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ELECTORAL AND PARTISAN INFLUENCES
ON AUSTRALIAN FISCAL POLICY
FROM MENZIES TO HAWKE

Duane H. Swank

Discussion Paper No. 24, May, 1991

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**ABSTRACT**

This paper examines whether or not an electoral business cycle of the sort described by William Nordhaus and a partisan cycle of the type discussed by Douglas Hibbs has conditioned the fiscal policies of Australian governments during the contemporary period. In addition, the paper examines a number of recent theoretical extensions of electoral-business-cycle and partisan explanations of macroeconomic policy choice, and develops and tests a new formulation of the partisan thesis. Using time-series data for years including the last two Menzies governments through the first three Hawke governments, the paper explores the roles of electoral and partisan forces in shaping the overall fiscal stance of the federal government and of the magnitude of personal income transfer payments by the Commonwealth government. Results indicate that, net of the influences of inertia in the policy process, and of variations in inflation, unemployment, growth, and other economic forces, elections and partisanship play significant roles in determining both overall fiscal policy and income transfer outlays. Analyses reveal that fiscal policies become more expansionary across the electoral cycle while Labor and Coalition governments have large but diminshing effects on fiscal policies over their terms in office.

# INTRODUCTION

A substantial amount of attention has been devoted to the question of whether electoral dynamics in contemporary democracies influence macroeconomic policy choices and outcomes. Political scientists have addressed this question in the course of seeking to understand the relationships between politics and economics in democratic capitalist systems. They have explored questions such as: do approaching elections produce policy-induced changes in economic conditions that bolster mass electoral support (e.g., Tufte, 1978)?; do alternations in government by Left and Right parties result in distinct policy outputs and economic performance favoring the core constituency of the incumbent party (e.g., Castles, 1982; Hibbs, 1977; 1987a; 1987b)? Economists approach the question from an explicitly normative viewpoint. Typically, economists seek to understand whether and how the electoral cycle may contribute to suboptimal economic performance (e.g., Nordhaus, 1975; McRae, 1977) and how alternations in government by ideologically distinct parties may contribute to price instability and to notable oscillations in employment (e.g., Alesina, 1988; 1989).

Remarkably, these issues have not been subject to much systematic empirical inquiry in the case of the Australian political economy. This is particularly true with respect to the question of whether or not electoral dynamics systematically and continuously influence macroeconomic policy choices. The absence of extensive inquiry into these questions can not be explained by reference to the party system or other structural features of the Australian political economy. In fact, Australia, from the perspective of the late 1960s to the present, provides an excellent case for study. Two ostensibly ideological distinct parties have alternated in government and, although there has been some decline, party support and identification have

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been significantly influenced by occupational status and social class (e.g., Aitkin, 1982; Mughan, 1985). In addition, when compared with most western European democracies, Australia has experienced a fair amount of regularity in its electoral cycle, experiencing on average a national election every two and a half years.[1] Australia also exhibits much of the same structural change and many of the same problems of macroeconomic performance seen in the bulk of the western democracies over the last 25 to 30 years.

In light of these observations, this paper will explore the question of whether or not electoral politics regularly influences the fiscal policy choices of Australian governments in the contemporary period. Specifically, the paper will examine whether or not an electoral business cycle of the sort described by Nordhaus (1975) is present in Australian fiscal policy during the last 30 years. It will also ask whether a partisan cycle of the type discussed by Hibbs (1977; 1987a; 1987b) has conditioned the fiscal policies of Australian governments during the same period. In addition, the paper will examine a number of recent, important theoretical refinements of electoral-business-cycle and partisan explanations of macroeconomic policy choice, and it will develop and test a new formulation of the partisan thesis.

Fiscal policy is chosen as the principal focus because it is arguably the policy instrument democratic governments control in the most direct and sustained fashion. Moreover, fiscal policy matters: all major schools of contemporary macroeconomic theory except the strongest variants of rational expectations theory allows for potentially significant fiscal policy effects on the macroeconomy (e.g., Alt, 1985; Hibbs, 1987a). Inquiry is limited to roughly the last 30 years because of methodological considerations (see below).

Before detailing my specific strategy for analysis and before presenting

and discussing the findings of this inquiry, I will provide a brief overview of the electoral-business-cycle and partisan theories of macroeconomic choice and of recent critiques and extensions of their original formulations. I will also discuss a further extension of the theoretical models as well as alternative explanations of government fiscal policy that bear on tests of political theories of Australian macroeconomic policy choices.

## POLITICAL ECONOMIC CYCLES IN MACROECONOMIC POLICIES AND OUTCOMES

While scholars have long attributed a significant policy-making role to electoral competition (e.g., Downs, 1957) and partisan control of government (Lipset, 1960), work by William Nordhaus (1975), Duncan MacCrae (1977) and Edward Tufte (1978) on the "political-business cycle," and by Douglas Hibbs (1977) on the macroeconomic impacts of the alternation in government of conservative and labor-oriented parties ushered in an era of renewed interest in the impact of electoral processes on macroeconomic policies and outcomes. Together, these seminal contributions have generated a vast theoretical and empirical literature, particularly with respect to political economic cycles in the United States and United Kingdom.[2]

### Electoral and Partisan Cycles

The political-business cycle thesis initially articulated by Nordhaus (1975) suggests that, given the distribution of preferences for unemployment and inflation among the public and the nature of the tradeoff between unemployment and inflation, it is rational for incumbent politicians seeking reelection to decrease unemployment through the election cycle and, to combat post-election inflation, increase unemployment immediately after the election. The original thesis rests upon assumptions of myopic (versus fully

rational) behavior by voters, vote-maximizing by politicians, and the existence of a manipulable, short-term (Phillips-curve type) tradeoff between unemployment and inflation. The key feature of this tradeoff is the presence of an exploitable lag time between declines in unemployment and actual increases in expectations-induced inflation. With respect to policies, Nordhaus (1975, p.170) asserts that macroeconomic outcomes are obtained by the "judicious choice" of particular fiscal, monetary, and other policy instruments.[3]

Douglas Hibbs (1977; 1987a; 1987b), unlike Nordhaus, suggests governing parties pursue macroeconomic and other policies consistent with the preferences and material interests of their core constituencies, constituencies defined largely in terms of social class. The Hibbs Model – what is typically called the partisan theory of macroeconomic performance and policy – also rests on a small set of core assumptions. First, Hibbs assumes the existence of a Phillips-curve type tradeoff between unemployment and inflation where parties can obtain relatively lower unemployment and relatively higher inflation or lower inflation and higher unemployment but, net of other factors, not both. Pursuant to this, Hibbs argues that given the preferences and interests of low income strata for high employment, labor-oriented governments will pursue a package of macroeconomic policies that results in lower unemployment and higher inflation. Conversely, given the material interest in price stability and the aversion to inflation of upper income strata, conservative governments will pursue a package of policies that produces relatively low inflation and relatively high unemployment. Left governments will also complement full employment-oriented policies with downward redistribution of income (Hibbs, 1987a, esp. Ch. 7; Swank and Hicks, 1985). Finally, Hibbs assumes that such outcomes flow from conscious

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choices of fiscal, monetary, and other policy instruments such as income
transfer payments (Hibbs, 1977; 1987a).[4]

Edward Tufte (1978), following Nordhaus and Hibbs, also stresses the
political motivations of macroeconomic policy makers. However, Tufte's
contribution is unique in two respects. First, Tufte suggests that a
substantial portion of preelection economic stimulus will take the form of
bursts in income transfer payments and other popular policies immediately
before the election. While addressing the prospect of a pattern in
unemployment like the one highlighted in Nordhaus's model, Tufte acknowledges
the significant institutional and practical impediments to the systematic
manipulation of unemployment and inflation rates that is inherent in the
Nordhaus formulation. Instead, Tufte's analysis suggests that preelection
increases in real disposable income induced by transfer and tax policy changes
and preelection bursts in unemployment-enhancing policies (e.g., expansions of
the money supply) may be the central features of electoral business cycles
(Tufte, 1978, esp. Ch. 2).

Second, Tufte acknowledges that incumbent governments may not be
exclusively vote maximizers. In fact, Tufte (1978, esp. Ch. 4) argues that
once reelection is secure, government policies will further the interests and
preferences of core constituencies and broad party ideological goals (also see
Frey and Schneider, 1978a; 1978b). Indeed, such themes have been echoed
recently in debates over the broader Downsian conception of vote maximization
and resultant party convergence toward the median voter (Downs, 1957). As
Garrett and Lange (1989) have recently pointed out, a large body of literature
both from within and outside the Downsian framework of policy convergence
suggests parties have electoral incentives to maintain policy distinctiveness
from one another. First, this literature suggests pursuit of ideological goals

may be electorally efficacious in that ideologically distinct programs and policies reward core party activists that typically stand notably to the left (or, in the case of conservative parties, the right) of the median voter or the typically party supporter. Second, parties may obviate alienation or indifference and prevent entry by third parties to the system by maintaining policy distinctiveness. Finally, partisan policies may simply represent better electoral investments than convergent, median-voter policies. Thus, not only ideology and enduring patterns of party allegiance and support across social classes, but the logic of electoral competition itself suggests that differences in macroeconomic policies and outcomes should exist in contemporary affluent democracies.

Generally, the electoral-business-cycle and partisan models of macroeconomic policy choice suggest that, in Australia over the last three decades, we should observe movements of fiscal policy in the expansionary direction as elections approach, possibly most pronounced in the financial-year budget encompassing the election. Net of this direct electoral effect and of other determinants of fiscal policy (e.g., the business cycle), the partisan theory suggests that we should see nontrivial differences in the thrust of fiscal policy across Labor and Coalition governments; fiscal policy should be more expansionary under Whitlam and Hawke and more restrictive under the Liberal/National Party governments of Menzies through McMahon and of Malcolm Fraser.

Critiques

**Structural Limits to Political Management of the Economy**. The development of the electoral-business-cycle and partisan theories has also occasioned a variety of challenges to the notions that either elections or

partisanship can overcome institutional, economic, and other constraints on policy innovations and, in turn, have systematic influences on macroeconomic outcomes. Even authors that have stressed the importance of electoral or partisan determinants of policies and outcomes have cited limitations and constraints to the political management of the macroeconomy. For instance, Tufte (1978, esp. Ch. 6) notes that significant degrees of institutional fragmentation of macroeconomic policy making, the bluntness and unmanageable character of policy instruments, and the unwielding nature of the economy all constrain political control of the economy by governments in advanced industrial democracies.

Other scholars have echoed similar themes when discussing constraints on partisan manipulation of unemployment and inflation. For instance, Rose (1980) argues that incumbent parties face numerous impediments in the form of institutional constraints (e.g., bureaucratic inertia, fragmentation), and significant domestic and international economic constraints (e.g., international price shocks) on partisan manipulation of policy and economic performance. Observers of Australian politics and policy making have also stressed the roles of institutional and economic constrains in limiting political management of the Australian economy. As Head and Patience (1979) note, constitutional structure, bureaucratic inertia, the unmanageable character of the domestic economy, and international economic oscillations and shocks all constrain the pursuit of political goals by Australian governments of either ideological stripe.

The Uniqueness of Individual Governments. An additional set of criticisms and amendments to the early theoretical formulations of the Nordhaus and Hibbs' theses stress the distinct character of individual governments and the variability in electorally motivated policy across

governments and parties. First, Beck (1982) has argued, in response to Hibbs' (1977) seminal work on partisan differences in the United States, that while party label might be useful in distinguishing some features of the policy choices of different governments, it is probably less helpful than simply specifying the characteristics of particular (U. S. presidential) administrations and their varying constituencies and coalitional bases. Thus, according to Beck, macroeconomic policies and outcomes will differ as much or more across individual administrations than they will across different party governments. Indeed, Beck's notion of administration or individual government variations in macroeconomic policy behavior has been developed by Hibbs (1987) in recent work on the electoral business cycle. Specifically, Hibbs (1987, esp. Ch. 8) argues that a Nordhaus type electoral business cycle is only evident in data for the post-War United States for the first Nixon and Reagan administrations. Relatedly, Alesina (1988) has pointed out that the logic of the electoral business cycle -- early term restrictive policy followed by increasingly expansionary policy as elections approach -- is most consistent with the character of conservative governments; Left governments that are ideologically committed to full employment goals may find it undesirable or impractical to conform to the pattern of the electoral business cycle. Overall, one might note that not only different constituency bases but variations in macroeconomic environments, in adherence to economic theories, and in policymaking styles (Weatherford, 1987) may distinguish individual governments.

Generally, the notions of individual government differences in macroeconomic policy and performance and variations in the existence of electoral business cycles across individual governments or parties are at least plausible in the Australian case. For instance, one might note that the

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fiscal stringency of the Hawke governments, particularly after 1985, appears closer in policy orientation to the Fraser government's general fiscal prudence than to Whitlam's expansion of the Australian welfare state. Also, in light of the possibility that there are variations in the degree to which governments pursue reelection goals, one might cite what is occasionally regarded as a notable, spending-induced "preelection stimulus" entailed in Fraser's 1982/1983 budget (e.g., Gruen, 1985).

Rational Expectations and Political Economic Cycles. An additional, significant set of critiques of electoral and partisan theories derive from the rational expectations school in economics (e.g., Lucas, 1972; Sargent and Wallace, 1975; Barro, 1978). According to the rational expectations framework, if fully rational economic actors learn the "partisanship rule" of differing policy mixes, or come to expect preelection stimulus, effects of these policies on output or unemployment will be largely offset. For instance, under a left party or during the period immediately preceding an election, fully rational economic actors would account for forthcoming stimulative policies in their price setting behavior (e.g., in labor contracts) and the governing party would have to rely totally on "surprise" policies to affect employment and output. Routine management of the economy in pursuit of electoral or partisan goals would not be effectual as long as economic actors anticipated such behavior.[5]

Recent Extensions of Theory: Rational Partisan Theory

In light of the implications for electoral-business-cycle and partisan theories of the rational expectations critique, a good deal of recent theoretical and empirical work has been oriented to amending the original theories to account for the adaptive, rational behavior of economic actors.

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One of the most widely discussed contributions is the work of Alesina (1988; 1989) and collaborators (e.g., Alesina and Sachs, 1988). In this work, Alesina offers a "rational partisan thesis" of party differences in which parties may accomplish ideological objectives in the early parts of their terms of office. This is contrast to Hibbs' original formulation in which policy springs from ideology and is hypothesized to condition policy choices and economic outcomes across the entire terms of office of Left or Right parties. Specifically, rational partisan theory argues that when economic agents enter into contracts covering the period after an election, they do not know the outcome of the election. As a result, they will fix wages and prices in line with an average of anticipated policy performance (e.g., money growth) under the competing parties weighted by the expected probability of party success. (Wages and prices will be set somewhere between the higher levels appropriate to a Left party victory and the lower levels appropriate to conservative party success.) Thus, a party entering office may affect employment and output during the early parts of their term. However, these effects are transitory; economic actors adjust their behavior to accommodate for the new government and real effects on outcomes decline over the term of government.[6]  Alesina (1988), Alesina and Sachs (1988), and Hibbs (1990) present results consistent with this formulation for the United States; Alesina (1989) reports findings supportive of the rational partisan model for several advanced industrial democracies.

Electoral business cycles of the sort embodied in Nordhaus's original formulation or in Tufte's work can also be consistent with the existence of fully rational economic actors and voters. For instance, a number of scholars have argued that if one takes into account the likely information asymmetries between voters and policy makers, preelection economic stimulus of income and

employment is possible. For instance, Rogoff and Sibert (1988) have argued that, given the differential levels of information on economic performance and policy impacts across voters and governments, incumbent governments can engage in preelectoral stimulus in order to appear more competent to voters. Other variations of electoral business cycles with assumptions of rational economic agents/voters are also possible (e.g., Cukierman and Meltzer, 1986).

## Strategic Politicians and Macroeconomic Policy.

Theoretical extensions stemming from the rational expectations critique, while instructive, do not exhaust the additional forces that need to be taken into account when assessing how the dynamics of partisan policy influences might depart from the models entailed in the earlier work of Hibbs, Tufte and others. In addition to adjustments to early-term partisan policies that may stem from adaptive behavior of economic agents, the structure of political incentives and disincentives favor early-term policy innovations. Alt (1985) has argued that new governments of either the Left or Right have incentives to keep visible partisan policy promises and do so early in their terms. This is so because parties enjoy high levels of "honeymoon" support early in their tenure in office; keeping promises early also establishes credibility necessary to govern and compete politically in the future. As Alt (1985) observes, sustaining policy innovations over the course of a government's tenure in office may require increasingly large expenditures of political resources and undesirable tradeoffs with other policy goals.[7]

A further consideration involves changes in economic environments. As governments remain in office, new and perhaps unforeseen policy problems emerge that pressure governments to shift or even reverse preferred policies. The growth of external debt, periodic trade imbalances, and the emergence of

concerns about the long-term competitive position of Australia during the successive Hawke governments of the 1980s are instructive in this regard (Davis, 1989; Stewart and Jennett, 1990; Stutchbury, 1990). Moreover, governments may make policy mistakes or the reactions of key economic actors such as business and labour may undercut policy effectiveness. The Mitterrand government's "u-turn" from expansionary and redistributive-oriented policies during 1982 and 1983 is one notable example of this dynamic in the case of Western Europe (e.g., Safran, 1985). In Australia, similar, less dramatic examples exist. For instance, during the Whitlam government, the wage explosion in 1974 and other inflationary pressures contributed to a reversal of the full employment emphasis of the 1974/75 budget (e.g., Hughes, 1979). During the successive Hawke governments, the absence of business cooperation with the Labor Government and the ACTU hampered the development of a neo-corporatist tripartite system of economic management and a mature incomes policy (e.g., Gerritsen, 1986; Gardner, 1990). Overall, the combined pressure of these forces -- forces highlighted by the rational partisan perspective, new problems, policy mistakes, adverse actions of economic actors, and the mix of political incentives and disincentives -- may produce policy reversals or even "u-turns" in partisan programs and initiatives. However, a complete understanding of the way in which this process occurs requires a reconsideration of electoral incentives.

It is perhaps a truism to note that, in order to pursue partisan goals, (re)election must be secured. However, in combination with the preceding observations, this truism points toward the interaction of forces militating against sustained partisan policy and of electoral imperatives. That is, from the perspective of partisan theory, it may be unrealistic to assume that parties of either the Left or Right have a large enough core constituency

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exclusively to pursue ideological goals while assuming reelection is guaranteed. Indeed, as Przeworski (1985), Esping-Anderson (1990) and others have noted with regard to the Left, the natural constituencies (e.g., manual workers in the industrial sector of the economy) of social democratic parties in advanced capitalist democracies have hardly ever constituted clear numerical majorities of the electorate. In the case of Australia, Castles (1991) has recently argued that this phenomenon has become particularly pronounced. That is, summarizing an ample body of research on economic and political change in the 1970s and 1980s, Castles notes that an increasingly large mass of Australian voters are found in white-collar positions in the service sector of the economy; electoral appeals to nontraditional left-right themes (e.g., environmental protection, international competitiveness) become increasingly important for capturing and retaining government (also see Bean, McAllister, and Warhurst, 1990).

Thus, Left parties as well as conservative ones may generally be under pressure to moderate or temporarily abandon ideological policy goals as elections approach in order to pursue votes among the broad middle strata of electorate. This seems particularly likely when policies appear to ineffective. Policy mistakes, new problems, and intensifying political conflicts over economic issues will be partially reflected in indices of mass voter approval and popularity, adding pressure on partisan governments to moderate policy or reverse course.[8]

In sum, this combination of economic and political forces and dynamics may produce a recurring, distinct pattern of strategic partisan policy behavior. Specifically, ceteris paribus, governments may pursue partisan objectives during the early portion of their terms only progressively to reverse course over their tenure in office. In addition, this pace of this

reversal may hinge in part on electoral considerations. Specifically, the longer governments maintain high levels of political support, the longer they are likely to pursue partisan goals. However, as policy mistakes, political conflicts, and new policy problems contribute to declines in mass approval, the electoral imperative may necessitate shifts in policy away from its current position and toward the center: Left parties will become less oriented to full employment and redistributive goals while conservative ones will move away from anti-inflationary restrictive policies and fiscal prudence in taxing and spending.

**Variants of Political Economic Cycles: A Summary**

The preceding discussion produces a number of different, plausible formulations of political economic cycles in Australian macroeconomic policy and performance. For the purposes of the present paper, six major types of political economic cycles will be explored.[9] Variations of these cycles that stress individual governments differences will also be examined. The major types of cycles are listed in Table 1.

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Table 1. Varieties of Political Business Cycles.

| | Electoral Motivated Policy | Partisan Policy |
|---|---|---|
| 1. Nordhaus's Political Business Cycle | Yes | No |
| 2. Tufte's Electoral Model - Election Year "Bursts" | Yes | No |
| 3. Hibbs Partisan Theory | No | Yes |
| 4. Tufte's Full Model - Election Year Bursts" coupled with Party Pursuit of Ideological Goals | Yes | Yes |
| 5. Expanded Tufte Model - Nordhaus-type Political Business Cycle and Party Pursuit of Ideological Goals | Yes | Yes |
| 6. The Partisan Cycle | | |
| A. Declining Partisan Policy Influences - No Direct Electoral Cycle Effect | Yes (Indirect) | Yes |
| B. Declining Partisan Policy Influences - Direct electoral cycle effect | Yes | Yes |

Overall, the first two formulations stress electorally motivated policy alone while the third -- Hibbs' original partisan model -- hypothesizes that political influences on macroeconomic policy are exclusively partisan in character and visible across periods of Left (Labor) or conservative (Coalition) governments. The fourth and fifth models simply combine the two major variants of electoral business cycles with the simple partisan model. The sixth formulation -- the partisan cycle -- integrates rational partisan theory with the myriad of complementary concerns addressed above and assumes a pattern of partisan policy effects that diminish over a government's tenure in office; the simple partisan model assumes constant partisan policy over the term of a Left or conservative government. Formally acknowledging direct

electoral effects on macroeconomic policy of the type embodied by the Nordhaus

model or Tufte's thesis of electoral "bursts" would be consistent with the

logic of the partisan cycle entailed in formulation six. A version that does

not postulate direct electoral cycle pressures net of those inherent on the

logic of partisan cycles is denoted by A. A slightly different model that

allows for a direct electoral cycle effect is denoted by B. Indeed, electoral

forces are integral to understanding declines in partisan policy from this

perspective and additional electoral effects on policy over the electoral

cycle 'uld underscore the role of electoral competition as a constraint on

partisan policy.

### POLITICS AND AUSTRALIAN MACROECONOMIC POLICY AND PERFORMANCE

As noted above, there has been little systematic inquiry into the

electoral and partisan dimensions of Australian macroeconomic policy and

performance, particularly compared to the amount of study devoted to the

United States and the United Kingdom. However, a few studies that encompass

Australia do exist and provide tests for some of the major varieties of

political economic cycles discussed above. Unfortunately, most are descriptive

and exploratory in nature and the pattern of results is generally

inconsistent. With respect to the macroeconomic impacts of the electoral

cycle, the empirical portion of Nordhaus's (1975) seminal contribution finds

no evidence of systematic decreases in unemployment rates in preelection

periods and increases in unemployment after elections for Australia. In his

summary, Nordhaus (1975: 186) actually notes: "The overall results indicate

that for the entire period a political cycle seems to be implausible as a

description for Australia..."

Similar descriptive comparisons of macroeconomic performance for

Australia have been provided by Tufte (1978) and Soh (1986). In a similar vein to Nordhaus, Soh's work indicates that there are no appreciable differences in levels or degrees of inprovement in inflation, unemployment rates, and growth rates of real disposable income between election and nonelection years in Australia during the 1962-1980 period. However, Tufte notes that, in Australia, real disposable income expanded in 75 percent of election years compared to only 29 percent of nonelection years in the 1960s and early 1970s.

Somewhat more supportive evidence for electoral business cycles emerges with repect to macroeconomic policies, particularly fiscal policies. Soh (1986) reports that growth rates of government expenditures are higher in both election years and the year preceding the election than in nonelection years in Australia during the years, 1961-1980. Similarly, Gruen's (1985) study of electoral effects on tax and spending policies indicates that growth in real outlays is higher in election years than in years preceding or following an election. Gruen reports analogous results for policy-induced changes in tax burdens. Consistent with Gruen's study, Schneider and Pommerehne (1980) report that declines in mass approval of the incumbent government and closeness to the next election stimulate spending and decrease taxation.[10] However, Alesina's (1989) recent study of partisan and electoral effects on macreconpmic policy and performance suggests that, with respect to the central indicator of the government's fiscal stance -- the budget deficit/surplus, the thrust of fiscal policy in election years does not systematically differ from the government's fiscal policy in years preceding and following the election.

A pattern of contradictory or inconsistent evidence also emerges for the the partisan thesis. Gruen (1985) reports that average growth rates in total real outlays (and some categories of social spending) and tax progressivity are higher during Labor governments than during Coalition governments.

However, Schneider and Pommerehne (1980) conclude that, net of electoral influences and various political and economic constraints on policy, the partisanship of governments does not matter for tax and spending policies. Similarly, Alt (1985) in a study of unemployment rates in 13 advanced industrial democracies, concludes in the case of Australia that there are no systematic differences in unemployment across Labor and Coalition governments nor are there any partisan effects in the early portions of a government's term. Alesina (1989), like Alt, evaluates the impact on economic performance of early-term policy initiatives of both Right and Left parties. Although Alesina finds that output and unemployment move in the predicted direction in a majority of cases, differences in output and unemployment between the first two years of Labor goverments  and other years are not statistically significant.

    Overall, these studies, while suggestive, are marred by simple descriptive comparisons where conclusions rely on magnitudes of differences in policy and performance indicators between election and nonelection years or between Labor and Coalition governments. Only the Alt (1985) and Schneider and Pommerehne (1980) studies advance beyond this exploratory stage to account for the important institutional, political, and economic influences and constraints on electorally oriented or partisan policy and to provide rigorous tests of electoral and partisan policy effects. I will now turn to discussion of the framework and methods utilized in the present paper to address the questions of electoral and partisan influences.

### MACROECONOMIC AND INSTITUTIONAL INFLUENCES ON FISCAL POLICY

    In developing a framework in which to examine the role of electoral dynamics in Australian fiscal policy choice, a number of additional,

alternative explanations of macroeconomic policy making must be considered.
Perhaps most obvious are the institutional and related constraints that inhere
in the policy process of all contemporary democratic political systems.
Specifically, our framework for testing the importance of electoral and
partisan influences on fiscal policy will initially account for the
likelihood of substantial inertia in the fiscal policy-making process. This
inertia stems from the complexity of the institutional context and the nature
of policy choice. With respect to the character of policy choice, politicians
and bureaucrats generally attempt to minimize the costs of adjusting the
expectations and behaviors their constituencies that non-incremental change
entails; they also face numerous cognitive limitations on their ability to
choose between complex policy alternatives and to implement selected programs.
(e.g., Wildavsky, 1964; Wildavsky, 1975). While these limitations on policy
change are probably not as great for revenues, they none the less pose
significant limitations for tax policy adjustment as well. Moreover, the
institutional fragmentation of policy-making responsibility, authority, and
advice may well impede the speed at which changes in policy can be made.
Davis et al (1988: 155) echo these themes in the case of Australian economic
policy formulation:

> Governments themselves are unsure about how to act in many
> areas of economic policy, and accordingly gravitate toward the
> incremental in policy decisions. Institutional structures and
> previous policy processes have established traditional policy
> concerns which leave little room for manoeuvre....Disagreements
> occur over economic strategies, outcomes and consequences.
> There are arguments between institutions. Technical disputes
> between economic advisors....further complicate policy
> formulation.

The second basic feature of our framework -- designed to provide a
context for adequate tests of the paper's focal hypotheses -- involves

controls for macroeconomic performance goals of fiscal policy makers. An ample amount of theory suggests fiscal policy makers pursue socially optimal macroeconomic performance. That is, it is commonly assumed in some public choice (e.g., Musgrave and Musgrave, 1984) and most neo-classical/neo-Keynesian (e.g., Blinder and Solow, 1974; Tobin, 1987; and Fisher, 1988) treatments of macroeconomic policy that policy makers pursue macroeconomic management of growth, employment, and price levels through fiscal policy (and monetary policy) instruments. Indeed, most surveys of economic policy making in Australia in the last several decades highlight policy maker sensitivity to output growth, high employment, and price stability (e.g., Hughes, 1979; McDonald, 1985; Davis, 1989).

In addition, the structuring and maintenance of automatic stabilizers that is embedded in the growth of social assistance, income maintenance, and income tax policies constitute a passive form of macroeconomic management. The automatic stabilization that stems from variations in growth and employment levels as well as inflation is likely to be significant in Australia (e.g., Nevile, 1990) as for all advanced industrial democracies (e.g., Beck, 1980). In addition, variations in other economic aggregates may have strong automatic effects on the size of budget deficits or surpluses. In the case of the Australian political economy, this is particularly true with respect to interest rates over the last two decades or so. As budget deficits and borrowing requirements secularly increase, variations in interest rates add and subtract hundreds of millions of dollars of required outlays from the budget. In sum, the empirical model to be estimated below will account for the responsiveness of fiscal policy -- automatic and discretionary -- to the commonly accepted targets of macroeconomic policy and sources of significant, automatic oscillations of revenues and outlays.[11]

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A final consideration involves the fiscal policy impacts of the stagflationary conditions following the OPEC (Organization of Petroleum Exporting Countries) oil shocks and the concomitant ascendance of neoconservative macroeconomic orthodoxy. The general effect of this transition in macroeconomic climate and theory across the advanced industrial democracies has been to shift fiscal and monetary policy in the restrictive direction as concerns with inflation, wage explosions, the profit squeeze, and the deleterious effects of high levels of public expenditures and taxation as well as budget deficits become paramount (e.g., Przeworski and Wallerstein, 1982; Tsai, 1989). This effect seems particularly pronounced after the second OPEC shock of 1979/80 (Tsai, 1989). Indeed, most observers of the development of Australian economic policy in the 1970s and 1980s note that neo-Keynesian orthodoxy was displaced by the monetarism of the Fraser government then the classical-Keynesian "new interventionism" of the Hawke government (e.g., McDonald, 1985; Davis, 1989). With regard to fiscal policy, observers also note that both the monetarism of Fraser and the "new interventionism" of Hawke contain similar emphases on reducing budget deficits, public expenditures, and general fiscal stringency (e.g., Camilleri, 1989; Davis, 1989). Thus, our framework will account for systematic differences in the fiscal stance of Australian governments across pre- and post-OPEC periods.[12] With these considerations in mind, I will now turn to a discussion of the specific methods that will be utilized to explore electoral and partisan influences on fiscal policy.

## THE FRAMEWORK FOR ANALYSIS

I will explore the paper's central questions through quantitative analyses of time-series data on Commonwealth fiscal policies for the financial

years, 1962/63 through 1989/90. The financial year, 1962/63, is used as the base year because extending the time series further into the past generates a disproportionate number of years in which there was no alternation in government between Labor and Liberal/National parties. In addition, strictly comparable data series on some macroeconomic aggregates (e.g., unemployment rates) are not available before the early 1960s. The following sections detail specification of a political economic model of fiscal policy, measurement of fiscal policies and theoretically relevant explanatory variables, and estimation procedures used to evaluate the model.

**Model Specification**

In order to examine the influences of electoral dynamics and partisanship on Australian fiscal policies, the central hypotheses of the paper will be evaluated in the context of a political economic model of fiscal policy choice that accounts for both policy inertia and macroeconomic performance and structure. The central policy instruments of interest are the Commonwealth budget deficit(surplus) and income transfers. While many categories of spending (and taxing) could form the focus of inquiry, careful analysis of the paper's central questions for many disaggregated categories of spending (and taxing) are beyond the scope of the present study. Instead, I will focus on the Commonwealth's budget balance, commonly regarded as an important indicator of fiscal policy stance.[13] Given the emphasis on income transfers in both electoral-business-cycle and partisan theories, their magnitude in relation to other budget aggregates, and their importance in income maintenance and redistribution, the basic model of overall fiscal policy will be generalized to income transfers to provide a second set of tests for the electoral and partisan hypotheses.

Following from the above discussion, the basic form of the model used below is that of a reaction function in which current fiscal policy is hypothesized to be a function of incremental adjustments to the past mix of programmatic commitments and of taxing and spending levels, variations in recent macroeconomic performance, particular features of the long-term economic climate and prevailing macroeconomic orthodoxy, and electoral and partisan forces.[14]   The general model of budget deficits, income transfers, and income taxation takes the following form:

$$POLICY_t = b_0 POLICY_{t-1} + B_1[ECONOMY] + B_2[POLITICS],$$

where POLICY represents a specific measure of fiscal policy, ECONOMY denotes a matrix of macroeconomic preformance and structural variables, POLITICS denotes a matrix of electoral and partisan variables, and $b_0$, $B_1$, and $B_2$ represent vectors of parameters that relate past budgets, macroeconomic forces,  and political variables, respectively, to policy variables.

A key feature of this formulation is that a specification of fiscal policies as functions of their previous levels and of sets of exogenous economic and political factors effectively indexes the effects of inertia in the policy process (e.g., incremental adjustments to budgetary bases) as well as effects of economic and political factors on year-to-year policy changes to the budgetary base. That is, while coefficients for lagged endogenous variables ($POLICY_{t-i}$) tap variations in current policy that relect the past position of policy, coefficients for exogenous variables specifically report the relationships between these economic and political factors on the one hand, and changes in policy variables on the other. In effect, test statistics for coefficients for our model's exogenous variables are identical to those in a model that specifies the dependent variable as a change in POLICY between

periods t-1 and t (e.g., Swank, 1988). Thus, our models might be interpreted as revealing the effects of explanatory variables on the movement of fiscal policy over and above the inertia hypothesized to be inherent in the process.

Measurement

The measurement of both fiscal policies and explanatory variables is relatively straight forward. (The empirical indicators for the key policy and explanatory factors are summarized in Table 2 and data sources are listed in the Appendix.) As suggested above, the focal dependent variable -- FISC -- is measured as the budget deficit (surplus) of the General Commonwealth Government Budget Sector. To account for temporal variations in the size of the economy, population, and public sector, the budget deficit is standardized on total outlays.[15]   For subsequent analyses on income transfer payments, total Commonwealth income transfers to individuals are used as the central dependent variable. Income transfers (TRANSF) are standardized as percentages of household income.

(Table 2 About Here)

With respect to explanatory factors, political factors are measured as follows. To address the central hypothesis derived from Nordhaus's classic formulation, a counter for the electoral cycle (ELECT CYCLE) is constructed. This variable provides a direct test of whether fiscal policy, net of other determinants, becomes progressively expansionary across the electoral cycle. To address the variant of the electoral business cycle emphasized by Tufte, a set of dichotomous variables for individual years of the electoral cycle is constructed; these variables (ELECT YEAR1, ELECT YEAR2) allow additional evaluation of the timing of general fiscal stimulus as well as bursts of transfer spending in the election year and preceding years. To address the

Table 2. Empirical Indicators for Principal Variables.

FISC:           Fiscal stance of the General Commonwealth Budget Sector defined as: log(revenues/expenditures)
                for the current financial year.

TRANSF:         Total Commonwealth social welfare transfers expressed as a percent of household income.

ELECT CYCLE:    Counter for the election cycle where election year is coded 1.00, immediately preceding year
                is coded 2.00. and so on.

ELECT YEAR2:    Dichotomous variable for year preceding election, where that year is coded 1.00 and others are coded
                0.00.

ELECT YEAR1:    Dichotomous variable for the election year, where election year is coded 1.00 and other years coded
                0.00.

LABOR PARTY:    Dichotomous variable for years of Labor party government, where Labor party years are coded
                1.00 and others are coded 0.00.

INFLATE:        The percentage change in the consumer price index (quarterly average for financial years).

CH UNEMPL:      The change in the civilian unemployment rate from the preceding May to the May of the current
                financial year.

GDP GROWTH:     Percentage change in real Gross Domestic Product. financial year.

CH INTRATE:     Change in the two-year government bond rate from the preceding June to the June of the current
                financial year.

POSTSPEC1/2:    Dichotomous variables equal to 1.00 for 1975/75 (1979/80) to 1989/90; otherwise 0.00.

MENZIES/MCMAH:  Dichotomous variable equal to 1.00 for the years of the Menzies through Mcmahon governments:
                otherwise 0.00.

WHITLAM:        Dichotomous variable equal to 1.00 for the years of the Whitlam government; otherwise 0.00.

FRASER:         Dichotomous variable equal to 1.00 for the years of the Fraser government; otherwise 0.00.

HAWKE:          Dichotomous variable equal to 1.00 for the years of Hawke government: otherwise 0.00.

question of whether or not electoral cycle effects are more or less pronounced during the tenure of particular Prime Ministers or across governments of different ideological orientation, simple interactions (see below) between these electoral variables and party and administration variables may be used.

With regard to partisan and individual government effects, dichotomous variables are constructed for Labor (LABOUR) and Coalition (COALT) governments and for separate Prime Ministers (e.g., WHITLAM, FRASER). These provide direct tests of average differences in fiscal policy across governments of differential partisan complexion and of individual Prime Ministers within and across political parties. Direct tests of the partisan cycle model of declining partisan policy effects across the tenure of specific Labor and Coalition governments may be addressed by examining effects of individual governments within a particular party's tenure in office (i.e., fiscal policies of the first Hawke government versus the second, and so on).[16]

Macroeconomic variables are measured as follows. Given that the structure of the basic model is oriented to explaining year-to-year variations in fiscal policy over and above policy inertia, variables are constructed as changes in economic conditions. That is, it is assumed that changes in fiscal stance from year to year are functions of automatic and policy maker responsiveness to changes in economic targets. For prices, the simple consumer-price inflation rate, or the percent change in the consumer price index over a given financial year (INFLATE), is used. Similarly, the effects of income and output are tapped by the percent change for real Gross Domestic Product for the current financial year (GDP GROWTH); unemployment is operationalized as the year-to-year change in the civilian unemployment rate (CH UNEMPL). Finally, a summary measure of interest rates is constructed by computing the annual change in the two-year government bond rate (CH INTRATE).

In order to assess the fiscal policy impacts of the shift in macroeconomic climate and orthodoxy, dichotomous variables for the periods 1975/75 to 1978/79 and 1979/1980 to 1989/90 are constructed. These variables (designated as POSTOPEC1 and 2, respectively) may be used to examine systematic differences in fiscal policy across pre and post-OPEC periods that are hypothesized to exist net of the direct policy effects of short-term macroeconomic performance and political forces.

To obviate the danger of bias in estimation of relationships between fiscal policy and economic variables that stems from simultaneous, mutual causal relationship, INFLATE, CH UNEMPL, GDP GROWTH, and CH INTRATE are lagged one period. Given the nature of hypotheses, political variables are not lagged in a strict sense. Election years are coded according to whether or not a budget for a given financial year encompasses an election, the year before an election, and so on. Party and administration variables are coded to reflect the party or specific government that produced the budget. Thus, for example, the 1972/73 budget is attributed to McMahon, or to the Liberal/National party, while the 1973/74 budget is treated as the first Whitlam budget, and so on.[17]

On the basis of these measurement decisions and lag specifications, the exact specification of the basic empirical model to be estimated below is:

$$FISC = a + b_0(FISC_{t-1}) + B_1(ELECT\ CYCLE) - B_2(LABOUR)$$
$$+ B_3(INFALTE_{t-1}) - B_4(CH\ UNEMPL_{t-1}) + B_5(GDP\ GROWTH_{t-1})$$
$$- B_6(CH\ INTRATE_{t-1}) - B_7(POSTOPEC1/2) + e,$$

where t and t-1 denote unlagged and lagged variables, -/+ signs indicate the direction of fiscal policy effects of explanatory variables, a denotes the equation intercept, FISC through POSTOPEC1/2 denote equation variables as defined above, and $B_0$ through $B_7$ represent parameter estimates of effects of $FISC_{t-1}$ through POSTOPEC1/2 on $FISC_t$. This basic empirical model and variants

of it that add terms for specific governments and tests for nonlinear relationships (see below) are the principal vehicles by which the paper's central hypotheses are evaluated.

## Estimation

Statistical estimation of the basic model and its variants was initially performed by Ordinary Least Squares regression on annual data for the financial years, 1962/63 through 1989/90. This period covers the last two Menzies governments through the first three Hawke governments. Typical of time-series regression models such as ours, evaluation of equation error structures revealed the consistent presence of weak to moderate first-order autocorrelation of errors. To correct the problem of inefficient estimates that ensues from autocorrelated errors, a standard least-squares Cochrane-Orcutt estimation procedure was used (e.g., Johnston, 1984, esp. pp. 321-325). Given the presence of a lagged endogenous variable, error variances were calculated with the method suggested by Dhrymes (1971, esp. Ch. 7). As Durbin's h statistics (distributed as standard normal) in the subsequent tables reveal, null hypotheses for first-order autocorrelation can not be rejected for any reported equations. In fact, most Durbin's h statistics approach 0.00 and, thus, suggest the complete absence of autocorrelation after reestimation with the least-squares Cochrane-Orcutt procedure.

With regard to the evaluation of null and alternative hypotheses for the paper's central theoretical questions, t-statistics producing probabilities between .10 and .05 will be regarded as weak support for a hypothesis while those with probabilities below the .05 level will be regarded as strong support. The .10 level is employed to indicate weak support for a hypothesis because of the relatively small number of degrees of freedom (i.e., 18-20) and

resulting low test power of our t-statistics. However, these weak cases are few in number: most t-statistics reported below for central hypothesis tests indicate clear cases of strong support or no support.

Finally, hypotheses that suggest nonlinear relationships (e.g., those that suggest effects of some X (let us say the electoral cycle) vary according to the level of some other X (say a particular party type) are evaluated through the analysis of the policy effects of interactions between the focal variables.[18] Specifically, tests of hypotheses that suggest (1) electoral cycle policy impacts are peculiar to certain governments or parties and (2) party effects vary by the level of mass support are evaluated by such means. Specific interaction terms (e.g., ELECT CYCLE*WHITLAM) are thus added to the basic model and parameters estimated through least-squares regression analysis.

## FINDINGS AND DISCUSSION

The results of estimation of the basic model of Australian fiscal policy are presented in Table 3. Tests for the presence of a Nordhaus electoral business cycle in Australian fiscal policy and for a simple partisan divergence in fiscal policy are embodied in the first column of the table. Estimates of the effects of inertia and macroeconomic forces on fiscal policy are included in the bottom half of each of Table 1's columns. As the table reveals, the effect of the electoral cycle, net of other forces, is significant and in the predicted direction. Recalling the construction of the electoral cycle indicator (1 in the election year, 2 in the preceding year, and so on), one can see that on average a movement from year three to year two, or from year two to the election year, increases the movement of fiscal policy in an expansionary (pro-deficit) direction by 2.2 percent of outlays.

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Table 3. Political Economic Cycles in Australian Fiscal Policy, 1962/63 to 1989/90: Electoral Models. [1]

|  | (I) | (II) | (III) |
|---|---|---|---|
| ELECT CYCLE | 2.210 * | --- | 1.759* |
|  | (.818) |  | (1.002) |
| ELECT YEAR2 | --- | -3.838 * | --- |
|  |  | (1.601) |  |
| ELECT YEAR1 | --- | -4.493 * | --- |
|  |  | (1.597) |  |
| LABOR PARTY | -3.112 * | -3.056 * | -5.366 * |
|  | (1.036) | (1.029) | (3.090) |
| LABOR*ELECT | --- | --- | 1.185 |
|  |  |  | (1.561) |
| MENZ/MCM*ELECT$^2$ | --- | --- | .267 |
|  |  |  | (2.031) |
| WHITLAM*ELECT$^2$ | --- | --- | .767 |
|  |  |  | (2.101) |
| FRASER*ELECT$^2$ | --- | --- | -2.405 |
|  |  |  | (2.181) |
| HAWKE*ELECT$^2$ | --- | --- | 2.339 |
|  |  |  | (1.975) |
| FISC$_{T-1}$ | .848 * | .842 * | .832 * |
|  | (.086) | (.086) | (.088) |
| INFLATE$_{T-1}$ | .657 * | .634 * | .699 * |
|  | (.198) | (.195) | (.197) |
| CH UNEMPL$_{T-1}$ | -3.241 * | -3.262 * | -3.238 * |
|  | (.748) | (.737) | (.739) |
| GDP GROWTH$_{T-1}$ | 1.063 * | .981 * | 1.153 + |
|  | (.417) | (.410) | (.428) |
| CH INTRATE$_{T-1}$ | -1.686 * | -1.627 * | -1.748 * |
|  | (.427) | (.426) | (.425) |
| POSTOPEC2 | 4.006 * | 4.102 * | 4.120 + |
|  | (1.014) | (1.011) | (1.006) |
| rho$_{1rst-order}$ | -.506 * | -.474 * | -.524 * |
|  | (.169) | (.173) | (.167) |
| intercept | -12.616 | -4.951 | -12.530 |
| $\overline{R}^2$ | .735 | .734 | .726 |
| Durbin's h | -.203 | -.190 | -.113 |

* Significant at the .05 level or below.
+ Significant at the .10 level.

[1] The table reports unstandardized parameter estimates with their standard errors in parentheses. First-order rhos, the parameter estimate of first-order autocorrelation, are estimated via a standard least squares Cochrane-Orcutt procedure. $\overline{R}^2$ is the equations's coefficient of determination corrected for degrees of freedom; Durbin's h is the test statistic (standard normal) for the presence of first-order autocorrelation in the presence of lagged endogenous variable.

[2] These interactions are estimated in separate equations identical to the one of Column III.

(That is, the positive coefficient indicates that a decline in the counter is associated with a decline in surpluses or an increase in deficits.) With regard to differences across Labor and Coalition governments, our results indicate that on average, the thrust of fiscal policy, net of other factors, is more expansionary under Labor governments than Coalition ones. The average magnitude of difference, after accounting for the effects of the electoral cycle, macreonomic forces, and inertia, is equivalent to 3.1 percent of outlays.

With respect to inertia and macroeconomic factors, the bottom section of the first column of Table 3 reveals that both inertia and economic forces play important roles in determining the position of Australian fiscal policy. As the parameter estimate for $FISC_{t-1}$ reveals, .85 of each dollar of current deficits (or surpluses) is given by the budgetary base. With regard to economic factors, inflation, unemployment, growth, and interest rates siginficantly affect the movement of fiscal policy. For instance, an additional point of inflation contributes to the movement of the fiscal balance in a restrictive (pro-surplus) direction by .66 of outlays; a one point percentage drop in the GDP growth rate increases the movement of fiscal policy in a pro-deficit direction of 1.1 percent of outlays. However, by far the largest substantive effect among economic factors is the impact of the unemployment rate; an additional one point change in the unemployment rate expands the budget deficit by 3.2 percent of outlays.

With respect to the impact of the long-term shift in macroeconomic climate and orthodoxy, tests were conducted for the impact of structural shift variables for both 1975/76 - 1978/79 and 1979/80 - 1989/90. If the principal shift occurred with the 1975/76 budget, both should be significant and positive (since coefficients for the two period variables compare the latter

periods to the pre-1975/75 one). However, fiscal stringency for the period 1975/76 to 1978/79 appears to be entirely explained by the rise of inflation. Inclusion of a dichotomous variable for 1975/76 to 1979/80 fails to obtain significance at the .05 level in the presence of the inflation variable. In fact, when both POSTOPEC1 and POSTOPEC2 are included in the basic model of the first column of Table 1, the inflation variable falls below the .05 level of signficance as does the POSTOPEC1 variable. Thus, only the POSTOPEC2 variable is included in this and subsequent equations. The impact of the 1979/80 – 1989/90 period is significant and in the predicted direction; the thrust of fiscal policy, net of other forces, is systematically more restrictive (pro-surplus) by the amount of 4.0 percent of outlays in the 1979/80 – 1989/90 period.

The second column of Table 3 contains tests for the Tufte variant of an electoral cycle model where the principal electoral effects on fiscal policy are embodied in stimulative "bursts" in election years. Tests of the effects of ELECT YEAR2 and ELECT YEAR1 effectively examine, net of inertia, partisan differences, and macroeconomic forces, the fiscal policy effects of the year preceding the election and the election year compared with nonelection years. As the table reveals, movements of fiscal policy in the year preceding the election and the election year are both significantly more expansionary (pro-deficit) than fiscal thrust in other non-election years. Moreover, consistent with the Nordhaus view, fiscal policy is even more expansionary in the election year than in the preceding year (fiscal stimulus of (-)4.5 percent of outlays in election years; fiscal stimulus of (-)3.8 percent of outlays in the year preceding the election). In other words, on average incumbent governments in Australia have significantly loosened fiscal policy in the year preceding an election, net of other forces, and, in turn, loosened fiscal

policy even further in the election-year budget. Thus, while election year "bursts" in fiscal stimulus occur, such movements in fiscal policy also occur in the year preceding the election. Thus, a more systematic, Nordhaus-type, multi-year process appears to explain more about electoral influences on Australian fiscal policy than the simpler Tufte formulation of election-year "bursts."

The logic of this process in an electoral system such as Australia's deserves comment. First, our results indicate that the average government in the contemporary period will view its second budget as potentially its election year budget. This assumption by the incumbent government is rational since on average a government elected in the December quarter of some financial year is likely to face election during or soon after its second full budget. If the government does not face election during its second budget, it is still in good position net of other factors. It will have provided overall fiscal stimulus or increases to real disposable incomes (via spending increases or tax cuts) for the December quarter in which it will have to stand for election and can further loosen fiscal policy and expand popular programs (or reduce taxation) in the third budget. Alternatively, the government could call an election during its second year budget if the economy is performing well. This latter case may characterize the first Hawke government (e.g., Stewart and Jennett, 1990), among others. In either case, the incumbent government theoretically does well electorally.

The final column of Table 3 reports results for tests of the hypotheses that the electoral cycle may be significantly more pronounced in particular governments or in conservative (Coalition) governments. As these findings reveal, there is no significant interaction of the electoral cycle with the four blocks of governments listed in the table or with the party variable.

(The interactions MENZ/MCM*ELECT to HAWKE*ELECT emerge from four separate equations; no effects for other variables differ from the signs and significance levels reported in the third column equation.) These findings suggest that, while the magnitude of electorally induced fiscal stimulus may vary at the margins, the same pattern described above holds for each party and for each government.[19]

Overall, the findings reported in Table 3 lend a fair amount of support for the fifth formulation in Table 1, above. That is, net of inertia and the impact of macroeconomic forces, electoral and partisan considerations of the types described by Nordhaus and Hibbs, respectively, appear to condition the fiscal policy choices of Australian governments. However, our partisan effects reported in Table 3 only reveal average annual differences in parties across Labor and Coalition governments; they do not tell us much about the pattern of policy behavior across the tenure in office of a political party.

(Table 4 about here)

Table 4 reports the results for the more detailed tests of partisan and government-specific effects on Australian fiscal policy. The first column of the table reports results for the effects on fiscal policy of whole individual Labor governments -- Whitlam and Hawke. As the reported parameter estimates suggest, the Whitlam government was more expansionary than the Hawke government in its entirety. In fact, the estimate for the fiscal policy effect of the Hawke governments from 1983/84 to 1989/90, while correctly signed, falls below conventional levels of statistical significance. However, these results conceal a very interesting story, particularly in light of the partisan cycle formulation discussed above. As the second column of Table 4 reveals, the effects of the Hawke government on fiscal policy are significantly expansionary during its first term (1983/84, 1984/85) and mildly

Table 4. Political Economic Cycles in Australian Fiscal Policy, 1962/63 to 1989/90: Partisan Dimensions. [1]

| | (I) | (II) | (III) | (IV) | (V) |
|---|---|---|---|---|---|
| ELECT CYCLE | 2.219 * (.797) | 1.423 * (.717) | 2.106 * (.940) | 2.170 * (.841) | 2.065 * (.768) |
| LABOR PARTY | --- | --- | --- | --- | -1.748 + (1.219) |
| WHITLAM | -4.772 * (1.669) | -3.774 * (1.422) | --- | --- | --- |
| HAWKE | -1.658 (1.606) | --- | --- | --- | --- |
| GOVT1 | --- | -5.663 * (1.994) | --- | --- | --- |
| GOVT2 | --- | -2.733 + (1.728) | --- | --- | --- |
| GOVT3 | --- | 2.356 (1.937) | --- | --- | --- |
| MENZ/MCMAH | --- | --- | 2.234 (3.945) | 2.822 (3.535) | --- |
| FRASER | --- | --- | 3.335 * (1.464) | --- | --- |
| GOVT1 | --- | --- | --- | 7.702 * (2.350) | --- |
| GOVT2 | --- | --- | --- | 3.295 * (1.398) | --- |
| GOVT3 | --- | --- | --- | -.610 (2.238) | --- |
| LABOUR*LEAD | --- | --- | --- | --- | -.363 * (.194) |
| $FISC_{T-1}$ | .829 * (.084) | .632 * (.099) | .872 * (.144) | .926 * (.126) | .809 * (.033) |
| $INFLATE_{T-1}$ | .700 * (.193) | .438 * (.182) | .568 + (.426) | .317 (.395) | .553 + (.201) |
| $CH\ UNEMPL_{T-1}$ | -3.068 * (.744) | -1.615 * (.769) | -3.090 * (.987) | -2.284 * (.942) | -2.917 * (.794) |
| $GDP\ GROWTH_{T-1}$ | 1.053 * (.408) | 1.289 * (.353) | 1.127 * (.507) | 1.014 * (.472) | 1.036 * (.398) |
| $CH\ INTRATE_{T-1}$ | -1.343 * (.515) | -1.114 * (.453) | -1.751 * (.534) | -1.194 * (.523) | -1.722 * (.396) |
| POSTOPEC2 | 2.628 * (1.513) | 4.068 * (1.333) | 3.622 * (1.979) | 5.662 * (1.368) | 4.882 * (1.042) |
| $rho_{1rst-order}$ | -.533 * (.165) | -.567 * (.163) | -.502 * (.180) | -.529 * (.172) | -.547 * (.164) |
| intercept | -12.782 | -12.978 | -14.586 | -13.545 | -12.615 |
| $\overline{R}^2$ | .734 | .788 | .721 | .752 | .741 |
| Durbin's h | -.352 | -.438 | -.240 | -.231 | -.780 |

* Significant at the .05 level or below.
+ Significant at the .10 level.
[1] See Table 1 for a description of table statistics.

expansionary during the second government (1985/86 - 1987/88). By the third Hawke term, the effect of the government on fiscal policy, net of other effects, was no different than the average Coalition government.

A similar story may be told with respect to Coalition governments. The third column of Table 4 reports the findings for individual fiscal policy effects of the Menzies-McMahon conservative government era and the effects for the entire Fraser government. While the estimated individual effect for the Menzies-McMahon period is correctly signed (pro-surplus), it is not significant.[20] However, the impact of the Fraser government, net of electoral and other forces are taken into account, is significant. The thrust of fiscal policy under the Fraser government was notably restrictive. Net of inertia, direct electoral pressures, and economic pressures on fiscal policy, the movement of fiscal policy in the average budget was in the direction of surplus by an amount equal to 3.3 percent of outlays.

The fourth column of Table 4 examines the pattern of fiscal policy under sequential Fraser governments. Assuming office on the heels of the first Labor government since the 1940s, Fraser reversed the direction of fiscal thrust substantially during his first term. The restrictive movement in fiscal policy continued during the second term, although the effect is notably smaller (3.2 versus 7.7 percent of outlays in the first government). However, by the third Fraser government, the thrust of fiscal policy, net of other factors, was no different than the average Labor government. In all, this pattern bears a striking similiarity to the subsequent pattern under the Hawke government. That is, a Labor (Coalition) government assumes control of government after a period of control by the opposition. Their first term is characterized by notable partisan policy initiatives. However, these effects -- a pronounced expansionary or restrictive thrust in

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policy -- dissipate in their second governments and disappear by their third

terms. In sum, the findings for the partisan behavior over both the successive

Fraser and Hawke governments increase our understanding of partisan effects on

Australian fiscal policy. Overall, our findings to this point lend a fair

amount of support to the partisan cycle formulation discussed above.

The last column of Table 4 displays the results of the interaction of

party and "lead." As discussed above, the moderation or abandonment of

partisan goals may be in part a function of declines in "lead" over the

opposition and the resultant concern over reelection prospects that such

declines imply.[21] As anticipated, the interaction term is significant and

indicates that the fiscal policy effects of party varies by the level of

"lead." Specifically, recalling the mathematics of interactions (see Note 18

above), a lead of 10 percent over the opposition generates a Labor party

effect, net of other factors, of -5.378 [-1.748 + -.363*(10)]. A five percent

lead results in a fiscal policy effect of -3.563 while no lead produces an

effect of -1.748, a marginally significant effect at the .10 level. A

mathematically equivalent interaction (not reported) of the opposite sign is

obtained for COALT*LEAD, indicating movement from a restrictive fiscal stance

as "lead" declines.

As a final set of tests of the alternative formulations of political

economic cycles discussed above, models equivalent to those considered to this

point were estimated for income transfers. The time period, variables

measurement, and estimations procedures are identical to those followed for

the overall fiscal policy equations. The results of these tests for income

transfers are reported in Table 5.

(Table 5 about here)

The first column of Table 5 reports results for a basic model of income

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Table 5. Political Economic Cycles in Income Transfers, 1962/63-1989/90.[1]

| | (I) | (II) | (III) | (IV) |
|---|---|---|---|---|
| ELECT CYCLE | -.118 * | -.131 * | -.182 * | -.149 * |
| | (.068) | (.074) | (.065) | (.069) |
| LABOR PARTY | .181 + | --- | --- | .100 |
| | (.119) | | | (.114) |
| WHITLAM | --- | .349 * | --- | --- |
| | | (.199) | | |
| HAWKE | | | | |
| GOVT1 | --- | .408 * | --- | --- |
| | | (.226) | | |
| GOVT2 | --- | .185 | --- | --- |
| | | (.240) | | |
| GOVT3 | --- | -.066 | --- | --- |
| | | (.158) | | |
| MENZ/MCMAH | --- | --- | -.441 + | -- |
| | | | (.258) | |
| FRASER | | | | |
| GOVT1 | --- | --- | -.456 * | --- |
| | | | (.250) | |
| GOVT2 | --- | --- | -.422 * | --- |
| | | | (.106) | |
| GOVT3 | --- | --- | .322 * | --- |
| | | | (.166) | |
| LEAD | --- | --- | --- | -.018 + |
| | | | | (.011) |
| LABOUR*LEAD | --- | --- | --- | .039 * |
| | | | | (.018) |
| $TRANSF_{T-1}$ | .839 * | .847 * | .921 * | .840 * |
| | (.054) | (.066) | (.064) | (.044) |
| $INFLATE_{T-1}$ | .098 * | .090 * | .067 * | .096 * |
| | (.020) | (.027) | (.028) | (.019) |
| $CH\ UNEMPL_{T-1}$ | .109 + | .084 | .200 * | .135 * |
| | (.068) | (.084) | (.064) | (.076) |
| $GDP\ GROWTH_{T-1}$ | -.002 | -.014 | .030 | .001 |
| | (.037) | (.038) | (.033) | (.035) |
| POSTOPEC2 | .086 | .116 | -.371 + | -.005 |
| | (.195) | (.150) | (.233) | (.156) |
| $rho_{1rst-order}$ | -.025 | -.314 + | -.385 * | -.319 * |
| | (.196) | (.186) | (.179) | (.181) |
| intercept | 1.060 | 1.086 | .960 | 1.180 |
| $\bar{R}^2$ | .981 | .981 | .985 | .981 |
| Durbin's h | .002 | -.278 | -.203 | -.304 |

* Significant at the .05 level or below.
+ Significant at the .10 level.
[1] See Table 1 for a description of table statistics.

transfers analogous to the one estimated above for the Commonwealth budget deficit (surplus). As the findings illustrate, effects of the electoral cycle and partisan control of government parallel those for the overall fiscal policy equation. The effect of the electoral cycle is significant with transfers increasing on average by .1 percent of household income for each year of the cycle.[22] The transfers impact of average partisan differences across Labor and Coalition governments falls just short of significance at the .05 level. Average differences in the movement of income transfers across parties is of the magnitude of .2 percent of household income with Labor spending more and Coalition governments spending less. While substantively small in appearance, this effect is twice the size of the impact of one point change in the inflation or unemployment rates (.098 and .109, respectively), reflecting the relative proportion of transfers to total household income.[23]

The final three columns of Table 5 report the results for the effects of individual Fraser and Hawke governments as well as the interaction between party and incumbent government "lead" over the opposition. As the table reveals, a pattern identical to the one observed for the dynamics of partisan effects on overall fiscal policy emerges in the case of partisan determination of income transfer outlays. As the second column suggests, the Whitlam government and the first Hawke government significantly expanded income transfer outlays net of other factors. On average, the movement of income transfers was greater by .35 percent of national income during the Whitlam government and .41 percent of national income under the first Hawke Government. However, changes in income transfers during the second two Hawke governments, net of other determinants, were no different than the average conservative government. As many observers have noted, the Hawke government came into office with a commitment to expand the social wage for workers in

exchange the wage restraint embodied in the Accord (e.g., Singleton, 1985; Gardner, 1990). However, the relatively greater income maintenance and other social spending that may be attributed to the first Hawke government, net of other factors, did not continue much beyond 1985. Fiscal stringency apparently replaced social protection as a central orientation of policy.

The results reported for the individual Fraser governments reveal a nearly identical pattern of moderation of partisan policy. As the findings indicate, significant reductions in income transfers may be attributed to the first two Fraser governments. Indeed, pledges to reverse the notable expansions of many social programs initiated by the Whitlam government were apparently honored as was the ostensible commitment to reduce the rate of growth if not the actual size of the public sector. However, by the third Fraser government, a reversal of policy had taken place. With significant deterioration in economic conditions in the 1981 to 1983 period, the Fraser government, net of other effects, actually contributed, net of other forces, to a growth in income transfer outlays. Compared to the average Labor government (including the last five years of the Hawke government), the movement in income transfers was greater by .3 percent of national income during the last Fraser government.

The final column of Table 5 displays the results for the model that embodies the notion that partisan effects are mediated by the "lead" the incumbent party enjoys over the opposition in the polls. As in the case of the results for overall fiscal policy, there is a significant interaction of party and "lead" indicating that as "lead" declines government pursuit of partisan goals weakens. For instance, a 10 percent lead in the polls during a Labor government would produce a Labor impact on income transfers of .49 percent of national income; a five percent lead over the opposition would

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produce a .3 percent impact on income transfers, and so on. Overall, the pattern of effects across Labor and Coalition governments in the case of income transfer outlays closely parallels the pattern of partisan effects on overall fiscal policy.

A theoretical interpretation of this pattern of pronounced then diminishing partisan effects -- one that reinforces the role of the electoral imperative while allowing for partisan effects -- is offered by the notion of a partisan cycle in macroeconomic policy. As discussed above, this view argues that new policy problems, policy mistakes, and political conflicts over the management of the economy continuously erode the foundation of substantial, early term partisan policy initiatives. Indeed, as noted at various junctures in the above discussion, this scenario seems to accurately describe the experiences of both the Fraser and Hawke governments. Moreover, the problems faced by these governments seem to have been particularly serious during the latter stages of their second terms and during their third terms in office. After a period of relatively good economic performance, the latter Fraser governments faced increasing unemployment in 1979 and 1980, a collapse of the "resources boom" in mid-1081, and a significantly worsening macroeconomy in the 1982-1983 period. The Hawke government, for its part, had enjoyed some success through 1985. However, during the 1986-1987 period the external crisis of debt and trade imbalances as well as concern for Australia's long-term competitive position intensified and general macroeconomic performance worsened with unemployment climbing to 8.4 percent of the labour force and inflation exceeding 9.0 percent by December of 1986 (e.g., Davis, 1989; Stutchbury, 1990). Moderation in partisan policy orientation is not entirely surprising under such circumstances.

However, as noted above in our theoretical discussion of the partisan

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cycle, the emergence of such conditions may be partially reflected in declines in mass voter approval and, in turn, reversals of partisan policies may hinge to an extent on deteriorations of electoral standing of the incumbent government. Our results indicate that, a modicum of "lead" over the opposition is an important part of the partisan foundation.

## CONCLUSIONS

The preceding examination of the pattern of electoral and partisan influences on Australian fiscal policy over the last three decades suggests that the pursuit of both electoral and partisan goals played important roles in determining fiscal policy choices. With respect to the timing of elections, our results suggest that the likely proximity of the next election significantly conditioned fiscal policy. Consistent with the a Nordhaus-type electoral business cycle, fiscal policy grew more expansionary in orientation and income transfer payments expanded across the electoral cycle. Yet, a simple Nordhaus model does not exhaust political influences on the budget. Some of the substantively largest effects on both overall fiscal thrust and on income transfer outlays were observed during the early years of the Fraser and Hawke governments (and during the relatively short tenure in office of Gough Whitlam).

Specifically, our findings indicate that, at least for the long-lived Fraser and Hawke governments, a distinct partisan cycle in fiscal policy coexists with an electoral policy cycle. Faced with an increasingly large number of problems, Australian governments of the contemporary era have apparently engaged in a series of strategic adjustments of policy, gradually moving away from clearly partisan policy and toward the other party across

their tenure in office. While underscoring the role of partisanship, this partisan cycle also illustrates the important role of the electoral imperative. That is, in a system such as Australia's where two parties vie for votes in a relatively stable, highly competitive electoral environment, elections moderate the degree to which parties may pursue their partisan interests. Indeed, with respect to Australian fiscal policy in the contemporary era, electoral politics does matter in a fundamental way.

1. Beginning with the November, 1963 election (the base year of the present study), seven of 11 national elections (excluding four Senate-only elections) have fallen roughly at two and one-half year intervals. If one excludes the 1974 national election, held in the context of extraordinary events, eight of the 10 remaining national elections fall approximately at the two and one-half year interval. Thus, although the timing of elections is occasionally in doubt, this general regularity may serve as the basis for electoral business cycles of the type described below. (I will return to this issue below.)

2. Given the familiarity of these theories, I will forego a detailed recapitulation of them. For excellent, more extensive discussions of the theories and extant evidence, see Alt and Chrystal (1983), Hibbs (1987a), and Alesina (1988; 1989).

3. Nordhaus's seminal contribution is by no means the first articulation of a political business cycle. As Nordhaus acknowledges, Kalecki's (1943) widely discussed work on political ramifications of sustained full employment is a much earlier, albeit distinct, contribution.

4. Two important differences in earlier and later versions of the model merit comment. First, Hibbs has relaxed his assumptions concerning the stability of the long-run Phillips curve, resting his more recent models on a natural employment-rate version of the short-run Phillips curve (e.g., 1987b, p.13). Second, more recent discussions by Hibbs of the material costs of inflation have weakened the implication that inflation has, contrary to popular wisdom, downwardly redistributive effects (e.g., compare Hibbs, 1977: 1468-69, to Hibbs, 1987a, esp. Ch. 7).

5. The importance of the rational expectations critique for electoral and partisan theories might be questioned. Specifically, the stronger varieties of rational expectations that suggest only "surprise" or unanticipated policies have effects on employment and growth have not been substantiated empirically. In fact, nearly all empirical work since the early 1980s has shown that the AUDI (anticipated-unanticipated distinction) hypothesis is questionable. These studies have demonstrated that anticipated policies do have real effects and, in some work, these effects seem to be larger than those of unanticipated policy (e.g., Mishkin, 1983; esp. Ch. 6; Sheehan, 1985a; Frydman and Rappoport, 1987).

6. Alesina (1989) suggests that, given adaptive, rational behavior by economic agents, partisan effects are generally likely during the first two years of an incumbent party's term of office.

7. For instance, consistent with rational partisan theory, Left parties that seek to aggressively combat unemployment (e.g., through overall stimulus, employment training programs, and so on) far into their terms may necessarily have to accept higher levels of inflation or forego other policies that require resources committed to employment-enhancing programs (also see Hibbs, 1990).

8. Schneider and Pommerehne (1980) report that, net of other forces, economic problems significantly diminished the incumbent governments popularity during the 1960s and 1970s. Variations in inflation and unemployment rates were particularly important in understanding oscillations in the popularity of Prime Ministers from Menzies to Fraser. Although the role of Australian voter assessments of the economy has been questioned (e.g., Mughan, 1987), recent

analyses have shown economic conditions to be important determinants of voter choices in the 1990 federal elections (Gow, 1990).

9. I will not formally examine the validity of varieties of electoral business cycles that may be constructed by incorporating rational expectations (e.g., Cukierman and Meltzer, 1986; Rogoff and Sibert, 1988). For the purposes of the present study, I will assume that an electoral business cycle of the Nordhaus variety or one consisting of election "bursts" in policy initiatives is consistent with the presence of rational economic agents.

10. In fact, Schneider and Pommerehne (1980) actually argue that the relatively short cycle in national elections produce intense pressures on governments to constantly gear policies to the next, rapidly approaching election, producing policy sensitivity to fluctuations in mass approval over the entire cycle. Generally, Schneider and Pommerehne's (1980) study is by far the most sophisticated study of political effects on Australia macroeconomic policies. However, on the other hand their model is very idiosyncratic: they do not standardize their tax and spending variables and they do not control for inflation (directly), growth and unemployment rates. Overall, although their electoral findings are consistently significant, the structure of the model (covering the years, 1960 to 1977) is questionable.

11. With regard to international economic forces, many of the fiscal policy impacts of international business cycles and shocks are transmitted through inflation, employment, growth, and interest rate factors. However, some international forces may directly impact on fiscal policy choices. In this regard, variety of supplemental tests were made for the influences of international economic factors, particularly those that allow for greater effects during the recent years of growing sensitivity to international debt,

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trade imbalances, and competitiveness. Specifically, measures of merchandise trade and current account deficits, while insignificant or incorrectly signed in the models to estimated below, exhibit significant negative effects in the post-1983 period. That is, net of the effects of political and economic processes embedded in our basic model, fiscal policy moved in a restrictive position as trade imbalances worsened in the years after 1983.

12. Demarcating the actual point of shift is difficult. While it is commonly assumed that the final Whitlam budget is notably anti-inflationary, incorporating monetarist concerns (e.g., Hughs, 1979), it is difficult to tell if this shift is simply a function of the 1974 "wages explosion" and subsequent inflation. Moreover, it is difficult to discern if the restrictive, anti-inflationary stance of the early Fraser budgets are inherently different from those that would have been pursued by other Coalition governments faced by high inflation. Alternatively, one might suggest that 1979/1980, as suggested above, denotes the structural shift in macroeconomic policy orientation. During this period, the second OPEC oil shock is underway; policies generally shift in a restrictive fashion across many other OECD governments; Thatcher's monetarist experiment begins in the United Kingdom; and Hayden, embracing more conservative economic orthodoxy than his predecessor, solidifies the leadership of the Labor party. I will explore these alternative watersheds -- 1975/76 and 1979/80 -- below.

13. There are several problems of using the Commonwealth budget deficit (surplus) as a measure of fiscal policy. First, governments have often pushed spending to the off-budget sector (e.g. Gittins, 1985) thereby masking stimulus outside of the general budget sector. In addition, the Commonwealth general budget sector accounts do not include fiscal stimulus and restraint

that emanates from state governments. Finally, the Commonwealth budget balance, itself, is not adjusted for budgets impacts of variations of the economy from its "full-employment" level. On the other hand, these problems are offset by other considerations. First, tests for effects of the electoral and partisan forces, in lieu of specification of complicated, multi-level political processes, should focus at the level of government where the locus of macroeconomic policy responsibility lies. Second, while off-budget and other account features complicate analysis, movement of the overall Commonwealth budget balance should be a fairly strong predictor of the movement of overall fiscal thrust. Finally, controls embedded in our model for business cycle and other economic effects on fiscal policy obviate many of the problems of an unadjusted budget measure. Moreover, a suitable "full-employment," adjusted budget for the Commonwealth budget is unavailable for a large number of years.

14. Despite their widespread use, reaction function parameters that relate economic variables (e.g., unemployment, inflation) to policies (e.g., budget balances) can not be used to infer policy maker preferences for certain levels of economic targets (Alt and Chrystal, 1983, esp. Chs 2, 6).

15. Standardization by outlays as opposed to the more conventional standardization by Gross Domestic Product is used because the former excludes variations in the deficit/surplus that are due to the trend in relative public sector size (i.e., the tax or public expenditure share of GDP). However, analyses that standardize the Commonwealth budget deficit with GDP produce identical results to those reported above for all central hypotheses.

16. More sophisticated tests of the pattern of partisan effects across

governments may be made by using interactions of a counter for time and the individual party and government variables. Thus, partisan effects in year one of a new Labor (Coalition) government can be compared to effects in year two and so on. To foreshadow the following analyses, tests for the effects of various constructions of individual-year counters and interactions for early-term effects produced results inconsistent with those anticipated. For instance, first-year Labor expansionary effects were smaller than second and third year effects.

17. Given the strong autoregressive character of macroeconomic performance factors, one-year lags are likely to capture both lagged automatic and discretionary effects and, to an extent, contemporaneous effects of economic fluctuations on current policy. With respect to elections, all election year budgets are easily identified with two possible exceptions. First, following Gruen (1985), I do not count the 1973/74 budget as an election year budget because of the unexpected character of the election. Second, the July 1987 election is attributed to the 1986/1987 budget and not the 1987/1988 budget; outside of symbolic offerings to voters, the 1987/1988 budget would have had no impact on general economic performance and voter incomes during the 1987 election cycle.

18. It may be helpful at this point to recall the interpretation of interaction terms. Briefly, one should keep in mind that (1) the individual coefficients for the individual variables that are interacted are indices of the effect of the particular variable when the other one has a value of 0.00; (2) the interaction term itself when multiplied by a given value of one of the two variables (let us say $X_1$) and added to the coefficient of the other variable (let us say $X_2$), becomes the slope for the effect of the second

variable $(X_2)$ at that given value of the first variable $(X_1)$; and (3) the significance test for the interaction simply tells us whether differences in the slope of the second variable $(X_2)$ at different levels of the first $(X_1)$ are significantly different from zero. The significance tests for the individual coefficients are tests of the significance of a particular interacted variable when the other one is 0.00. See Friedrich (1982) for an excellent discussion of interactions.

19. Tests for a significantly larger or smaller electoral cycle effect in individual governments (e.g., the last Menzies government, the first Hawke government) also revealed no interaction between the electoral cycle and individual governments. Additional tests were also made for the hypothesis that fiscal policy, net of other factors, will be more stimulative as a government's standing in the polls falls. These tests reveal no support for the notion that, net of the electoral cycle or partisan effects, governments continuously bolster popularity.

20. Fiscal policy effects of individual governments during the Menzies to McMahon period do not differ from this overall pattern. While some governments seem to be more restrictive in orientation than others at the margin, no individual government effect is significantly more restrictive than the average Labor government, once controls for the Fraser government, inertia, and economic factors are made. One explanation for this effect may be gleaned from the partisan cycle theory. That is, after a long Liberal/National Party tenure in office, all uniquely partisan effects on fiscal policy have dissipated. This interpretation is consistent with those findings for the pattern observed across the successive Fraser and Hawke governments.

21. The incumbent government's lead over the opposition is defined as the

percentage of the electorate intending to vote for the governing party minus the percentage intending to the vote for the opposition if lead is greater than 0.00; otherwise lead equals 0.00. (This construction is used because of the absence of theory about the impact of nontrivial "deficits" in popularity on partisan behavior. Further extensions of the above models might incorporate more extensive tests for hypotheses related to the behavior of governments that are far behind in the polls.) These calculations are made from Morgan Gallup Poll data as reported in Ian McAllister et al (1990). As Schneider and Pommerehne have shown, analogous measures of government popularity for the period 1960 to 1977 are significantly influenced by economic problems, particularly inflation and unemployment. (On this point, also see the treatment of this relationship in the "Discussion and Conclusions" section below.)

22. Tests for individual election years produced a coefficient for the election year (ELECT YEAR1 above) that fell short of significance at the .05 level and one for the year preceding the election year (ELECT YEAR2) that fell short of significance at the .10 level. Given that the coefficient for the entire electoral cycle is significant (at the .05 level), model specification with ELECT CYCLE is preferred. These results suggest that the electoral cycle effect on income transfers is one that extends across the entire cycle with the effects on fiscal policy peaking in the election year.

23. Similar to the overall fiscal policy equation, the various controls reveal substantial inertia in income transfer payments as well as effects of inflation and unemployment. However, independent GDP growth effects are absent as is the effect of the POSTOPEC variable. (The interest rate variable is dropped from the model on grounds that it is not relevant to either

automatic or discretionary variations in income transfers.) In addition, simple controls for the level and change of the population over the age 65 -- potentially and important determinant of pension outlays -- are not significant in Table 5 equations.


## APPENDIX: DATA SOURCES


Public Sector Data. Total outlays, revenues, and income transfer payments for the Commonwealth government general budget sector are from, Commonwealth Treasury, Budget Statements, Budget Paper No. 1. (Canberra: Australian Government Printing Office, selected years), and Federal Reserve Bank of Australia, Australian Financial Statistics, 1949-50 to 1986-87: I Tables. (Canberra: author, 1988).


Political Data. Data on election dates, party governments, and government popularity comes from compilations reported in Ian McAllister, et al, Australian Political Facts. Melbourne: Longman Cheshire, 1990.


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