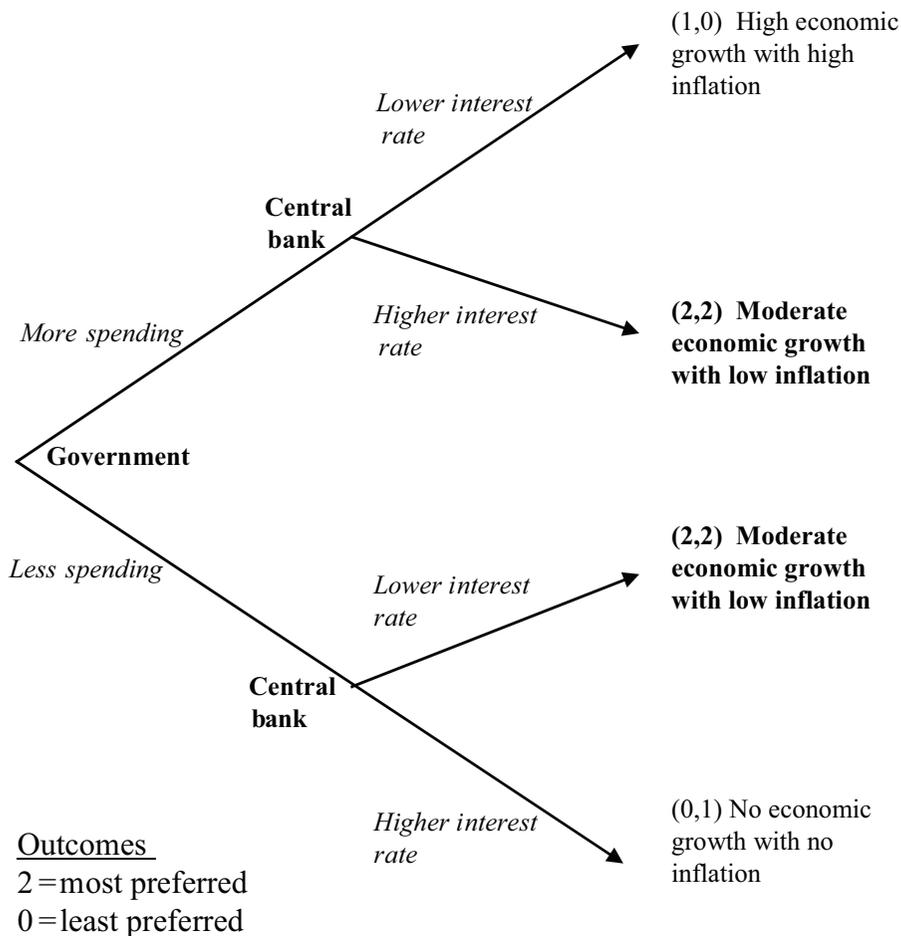


Fig. 11. The Fiscal and Monetary Strategic Game

At this point, I make no particular distinction between independent and subordinate central banks; nor do I differentiate between the preferences of rightist and leftist governments. These institutional and partisan distinctions will be discussed in chapter 5. In this most basic version of the game, I also make no distinctions about the relative effectiveness of fiscal versus monetary policy for either economic growth or inflation control. Provided that it is properly directed, both instruments are assumed to be equally effective for achieving the policy goal at which they are targeted.

The literature on economic globalization and OECD government spending,

as discussed in the previous chapters, clearly demonstrates that the advanced industrial democracies can still make meaningful fiscal policy choices even with international capital mobility (hence, fiscal policy divergence has occurred in the post-Bretton Woods era). If the government chooses to spend more for economic growth, then the central bank can be expected to raise nominal interest rates to restrain inflation. This set of choices results in the policy mix of more government spending and higher nominal interest rates (cell 2 in fig. 10), which is expected to generate moderate economic growth with low inflation. This macroeconomic outcome is preferred by both actors to the alternative of high growth with correspondingly high inflation, produced by more government spending with a lower nominal interest rate.

Alternatively, the government could opt to reduce its spending for inflation control. With less relative spending, the central bank becomes willing to lower nominal interest rates to boost economic growth. This set of choices produces the policy mix of less government spending with a lower nominal interest rate (cell 3 in fig. 10), which is also expected to generate moderate economic growth with low inflation. This macroeconomic outcome is preferred by both actors to the alternative of no economic growth with no inflation, resulting from less government spending with a higher nominal interest rate.

3. Testing the Policy Mix Framework

To be certain, the strategic game described in the preceding section of this chapter represents a very stylized version of national economic policy-making with an international capital mobility constraint. But this stylization has its advantages in presenting a simple and testable hypothesis with regard to the relationship between government spending and nominal interest rates in the OECD economies after 1973. The hypothesis concerns deliberate monetary counterbalancing in response to government spending. If the government spends more, presumably to promote economic growth, then the central bank will raise nominal interest rates for domestic price stability. If the government reduces its spending to minimize inflationary pressures and expectations, then the central bank will lower nominal interest rates, helping to promote economic growth. Although this is an important hypothesis concerning national economic policy-making in the post-Bretton Woods era, it is also an untested one. As Favero (2002, 1) recently noted, while “there is plenty of evidence on the behaviour of monetary policy authorities” and “some evidence on the behaviour of fiscal authorities,” “there is very little evidence on the interactions between monetary and fiscal authorities” who control the main two national policy instruments.

To capture as directly as possible the concept of deliberate monetary policy counterbalancing, I will model the policy interest rate for country i in year t (INTRATE), using the same OECD country-year sample that I used in chapter 3.⁷ With this goal in mind, the policy interest rate is preferable to any market interest rate, which is determined by the joint activities of mostly private sector actors, not the public sector actors under study here. The base model is laid out in equation (4.1).

$$\text{INTRATE}_{it} = \beta_0 + \beta_1 * \text{FISCAL}_{it} + \alpha_i * \text{COUNTRY}_i + \alpha_t * \text{YEAR}_t + e_{it} \quad (4.1)$$

The independent variable FISCAL could be any number of possible fiscal policy measures, including government expenditures, the budget deficit, or even public debt. But as discussed earlier, my policy mix framework focuses on government spending as the preferred measure of a government's fiscal policy intentions. Budget deficits (measured as the difference between government expenditures and tax revenues) are problematic in this regard, as they can vary for reasons unrelated to a government's policy intentions.⁸ Stone and Sawhill (1984, 44) wrote, "It is now widely recognized that changes in the actual budget deficit are a poor measure of changes in the thrust of fiscal policy, because the budget is sensitive to the level of economic activity as well as to policy changes." A public debt measure for the current national fiscal policy orientation is even more problematic, as it reflects choices made by numerous past governments, rather than the present one.

In choosing a spending measure to capture most directly the deliberate fiscal policy choice made by current governments, not all spending measures will be equally valid. Total government spending can be roughly broken down

7. The policy interest rate data was also described in chapter 3.

8. For certain governments, they may be a completely misleading indicator of their fiscal policy intentions. For example, Reagan administration officials viewed their tax cuts, which led to massive budget deficits, as a strategy for long-term fiscal policy contraction. This political perspective, not unique to the Reagan administration, reverses the traditional economic logic about tax cuts as a tool for fiscal expansion. Weatherford and McDonnell (1990, 145) concluded, "for most of his administration, Reagan viewed deficit reduction as a lever he could use to further his goal of decreasing domestic expenditures." Johnson (1998, 185) reported, "Stockman [Reagan's director of the Office of Management and Budget] believed that he could browbeat the cabinet into major program rollbacks by holding out tax cuts—and Volcker's reductions in interest rates—as a reward for pruning spending." Stockman (1986, 68) himself wrote: "the prospect of needing well over \$100 billion in domestic spending cuts to keep the Republican budget in equilibrium appeared more as an opportunity than as a roadblock. Once . . . Reagan got an electoral mandate for Kemp-Roth and 10-5-3 [two major tax cut plans], then we would have the Second Republic's craven politicians [Congress controlled by Democratic interest groups] pinned to the wall. They would have to dismantle its bloated, wasteful, and unjust spending enterprises—or risk national ruin."

into three component categories: government consumption, social transfers, and interest payments. The latter two categories are essentially obligatory in nature; that is, governments cannot easily change their spending habits with regard to either transfers or interest payments, especially in the short term as hypothesized here. Furthermore, the level of spending in these obligatory categories largely reflects spending decisions made by past governments and then imposed on the one currently in power. To the extent that it is possible to capture current discretionary spending, government consumption relative to GDP is arguably the most valid spending measure. This category includes current spending on such goods and services as public administration, public order, national defense, health, and education. Thus, FISCAL indicates government consumption expenditures, in constant terms, as a percent of country i 's GDP in year t .⁹ Higher (or lower) values generally suggest a more expansionary (or contractionary) fiscal policy orientation in constant terms.

My counterbalancing hypothesis predicts that the FISCAL coefficient will be positively signed and statistically significant. When OECD governments have chosen to spend more to promote economic growth, national monetary authorities have raised interest rates for inflation control. To the extent that OECD governments have simply focused on a single domestic policy goal—either economic growth or low inflation—and have used both monetary and fiscal policies at the same time toward this goal, the FISCAL coefficient will be negatively signed and statistically significant. Finally, if OECD governments have made no efforts at all to coordinate their fiscal and monetary policies in any consistent fashion, then the FISCAL coefficient will simply be statistically insignificant.

Just as in the set of time-series cross-sectional models presented in the previous chapter, I here use panel-corrected standard errors to deal with panel heteroskedasticity and contemporaneous autocorrelation. To correct for serial autocorrelation in each country time series, I also estimate and adjust for first-order autocorrelation as was done in the previous chapter. Several sets of results, including those with some additional control variables, are shown in table 3.

The estimates for the base model in equation (4.1) are reported in the first column of table 3. Consistent with my counterbalancing hypothesis, the FISCAL coefficient is positively signed and statistically significant. A 1 percent increase in government consumption spending relative to GDP is associated with an increase in the policy interest rate of forty-two basis points. This

9. The data are provided by the OECD in *Annual National Accounts* (1973–97).

finding is consistent with those reported by Melitz (1997, 2000), who found that OECD monetary and fiscal policies move in opposite directions (one contracts while the other expands), with interest rates and government spending acting as “strategic substitutes” (Buti, Roeger, and In’t Veld 2001, 3).

I also obtained positive fiscal coefficients when I measured a government’s fiscal policy using its relative budget deficit and public debt. But it is not clear that these results shed much light on my research question concerning the deliberate coordination of monetary and fiscal policy instruments. It is already well established that larger deficits and greater debt contribute to higher interest rates in the domestic economy. But this is largely a story of how deficits and debt crowd out private investment, which ultimately tells us little about how the government actors actually holding the monetary and fiscal policy instruments might coordinate them to achieve economic growth with low inflation.

In the second column of table 3, I reestimated the model, adding some

TABLE 3. Estimates of Government Spending on the Policy Interest Rate

	1	2	3
Constant	-1.75 (2.51)	0.71 (3.38)	2.13 (3.41)
FISCAL	0.42*** (0.13)	0.33*** (0.12)	0.27** (0.12)
GDPGROWTH		0.05 (0.11)	0.04 (0.10)
INFLATION		0.27*** (0.09)	0.27*** (0.09)
GDPPC		-0.00052*** (0.00014)	-0.00055*** (0.00015)
KOPEN		0.54*** (0.20)	0.53*** (0.20)
EMS			-0.91* (0.55)
SNAKE			-0.95 (0.74)
UNIPEG			0.12 (0.55)
<i>N</i>	575	575	575
<i>R</i> ²	0.53	0.73	0.72

Note: Estimates are Prais-Winsten coefficients, including an AR1 correction, with panel-corrected standard errors in parentheses. Individual country and year dummies are not reported.

Two-tailed statistical significance is indicated as follows: ****p* < .01, ***p* < .05, **p* < .10.

important control variables. To estimate more precisely how much national monetary authorities have increased short-term interest rates with more government spending, it is useful to hold economic growth and inflation rates constant. Thus, I included the variables GDPGROWTH and INFLATION. At the end of chapter 3, I discussed how the level of economic development may affect national interest rates. Thus, I also included the country's GDP per capita (GDPPC) in each year.¹⁰ Finally, I added the control variable for international capital mobility (KOPEN), described in chapter 3. With the addition of these control variables, the FISCAL coefficient is slightly attenuated, but it remains positively signed and statistically significant.

I argued earlier that fixed exchange rate commitments in the post-Bretton Woods era have been only weakly associated with external monetary convergence—due in large part to the flexible operation of such regimes as the European Snake and the EMS and to the inherent flexibility associated with unilateral decisions to peg national currencies. It is valuable to bring some additional evidence to bear on the subject. Thus, in the third column of table 3, I added to the model the EMS, SNAKE, and UNIPEG dummy variables, all of which are described in chapter 3.

Chapter 3 also showed how most advanced industrial democracies needed to be able to reduce national interest rates—moving them toward the low world interest rate—in order to achieve external monetary convergence after 1973 (see fig. 8 in chap. 3). Thus, if these various multilateral and unilateral commitments had any strong effects in promoting external monetary policy convergence, the coefficient for each (or some) of these variables should be negative and statistically significant. While EMS and SNAKE have the expected negative sign in table 3, only the EMS coefficient is statistically different from zero, and it is so only at the .10 level.¹¹ These results are consistent with those in chapter 3, demonstrating how different OECD monetary regimes (both multilateral and unilateral) have had only weak effects in explaining national monetary policy after 1973. Clearly, if we want to understand national monetary policy choices in the post-Bretton Woods era, we get much more explanatory power by looking first at government spending decisions; hence, the policy mix framework is potentially useful.

10. The data for all these control variables come from the World Bank's *World Development Indicators* (1973–97).

11. Weak EMS effects with regard to national interest rates and interest rate differentials have been reported by other scholars. For example, Marston (1995, 136) concluded: “uncovered interest [rate] differentials persist among the major European countries. In fact, departures from uncovered interest parity within the EMS are as large on average as those between EMS and non-EMS currencies.”

Finally, the statistically significant negative coefficient on the GDPPC term in table 3 demonstrates another important fact: monetary convergence vis-à-vis the most developed capitalist economies will almost always require a lower nominal interest rate, since more developed OECD states naturally have lower rates. Shambaugh's recent results in the economics literature (2004, 320–21) paint a very similar picture: national interest rate differentials have been quite positive in the post-Bretton Woods era relative to the so-called base countries ($i > i^*$), even for the advanced industrial democracies. External monetary convergence thus necessitated a lower national interest rate.

4. The Policy Mix and Exchange Rate Stability

To summarize briefly before incorporating the issue of exchange rate stability into the policy mix framework, the preceding analysis has demonstrated how OECD governments have gravitated toward a particular policy mix continuum in the post-Bretton Woods era. When fiscal policy became more expansive (as measured by more government spending relative to GDP), nominal interest rates also rose, leading to a policy mix of more government spending with a higher nominal interest rate. When government spending became more contractionary, the nominal interest rate fell, resulting in a policy mix of less government spending with a lower nominal interest rate.

The theoretical foundations for this fiscal and monetary relationship concern the government's need to use public spending and interest rates to satisfy simultaneously two different—and often difficult to reconcile—internal economic policy goals: economic growth and low inflation. In the policy mix framework just presented, the external policy goal of exchange rate stability does not have its own independent policy instrument. But I submit that this is not a problem with the theoretical framework. Indeed, it reflects an important macroeconomic policy reality: national policymakers lack a separate and independent policy instrument for the purpose of exchange rate stabilization in the post-Bretton Woods era of international capital mobility (see Moses 1994, 133).

But this fact does not mean that this external policy goal will be impossible to achieve with global financial integration. Governments seeking relative exchange rate stability vis-à-vis the most developed capital-producing states in the international system (i.e., those who effectively set the world interest rate) can choose the policy mix of less government spending and a lower nominal interest rate (see fig. 12). Less government spending permits the nominal interest rate to fall, bringing the domestic interest rate toward the low prevailing

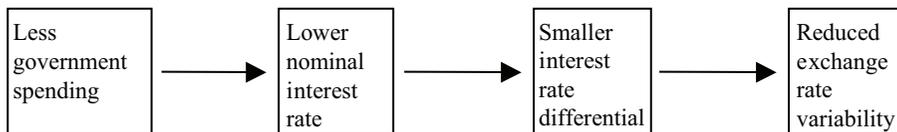


Fig. 12. Internal Policy Choices Leading to External Policy Convergence

world rate. Such external monetary policy convergence, or a smaller interest rate differential, helps reduce exchange rate variability, as was demonstrated empirically in table 2 in chapter 3. To the extent that neoliberal policy ideas prescribe reduced government intervention in the national economy and more stable exchange rates,¹² the combination of less government spending and a lower nominal interest rate might be described as the neoliberal policy mix.

This understanding accords with the expectations for external policy convergence in Western Europe in the 1990s. The 1992 Maastricht Agreement, often described as neoliberal in its policy orientation, specified five convergence criteria, which might be described simply as (1) lower inflation, (2) lower budget deficits, (3) reduced public debt, (4) lower national interest rates, and (5) exchange rate stability within the exchange rate mechanism of the EMS (see Watson 1997). For lower national inflation rates, EU governments were expected to curtail their spending in order to reduce budget deficits and public debt. Such fiscal contraction was, in turn, expected to facilitate a reduction in national interest rates, so that they would converge on those of the low-inflation economies (especially Germany) in the European Union. This combination of fiscal contraction and lower nominal interest rates was then expected to help stabilize national currency values within the EMS before the shift to a common European currency in 1999.

While it brings greater exchange rate stability, this neoliberal policy mix also entails important costs, especially those related to fiscal policy contraction. One significant drawback with reduced government spending is that public goods in the national economy may become undersupplied. Fiscal contraction also reduces the government's opportunities for redistribution designed to reduce income inequalities. But if the government increases its spending for these purposes, the nominal interest rate and the interest rate differential can be expected to rise correspondingly (see fig. 13). These results are quite consis-

12. On the connection between neoliberal policy ideas and exchange rate stability, see McNamara 1998.

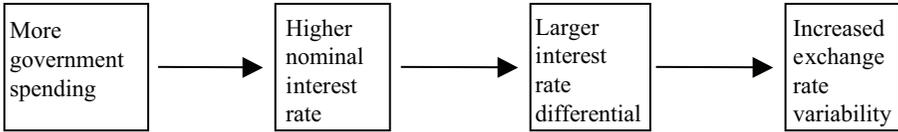


Fig. 13. Internal Policy Choices Leading to Domestic Policy Autonomy

tent with those reported by Mosley (2000, 762), who showed that OECD governments have paid an interest rate premium for engaging in more spending across a variety of spending categories, including government consumption, the primary fiscal policy measure used in this study.

It has not been previously recognized, however, that paying these interest rate premiums effectively represents a choice for domestic monetary autonomy, given financial integration among the OECD states in the post-Bretton Woods era. In other words, these interest rate premiums demonstrate the price that many governments have been willing to pay in an effort to achieve particular domestic economic objectives through fiscal policy expansion. This price also comes in the form of increased exchange rate variability: the results in chapter 3 show how greater monetary policy independence in the form of a larger interest rate differential has produced more external currency instability after 1973. Thus, of the two fiscal and monetary policy mixes available to OECD governments in the post-Bretton Woods era, the combination of less government spending with a lower nominal interest rate represents a choice for external policy convergence and exchange rate stability, as illustrated in figure 14. Conversely, the policy mix of more government spending with a higher nominal interest rate effectively signals a choice for domestic policy autonomy with correspondingly more exchange rate variability.

At this point, the reader should note that I have deliberately shifted away from the term *domestic monetary policy autonomy* to the term *domestic policy autonomy*. Similarly, I will shift from the term *external monetary policy convergence* to the term *external policy convergence*. This change is not accidental: the policy mix framework shows how the choice for exchange rate stability with international capital mobility implicates not only domestic monetary policy but fiscal policy as well. This possibility has been suggested by other scholars (see, e.g., Simmons 1999, 36; Garrett 2000, 166), but without an explicit model to explain the linkage from fiscal policy through monetary policy to exchange rate stability. The policy mix framework fills this important theoretical gap. In doing so, it provides a relatively simple and tractable model of national eco-

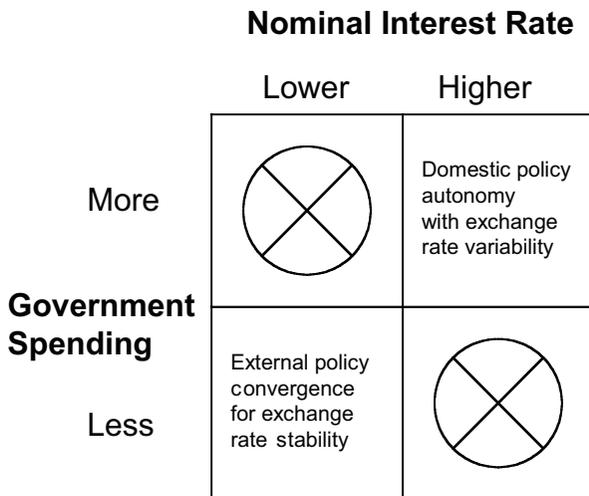


Fig. 14. Exchange Rate Stability and the Policy Mix

conomic policy-making that integrates government spending, national interest rates, and exchange rate stability into a common theoretical framework.

The policy mix framework also forces us to think more carefully about the relationship between fiscal policy and exchange rate stability. The traditional logic, borrowed from the Mundell-Fleming model and recently applied to the political business cycle literature (see Clark and Hallerberg 2000; Clark 2002, 2003), begins with fixed exchange rates and concludes with a more effective national fiscal policy. The standard Mundell-Fleming logic is that since fiscal policy expansion raises domestic interest rates, national monetary authorities must accommodate increased government spending with lower interest rates in order to restore the interest parity condition and maintain fixed exchange rates. If fixed exchange rates are thus maintained, then fiscal expansion becomes a highly effective policy instrument for stimulating the national economy, because it produces an accompanying monetary expansion.

In the basic Mundell-Fleming model, this monetary accommodation is unproblematic, since prices are assumed to be fixed and since fiscal expansion produces no inflationary effects. But in the real world, such monetary accommodation is problematic, since prices are not fixed and since fiscal expansion can have significant inflationary implications. The logic that allows researchers to reason that fixed exchange rates lead to fiscal policy expansion is also problematic in taking exchange rate stability as a given, exogenous to domestic

monetary and fiscal policy decisions. Furthermore, political science applications take it as a given based on a government's stated commitment to fix its exchange rate (i.e., its *de jure* exchange rate regime). The analysis presented here shows how such stated commitments are only weakly associated with reduced currency variability and external monetary policy convergence.

We cannot treat a national exchange rate as fixed simply because the government declares it to be so. The policy mix framework demonstrates how a government must make internal policy decisions that are consistent with external currency stability in order to achieve fixed or more stable exchange rates. Given the fiscal and monetary counterbalancing conducted by OECD governments in the post-Bretton Woods era, more government spending may be largely inconsistent with *de facto* fixed exchange rates.¹³ Instead of lowering interest rates after fiscal expansion to achieve smaller interest rate differentials (i.e., monetary accommodation), OECD monetary authorities have tended to raise them for domestic inflation control, leading to larger interest rate differentials and destabilizing capital flows.

This understanding nicely explains why European exchange rate regimes began to operate as fiscal policy constraints after 1992. As mentioned earlier, EU governments adopted the Maastricht convergence criteria in 1992, which—among other things—required prospective EMU member states to reduce budget deficits to no more than 3 percent of GDP and public debt to no more than 60 percent of GDP, potentially constraining their spending options. In 1997, the prospective EMU member states further concluded the Stability and Growth Pact, which made governments running budget deficits in excess of 3 percent of GDP potentially subject to huge fines (up to 0.5 percent of GDP).

Researchers using the traditional logic that equates exchange rate stability with opportunities for fiscal policy expansion have trouble explaining these facts. After all, why should governments agree to constrain their national fiscal policy if the whole point of the fixed exchange rate regime was to make their fiscal policy instrument more effective? The policy mix framework, which begins with the internal fiscal and monetary policy decisions made by national governments in order to explain their external currency (in)stability, can explain these facts. Governments achieve greater exchange rate stability, or *de facto* fixity, when they reduce their spending, allowing nominal interest rates to fall and minimizing the national interest rate differential *vis-à-vis* the low world interest rate. Consequently, when governments join fixed exchange rate

13. For additional evidence on this point, see Froot and Rogoff 1991; Healy 2004; Bearce 2005.

regimes to enable their fiscal policy instrument and engage in more spending, they are likely to find that exchange rate stability will be very hard, if not impossible, to achieve. But if a major reason for these monetary regimes (if not the primary one) was to increase regional exchange rate stability (Frieden 2002), the participating governments had to acknowledge that fiscal expansion was ultimately counterproductive to this end. Hence, they agreed to fiscal policy constraints in an effort to achieve more fixed exchange rates.

This policy mix logic can also help explain the historical disconnect between many governments' stated currency commitments, or their *de jure* exchange rate regimes, and the actual stability of their national currency, or their *de facto* exchange rate regimes (Reinhart and Rogoff 2004). If a government makes an external commitment to fix its currency's value but follows a domestic fiscal and monetary policy mix expected to increase the interest rate differential and exacerbate external currency variability, then it is not hard to understand why there would be a large discrepancy between exchange rate "words and deeds" (Levy-Yeyati and Sturzenegger 2005). Likewise, we can better understand why certain governments without any formal commitments to fix the value of their national currencies nonetheless achieved relative external currency stability (Calvo and Reinhart 2002): they followed an internal policy mix that reduced national interest rate differentials and facilitated a more fixed exchange rate.