Economic Policy Trilemma and Longevity of a Political Party: A Study of Japan's Liberal Democratic Party in a Comparative Perspective

Kenya Amano^{*} Saori N.Katada[†]

April 1, 2024

Abstract

Democracies tend to experience changes in the governing party to adapt to the structural changes in international economic relations and domestic industrial developments, while some countries see a party stay in the governing position for a long time. Such longevity of a governing party is even more puzzling when the country struggles with economic stagnation like in the case of Japan since the mid-1990s. How has the Liberal Democratic Party (LDP) managed to stay in power in the face of a changing economic environment? To answer this question, we propose our theory of economic policy trilemma; choice of macroeconomic policy comes down to supply-side growth strategy, distribution, and fiscal stability where the government can pursue only two of these three goals. We argue the LDP has managed to exploit policy space for the opposition parties under the trilemma and weakened their electoral positions. To empirically capture the changes in policy goals, we analyze policy debate data in the Diet from 1956 to 2022, quantifying the share of each policy goal in the debates for the LDP and other parties. This study reveals the non-LDP's economic strategy affects the LDP's policy choice, suggesting the incumbent party's co-optation strategies.

Keywords: Monetary policy, Fiscal stimulus, Distribution, Growth strategy, Economic policy, Trilemma

^{*} **Corresponding Author:** Weatherhead Center for International Affairs, Harvard University (kenya.amano@gmail.com)

[†] Department of Political Science and International Relations, University of Southern California.

Introduction

Many democracies experience changes in the governing party to adapt to the structural changes in international economic relations and domestic industrial developments, while others see a party stay in the governing position for a long time. Such longevity of a governing party is even more puzzling when the country struggles with economic stagnation, as economic crises tend to defeat the ruling party and cause a transition of power (UK 1979; South Korea 1997; France 2012, for example).

The case of Japan is particularly interesting as the country's economy has transformed quite drastically and experienced both rapid economic growth and prolonged economic stagnation over the course of the nearly seven decades of the Liberal Democratic Party (LDP) rule since 1955 (with the exception of the total of four years; 1994, 2009-12). This "uncommon democracy" (Pempel 1990) has been a focus of interest among scholars of comparative politics. How has the LDP managed to stay in power in the face of a changing economic environment for so long?

We argue that the LDP weakens opposition parties by co-opting their innovative policy proposals, thus exploiting the opposition parties' own policy space and producing less competitive elections. This is what we call the LDP's "exploitation strategy." To illustrate economic policy space, we define the economic policy choices in the three dimensions as supply-side growth strategy, distribution, and fiscal stability, and propose the theory of trilemma where the government can pursue only two of these three goals. The first goal is economic growth capitalizing on the "old way of business" resorting to the supply-side of producers and large businesses, and catering to the vested economic interests and clientelism through public works such as infrastructure investment. The second goal puts the emphasis on distribution with various types of hand-outs measures targeted towards wider demography, as well as consumer-focused measures, such as time-limited suspension (or reduction) of sales tax. Here we define distribution policy as a resource allocation toward the demandside of the Japanese economy consisting of consumers and workers, where the typical policy menu is to implement a series of direct payments or reductions on income and sales tax. On the other hand, the supply-side growth strategy focuses on the producers, industries, and businesses where the government executes public expenditure programs to stimulate private investments and exploit regulations. The third and final goal is the fiscal stability through fiscal discipline of the central government. The LDP has managed to exploit policy space for the opposition parties under the trilemma.

To empirically examine the policy positions of the LDP vis-a-vis the opposition parties, we analyze the speech data of the Finance Committee in the lower house in the Diet from 1955 to 2022. Employing the semi-supervised topic model developed by Eshima, Imai, and Sasaki (2023), we identify a visible pattern where the LDP has responded positively (i.e. moves closer) to the non-LDP parties' policy preferences among the three goals of the economic policy trilemma discussed above. Furthermore, the text analysis from the Diet discussion demonstrates that, although both political and economic crises have been the triggers of shifting policy priorities, the LDP has largely tended to follow the non-LDP position on supply-side growth at the time the country's GDP is rising, while increasing government debt reduces the LDP's pursuit of distribution policy.

This study expands the theory of the political business cycle, which focuses on the incumbent party's use of fiscal instruments at the time of the election. We do so by examining not the timing but the changing targets of the leading party's fiscal expansion strategy for their electoral objectives. In addition, we explicitly introduce the notion of three-way policy trade-off beyond the growth versus redistribution dichotomy by introducing the fiscal dimension. Although fiscal resources are constrained by the country's tax revenues, with the changing economic foundations as well as the recent emergence of unconventional monetary policy, fiscal maneuver has become a medium to long-term policy choice for the incumbent government.

After this introduction, this paper proceeds by first reviewing the evolving macroeconomic policy regimes of the Japanese government from 1956 through 2022 by dividing them into

six distinctive phases. Then, the third section discusses the existent theories related to the political business cycle as well as the growth-distribution trade-off as we elaborate on the theory of economic policy trilemma. The fourth section discusses the empirical strategies using text analysis. The fifth section summarizes the results of the analysis that indicates the LDP's exploitation strategy of following the non-LDP's policy discussion before the concluding section where we discuss the policy implications and future course of this study.

Regimes of Japanese Macroeconomic policies

Japan's post-war history of macroeconomic policy is a history of the government managing and responding to shifting priorities based on the changing economic conditions. Since the time when the Japanese leading party LDP formed in November 1955 into the 2020s, the Japanese economy has grown by more than 100 times with various phases of different GDP growth rate (Figure 1). Over these seven decades, Japan also experienced multiple internal crises and external shocks that led to the country's structural shift. Based on these structural changes, we have divided the 1955-2022 time period into six major regimes (See Table 1). The first period (1955-1972) was the time of political consolidation after the country's independence with strong economic growth known as the Japanese economic miracle. The second period (1973-1993), which started with the surge of leftist parties and the oil crisis, ended up with the LDP's achieving at least temporary stability during the bubble economy. The third period (1994-2000) was the time after the bursting of the

	Economic Miracle	Oil Shocks and Plaza Accord	The first Lost Decade after	Koizumi Reform	The Years under	Abenomics and thereafter
	1955 - 1972	1973-1993	Bubbule Burst 1994-2000	and thereafter 2001-2008	the DPJ 2009-2012	2013-2022
Primary Focus	Supply-side	Distribution	Supply-side	Fiscal Stability	Distribution	Supply-side
Secondary Focus	Distribution	Fiscal Stability	Distribution	Distribution	Fiscal Stability	Distribution

 Table 1: Regimes of Japanese Macroeconomic Policies



Figure 1: Real GDP Growth Source: IMF

Japanese economic bubble, where the economy stagnated culminating in massive financial crises. The fourth period (2001-2008) started with Prime Minister Koizumi's reform aiming for fiscal consolidation, and ended at the time of the global financial crisis and DPJ's electoral victory. The DPJ rule constitutes the fifth period of three years (2009-2012) where the party tried to focus on distribution. Finally, the last period (2013-present) was the time mostly under the Abe administration and also reflected the aftermath of the 3-11 triple disaster in 2011 of the massive Tohoku earthquake and tsunami as well as the Covid pandemic crisis from 2020^{1} .

Economic Miracle: 1955-1972

 $^{^1\,}$ This historical narrative is largely based on Muramatsu and Kitamura (2010), Calder (1988), and Kusano (2005).

This period was marked by economic recovery focused on supply-side growth and demand creation through distribution. Only three years after the end of the US occupation, the LDP emerged in 1955 after a politically turbulent time. Starting with the first "five-year plan for economic self-support" issued in December 1955, Japan's economic policy priority for this period focused on these tasks. The government also announced two other economic plans: New Long-Range Economic Plan for FY 1958-62 and the famous National Income Doubling Plan for FY 1961-70. As supply-side growth policies, building roads and railways as well as setting up urban infrastructure became the priorities in these efforts. Distribution issues during this time were also addressed through the establishment of universal health coverage in 1958 and starting of the social security plan in 1961. Especially until the mid-1960s, there were no fiscal concerns for the economy due to rapid economic growth, the demographic advantage of the young population without a large social security burden to the extent that tax reduction was implemented (Yoshioka and Kawasaki 2016).

Oil Shock and Plaza Accord: 1973-1993

Facing the end of the rapid growth and political challenges, the LDP's macroeconomic priority shifted to distribution with fiscal stability. The urban-centric growth with massive internal migration slowed by the early 1970s, and various external shocks including the 1973 oil shock and the foreign exchange rate realignment of the early 1970s all contributed to the volatility². Politically, the leftist parties, including the Japan Socialist Party, gained ground during this period with a strong push for pragmatic welfare and redistribution platforms. In response to the opposition party's policy proposals, the LDP declared a "New Welfare State" in the Economic White Paper in 1972. Distribution priority during this period focused on the aging population, where the Law Concerning the Security of Healthcare Treatment for Senior Citizens was passed in 1982 and the Gold Plan, a ten-year strategy to build capacity to support the health and welfare of the elderly, was introduced in 1989. During this time,

 $^{^2}$ A series of the government's "Economic and Social Development Plans" announced in 1967 and 1970 focused on "balanced economic development" that would offset the overcrowding and drastic increase of land prices in the urban areas.

we also see the Japanese government's efforts to reallocate fiscal resources to rural areas with strong political connections. Prime Minister Kakuei Tanaka (1972-74)'s famous "Plan for Remodeling the Japanese Archipelago (*nihon rettou kaizo ron*)" launched to build an extensive transportation network of highways and high-speed rails.

With a series of stimulus packages at the time of the oil crisis, the Japanese government began to issue Japanese Government Bond (JGB) annually to cover the fiscal deficit from 1975³. The Japanese government's fiscal discipline (and the lack thereof) started to become the centerpiece of political debate. Fiscal consolidation was Prime Minister Yasuhiro Nakasone's (1982-87) major policy goal, where he led lengthy Diet discussions aiming to introduce a sales tax. After multiple failed attempts, the effort finally led to the introduction of 3% consumption tax in 1989⁴.

The First Lost Decade after the Bubble Burst: 1994-2000

Japan's top macroeconomic policy priority was economic recovery after the burst of Japan's economic bubble in the early 1990s, which kicked off the intense efforts to boost the economy through supply-side strategy as well as distribution. The LDP government faced a series of financial crises and almost zero to negative GDP growth during the decade of the 1990s.⁵ In response, the government rolled out a series of economic stimulus plans (eight packages from 1992 through 2000) totaling \$136 trillion (over \$1.2 trillion based on the 1990s exchange rate average). More than half of that amount was dedicated to public investment in economic and social infrastructure, and all were targeted to stimulate the economy (Fukuda and Kei 2002).

At the same time, the demand for welfare provisions also intensified during this period resulting in a series of social policies from expanding child care to enhance both the prospect

 $^{^3\,}$ The first deficit-financing bond $(akaji\ kokusai)$ was issued in 1965 to cover the fiscal shortfall in the post-Olympics recession.

 $^{^4\,}$ The rate of the sales tax increased to 5% in 1997, to 8% in 2014 and 10% in 2019.

 $^{^{5}}$ There were also multiple external shocks, including Kobe Earthquake (1995) and Ohmu Shirikyo terrorist attacks (1995) and the Asian Financial Crisis (1997-98) as well as severe yen-daka episodes in the middle of the decade.

of increased fertility and mothers remaining in the workforce, to introduction of elderly care insurance in 1997. Meanwhile, despite the concern over ever-growing public debt and an increase in the consumption tax from 3 to 5 percent in 1997, the government's fiscal discipline weakened during this period partly thanks to the loose monetary policy by the Bank of Japan. As a result, the ratio of Japan's public expenditure over GDP increased from below 29.3 percent in 1990 to 38.6 percent by 1998 (Figure 2). By the end of this decade, the concerns over such massive (and often wasteful) government expenditure to create demand and massive increase in public debt (i.e. the large amount of Japanese Government Bond issuance) led the government to re-evaluate its macroeconomic strategy.⁶

Koizumi Reform and Thereafter: 2001-2008

In 2001, a popular (and populist) Prime Minister Jun'ichiro Koizumi led the LDP with an explicit mandate of fiscal consolidation and neoliberal reforms so to achieve a "small government." He was focused on cutting ties with LDP's supply-side clientelism, and exploited the opposition's policy space by advocating fiscal stability. His "honebuto" (literally translated as "big boned" as robust; its official title translated as "Basic Policies for Economic and Fiscal Management and Reform") policy first instituted in June of 2001 began the path of growth through economic structural reforms ("structural reform without sanctuaries") and balanced budget. In the six sets of these basic policies announced during the Koizumi administration from 2001 to 2006, the strategies included financial market reforms, deregulation and privatization of public and semi-public institutions with the focus on postal reform along with fiscal consolidation including tax reform (Kaihara 2008). By the time Prime Minister Koizumi stepped down, the central budget was clearly tightened reducing budget deficit as percentage of the government spending from 36 percent of GDP in 2000 to 33 percent in 2007 (Figure 2), and shrinking the percentage of public works per GDP to 2.9 percent in 2008, which is less than half of its peak in the late 1990s. Meanwhile, social spending expanded

⁶ For example, the government's 2001economic Minsee white paper. Also Finance (2012)Nihon mukete istry of keizai no nagabiku teitai tosaisei $\mathbf{n}\mathbf{i}$ (https://www.mof.go.jp/pri/publication/policy_history/series/ $h1 - 12/1_{21}$.pdf).



Figure 2: Government Expenditure, percent of GDP Source: IMF

from 35 percent of the policy budget in 2000 to 48 percent in 2008 (Noble 2010, 247-51).

The Years under the DPJ: 2009-2012

Running on the platform of "from concrete to people," the electoral victory of the Democratic Party of Japan (DPJ) in August 2009 was a historic event for Japan after more than five decades of LDP's near monopoly as the country's leading party.⁷ The DPJ promised to wean the Japanese economy away from the traditional supply-side growth policy focused on public investment and exports, with a priority on consumption and domestic demand.⁸ With the emphasis on employment, technology, environment, health, rural revitalization with tourism and a focus on Asia, the DPJ's new growth strategy was adopted by the cabinet

 $^{^{7}}$ For electoral analysis as to why the LDP lost, see Maeda (2010).

⁸ For example, Prime Minister Hatoyama's policy speech at the Diet on October 26, 2009.

in December 2009⁹. Fundamentally resorting to the concept of "growth through welfare," the challenge for the DPJ's economic policy was how to obtain long-term growth from the welfare sector whose increased productivity is difficult to expect (Tanaka 2014, 26).

The DPJ installed the Government Revitalization Unit not only to review administrative processes but also to "scrutinize all budgets and programs and eliminate waste and abuses (Shinoda 2012, 802)." Reflecting the party's advocacy against excessive public works and in favor of social spending, the budget for FY 2010 saw 9.3 percent decline in public works and 9.8 percent increase in social security spending. The DPJ administration also cut 48 dam projects in the first year in office (Pempel 2010, 229). In 2011, however, the 3/11 triple disaster (earthquake, tsunami and nuclear plant meltdown) in Tohoku area, whose total damages were estimated to be 3.6 percent of the country's nominal GDP at that time, required fiscal commitment to its reconstruction through the Basic Act of Reconstruction enacted in June 2011. In an effort to continue the fiscal consolidation, the Kan administration did not issue a deficit bond to cover the immediate reconstruction expenses. Finally, in the FY 2021 budget, a special account of \$3.7 trillion was set aside to support the region's economic recovery (Sakiyama 2012).

Abenomics and thereafter: 2013-2022

Prime Minister Abe and his following administrations returned to supply-side priority in Japan's macroeconomic policies and also continued on DPJ's distribution priorities, all at the expense of fiscal stability. After the LDP's landslide electoral victory in December 2012, Prime Minister Abe launched an unconventional growth strategy called Abenomics. The economic policy package combined three "arrows" of aggressive monetary policy (first arrow), flexible fiscal policy (second arrow) and structural reform to unleash economic growth (third arrow).¹⁰ One of the important characteristics of Abenomics came in the form of very aggressive monetary policy that lowered the interest payments on the government's borrow-

⁹ For its full document, see Cabinet Office "Shin-seicho senryaku: Kagayaki aru Nippon he" December 9, 2009. https://www.kantei.go.jp/jp/kakugikettei/2009/1230sinseichousenryaku.pdf.

¹⁰ For a comprehensive analysis of the political economy of Abenomics, see Hoshi and Lipscy (2021).

ing.¹¹ This allowed the government to expand its public expenditure by compressing its interest payments, and set the ground for the return of supply-side stimulus oriented growth strategy into the 2020s with a strong flavor of clientelism. For example, a large stimulus package to emerge through "Building National Resilience (*Kokudo Kyoujin*)" legislation was enacted in early 2013, which ushered in various expenditures towards disaster-proofing the Japanese infrastructure. Furthermore, the Tokyo Olympics scheduled in 2020 raised public expectations of economic growth through construction and tourism. During this same period, social programs especially in support of education and child care expanded.

The Covid-19 hit the Japanese economy in 2020 and Prime Minister Abe stepped down in September. When Prime Minister Kishida came into the office in October 2021, two unprecedentedly huge government stimulus packages totaling \$234.2 trillion were already in place raising Japan's public debt to GDP up to over 260 percent by 2021.

Economic Policy Trilemma

Maintaining a stable economic environment, stimulating growth and allocating wealth are major objectives of the macroeconomic policy. Within the policy tool kits, the fiscal policy is associated with the public expenditure both routine and discretionary to meet the public service needs and stimulate aggregate demand. Leading political parties can, on the one hand, use these fiscal instruments to maintain a stable economy in support of citizens' welfare. On the other hand, under democracy, the incumbent government will be held accountable for worsening economic conditions if it does not respond adequately to economic downturns or macroeconomic crises (Key 1966, 76). Furthermore, the long-term economic structural changes and demographic shifts lead to changing electoral bases, and usually influence electoral outcomes. Political parties are to respond to these changes in order to stay in power. In this context, the class-based voting theory often predicts that the left-

¹¹ For the impact of aggressive monetary policy that provided fiscal opening, see Amano and Katada (2022).

leaning parties support redistributional welfare policies and a "big" government, while the right-leaning parties have free-market orientation with limited government intervention.

In order to increase its electoral odds, the incumbent government has fiscal expansions at its disposal. To this effect, the theory of the political business cycle states that "elected officials with fixed terms attempt to produce favorable economic conditions during election years, even at the expense of higher unemployment or inflation at midterm" (Golden and Poterba 1980, 696). Facing electoral cycles and sensitivities of the electorates to economic bottom line, such rational behavior explains particular boom-and-bust policy cycles of many democracies and emerging democracies (Block 2002, for example). Meanwhile, both external and internal crises motivate the incumbent politicians to become more creative or innovative with their policies (Polsby 1984), it is especially so as seen in countries where their sensitivity to the threat of political changes is high (Calder 1988).

The widely discussed political business cycle theory explains temporary fiscal expansion to meet the incumbent party's electoral objective. It is essential, however, to identify who benefits from such expansion¹². Therefore, we focus on the purposes that fiscal resources are dedicated to. Furthermore, given the inevitable fiscal constraints particularly in the long-run, the government faces the trade-off among the variety of goals pursued by such efforts.

To explain the long-term policy adjustment, we develop a theory of economic policy trilemma and discuss the implication from the trade-off among the choices that the government faces. As discussed above, the economic policy trilemma consists of three economic goals, where the policymakers can only achieve two out of the three goals at the same time. The first pillar is the economic growth capitalizing on infrastructure investments and public works in support of supply-side consisting of producers and large businesses; The second consists of distribution goal with social policies and various types of hand-outs measures some targeted wider demography with focus on underserved, in addition to consumer-focused

¹² Lohmann (1998) argues heterogeneity of voters and their information access but does not disaggregate by the types of benefits.

measures such as time-limited suspension (or reduction) of sales tax. The third is the fiscal stability through fiscal discipline of the central government. In short, if policymakers want to achieve growth that satisfies their specific producer clients and also pursue distribution for the larger population, they have to compromise fiscal discipline (i.e. fiscal irresponsibility). If they stick to fiscal discipline, they need to prioritize only one of the two policy goals (growth or distribution).

The trade-off between the first two policy goals, the one between supply-side focused growth strategy and distribution, has been the topic of extensive research in the fields of both economics and political science. In the late 1990s, "permanent austerity" (Pierson 2001), a precondition of policy credibility among the OECD countries, intensified the political conflict between the organized economic interests of businesses and the mass public (especially in support of the welfare state). The seminal work by Przeworski and Wallerstein argues that "governments face a trade-off between distribution and growth, between equality and efficiency" (Przeworski and Wallerstein 1988, 13). That is particularly so when there is prominent structural dependence of the state on capitalists since the performance of the economy is the key for the legislators to achieve success in their re-election and maintain their popularity (Swank 1992). In such a context, however, the ideologies of the political parties play an important role in the choice within the trade-off. Generally, the conservative parties (or the parties on the right) adopt supply-side growth strategy by increasing the productivity of capital, while socialist governments (on the left) tend to depend on distribution to increase the productivity of workers (Boix 1998). This is the world where "[p]olicy-makers are constantly faced with decisions on how to allocate scarce public resources across budget categories (Breunig and Busemeyer 2012, 923)." In this context, the electoral consideration would loom large in the politicians' minds.

It may be true that three economic goals could be achieved at the same time when the economy is supported by the economic boom cycle (Dore 1994). We posit, however, that the policy stance to pursue all three goals is impossible to realize and gain voters' support in the

long term because it is inevitable to have external shocks in the economy in the long term, requiring to be "irresponsible" in fiscal policy. Therefore, a strategic party could propose to fill in this new political space, by being a traditionally "irresponsible government" and neglecting fiscal discipline, and pursue both supply-side growth and distribution with the risk of inflation. Meanwhile, those parties that insist on fiscal discipline and stick to the two traditional policy dimensions continue to face the trade-off.

We can form four sets of expectations based on the politics of the economic policy trilemma. First is when there is room for fiscal expansion (either under good economic times or severe crises where the fiscal expansion receives overwhelming support), one would expect the leading party to pursue not only its traditional clientelism with supply-side growth policy but also expand its support based through distribution policy. Second, when the fiscal space is limited either because of political commitment or market scrutiny, the choice is limited to one of the two macroeconomic goals between distribution and growth. Third, the incumbent party makes the choice between distribution and supply-side-led growth policies based on the political conditions with the focus on electoral prospects as well as the macroeconomic conditions such as inflation, unemployment, growth, and the level of public debt. Lastly, the incumbent party that takes an ambiguous stance on all three goals is unlikely to gain voter support and will likely lose the election. Under this trilemma and in the face of changing economic conditions through Japan's post-War development, one would expect periodic changes in the coalitions or majority parties to reward attractive policy priorities and encourage adjustments. However, we argue that the longevity of Japan's leading party, LDP, is attributed, henceforth, to the party's effective management of this economic policy trilemma.

Testing the LDP's strategy under Economic Policy Trilemma

Hence, by exploiting the three-way trade-offs, the leading party can prevail over the opposition parties throughout the changing economic structure and in the face of internal and external crises. We can present the following hypotheses based on these expectations.

Hypothesis 1. As the amount of policy discussion on a particular macroeconomic goal in the non-LDP increases, the LDP increases its focus on that policy goal.

One of the dominant views behind the LDP's long-lasting single-party dominance focuses on the LDP's policy flexibility in the face of a changing economic environment, as the LDP becomes a "catch-all" party (Curtis 1971; Pempel 1998) that has marginalized and fragmented the opposition parties. In this sense, the "creative" maneuvering of policies has allowed the LDP to survive the changes (Pempel 1982). For example, the government started to do more on social welfare in response to declining LDP electoral fortunes from the 1970s, and once increased provision was implemented, it became correspondingly more difficult to reverse the trend (particularly with pensions in an aging society). The distribution policies include wage policies, pension and medical care, as well as support for child care, many of which were first promoted by left-leaning opposition parties, and became LDP's policy priorities. Furthermore, in our previous work (Amano and Katada 2022), we demonstrated that this LDP's strategy exploits the policy space for the opposition parties, especially the CDP-JCP coalition, at the time of the 2021 lower house election. As the COVID-19 crisis allowed the LDP to compromise upon the third goal, i.e. fiscal discipline, the LDP managed to straddle between the two goals of growth and distribution. Therefore, as the LDP strives to capture votes from those other than LDP clients or to avoid LDP supporters to shift their support to non-LDP parties, the LDP members increase their interests in the macroeconomic policies advocated by non-LDP politicians.

Hypothesis 2. The LDP's exploitation strategy is contingent on both electoral supports (election and approval rate) and economic conditions (employment, growth, stable prices, stock market).

Hypothesis 2a. Under robust electoral support, the LDP is less likely to follow the non-LDP's discussion of all three macroeconomic goals.

Hypothesis 2b. When economy strengthens, the LDP is more likely to follow the non-

LDP's supply-side cues, while the LDP is more likely to follow the non-LDP's distribution cues when the economy gets weak.

The LDP's exploitation strategy has clear electoral goals to attract non-LDP voters. Hence, when the LDP is on a solid electoral footing and economic conditions are favorable, its members do not have to pay lip service and even the policy shift in favor of the non-LDP's proposals. Meanwhile, the LDP can doll out goodies in the form of public works in competition with the non-LDP to maintain the LDP's political base when the time is good.

The Electoral Reform in 1994

There are multiple sources of the LDP's electoral dominance from 1955 through the 2020s. By empirically zooming into the period before and after 1994, nonetheless, we are able to control for multiple variables on important dimensions of the electoral and political system reforms. First and most consequential of the change in 1994 was that year's introduction of a new electoral system. This electoral reform transformed the lower house election from the Single Non-Transferable Votes with the medium-sized constituency system to one that combines single-member districts (a bit fewer than 2/3 of the seats) and proportional representation (the remaining less than 1/3). The adaptation of this so-called Mixed Member Majoritarian (MMM) system through this reform not only reduced the intra-party competition but also increased the hope of two-party system, where they would compete electorally based on policies and programs as each candidate (in the single-member district) has to win 51 percent of the votes (Rosenbluth and Thies 2010).

At the same time, this change also took away the often-discussed LDP's electoral advantage in multiple ways. One, the medium-size districts were valuable grounds for the LDP to gain multiple seats, where the party was able to put forward several candidates with strength in different areas such as construction or agriculture through intra-faction coordination (Cox and Rosenbluth 1994). This also led the LDP to form numerous policy channels of zoku-giin (policy tribe member politicians), through which requests for special treatment for uncompetitive sectors (such as agricultural protectionism or subsidies to small and medium businesses) or pork for the connected were transmitted to and from the government (Inoguchi and Iwai 1987). The LDP had been successful in solidifying its clientelism and taking advantage of its pork-barrel politics (Fukui and Fukai 1996; Catalinac, Bueno de Mesquita, and Smith 2020; Reed 2022, inter alia). In particular, the government (under the LDP) has deployed public works projects, where this dominance of construction state *dokken kokka* "puts much more public investment into the construction of public works than can be realistically justified by public need" Broadbent (2002)¹³. The electoral reforms, hence, reduced incentives to pork barrel to specific narrow slices of interests.

Furthermore, malapportionment of votes between the rural areas of LDP's strongholds and the urban areas was also largely corrected through this reform¹⁴. Therefore, if the medium-size district system and its associated institutional advantages were the main source of LDP longevity, the party would have suffered immediate and acute loss after 1994, requiring them to transforms patronage politics from a particularistic one to a programmatic one, as the leading party could continue to boost (or claim to boost) economy of the region and provide jobs through supply-side policies.

Thus, when we split the data into pre-1994 and post-1994, we expect the LDP's exploitation strategy to be strengthened after 1994, drawing the following hypothesis.

Hypothesis 3. After the 1994 electoral reform, the LDP is more likely to increase its focus on the policy goals that the non-LDP parties primarily focus on than before the reform.

 $^{^{13}}$ The most often cited work on Japan as *doken kokka* is the book by Curtis and Ishikawa (1983), where they cite Japan's disproportionately large concentration of public investment in infrastructure as of 1980.

 $^{^{14}}$ The malapportionment in the lower house reached its worst point in 1972 and 1983 at 4.99 and 4.40 votes in some rural prefectures to 1 vote in the urban area. The 1994 reform mandated that such discrepancy should be kept at maximum 2 to 1.

Preliminary Textual Analysis of the Diet Discussion: Data and Measurement Strategy

We conduct quantitative textual analysis by using the speech data in the diet. We operationalize the parties' focus on economic policy goals by quantifying the proportions of the speech amounts of each policy goal by elected members of parliament (MPs). The National Diet Library recorded and digitized all committee debates since 1947 under the new constitution established after World War II¹⁵. We collect the speech data of the Finance Committee in the lower house from 1955 to 2022. The Finance Committee, one of the oldest standing committees, is the center of all discussions related to macroeconomic policies. We analyze the debates of this committee from Session 23, starting November 1955, after the LPD was formed.

To operationalize the parties' focus on economic policy goals, we take three steps. First, we collect all speech data in the Finance Committee and then employ the tokenizer MeCab to extract all nouns that contain substantive arguments of speeches. 403,534 speeches yield a corpus with an average of 52 words per document and a total of 904,081 unique words. The maximum number of words for a document is 2287, while the minimum is 1. Second, after cleaning the data, we classify each word to each policy domain using a semi-supervised topic model developed by Eshima, Imai, and Sasaki (2023). Since classifying and coding documents manually needs lots of time and effort, political scientists increasingly rely on fully automated content analysis based upon machine learning models (Grimmer and Stewart 2013). In particular, researchers have frequently used probabilistic topic models to explore the associations between identified topics and meta-information like, in our case, macroeconomic policy domains (e.g., Grimmer 2010; Roberts, Stewart, and Airoldi 2016). The semi-supervised estimations by the keyATM model enable us to classify the topics using keywords that the researcher specifies *ex ante*. We rely on this approach to operationalize

¹⁵ We use R package kaigiroku to access to the Diet Library's API (https://kokkai.ndl.go.jp/api.htmll).

	Distribution Topic		Fiscal S Top	tability pic	Supply Growth	y-side Topic
Social Welfare	Education	Pension	Tax	Fiscal	Construction	Public works
society welfare equity benefit	education child student	pension	tax consumption_ tax tax increase burden	deficit government_ bond fiscal	road construction shinkansen	employment public project land

Table 2: Topic-identifying keywords

the degree of the policy discussion. Referring to the classification by Catalinac (2016) and Eshima, Imai, and Sasaki (2023), we identify 18 categories of policy domains that are not exclusive to economic policies. In the topic model estimation, we also include five topics without keywords to exclude the themes in texts that we cannot identify with the keywords.

Lastly, we aggregated into three macroeconomic goals: policy domains on *Public Work* and *Construction* for Supply-side growth, *Social Welfare*, *Pension*, and *Education* for Distribution, and *Tax* and *fiscal* for Fiscal stability. The selected 7 to 13 keywords to identify these policy domains are listed in Table 2.

Dependent Variable: Document-Topic Distribution

Our dependent variable is the proportions of the speech amounts of each policy goal by MPs— *Document-Topic Distribution*. Figure 3 presents the proportion of discussion on three goals for the LDP and the non-LDP by year as we set up our unit of analysis as party-year. We also create monthly data as party-month unit of analysis for estimating different time periods. In the following empirical estimations, because of the relative amount of discussion on fiscal stability in the Finance Committee, we normalize the document-topic distribution for each goal to underscore their changes over time, using the level of the document-topic distribution of each macroeconomic goal for the LDP as our outcome variable.



Figure 3: Document-Topic Distribution for three macroeconomic policies by Party-Year

We also draw the level of the document-topic distribution of each macroeconomic goal for two party-groups in the ternary plot space. The ternary plots help us understand the policy constraints in the trilemma situations and the focuses of policy areas in each period. Figure 4 presents the relative relationship between three variables: Distribution, Fiscal Stability, and Supply-side growth policy goals. The plot consists of three axes that intersect at a central point, with each axis representing one of the variables.

The plot shows the positions of the LDP and non-LDP based on their proportion of each policy discussion. For example, a party with a strong emphasis on supply-side growth might have a point near the top of the supply-side axis and a lower position on the other two axes, which is the top corner. Conversely, a party with a strong emphasis on distribution policy might have a point near the top of the distribution policy axis and a lower position on the other two axes, which is the lower right corner.

As we contract the plots based on the five (six including the DPJ period of 2009-2012) period of the LDP rule discussed in the historical narrative, we can observe the following trends. During the first period (1955-1972), there was a clustering of both LDP and non-LDP discussions around distribution and supply-side growth with limited attention paid to fiscal stability. Meanwhile, the debates in the second period (1973-1993) shifted more towards fiscal stability. After a period of scattered discussions in the third period (1994-2000), the period under Koizumi (2001-2008) put focus on fiscal stability and supply-side growth¹⁶. Under Abenomics (2013-2022), we see a clear shift of the discussion away from fiscal stability towards supply-side growth seen in the policies of National Resilience Plan.

Explanatory Variables

Our main explanatory variable is the lag of the level of the document-topic distribution for the non-LDP. Here we ask, on each goal of the trilemma, under what conditions the LDP responds more readily to the non-LDP discussion. We expect that the LDP exploits the

¹⁶ This is, however, not consistent with our historical analysis. See Table 1).





Figure 4: Relative relationship between three macroeconomic policy discussions

policy ideas from the opposing party, and thus the policy focus by the Non-LDP in the previous year (t-1) would affect the current (t) policy focus of the LDP.

We also control for the following covariates that are linked to the policy focus among three macroeconomic goals of the LDP. As for the political factor, we include the LDP's vote share in the latest lower house election. In the economic conditions, we add the real GDP growth rate, the proportion of the amount of government debt on GDP (logged), the real GDP growth rate of the United States, the unemployment rate, and the number of deaths by a natural disaster, which typically requires fiscal, distributional and construction responses. All variables are lagged for one year.

Preliminary Results

Estimation for All Years under the LDP Administration

Table 3 presents the results of OLS regression models for the relations between the LDP's focus on each macroeconomic goal and non-LDP's discussion in the previous year. We set the outcome variables in three measures of the LDP's focus on macroeconomic goals: demand growth, fiscal stability, and supply growth. The primary independent variables are the lag of the level of the document-topic distribution of each macroeconomic goal for non-LDP. We estimate all years under the LDP administration from 1956 to 2022 and exclude years under the DPJ administration from 2009 to 2012.

Each column in Table 3 corresponds to a separate regression model, including three models with three different outcomes. The coefficients of interest are presented in the first row of each regression model. The coefficients show the effect of the independent variables on the dependent variables after controlling for other factors. The standard errors are presented in the second row of each regression model.

The results suggest that the lagged non-LDP's discussion has a positive and statistically significant effect at 5 % level on the LDP's discussion across three macroeconomic goals. We

				Outcome var:	iable: LDF	"'s discussion			
		Model 1			Model 2			Model 3	
	Distribution	Fiscal Stability	Supply-side Growth	Distribution	Fiscal Stability	Supply-side Growth	Distribution	Fiscal Stability	Supply-side Growth
Non-LDP's discussion	0.526^{***} (0.113)	0.687^{***} (0.123)	0.776^{***} (0.120)	0.401^{***} (0.127)	0.648^{***} (0.126)	0.688^{***} (0.118)	0.308^{**} (0.134)	0.574^{***} (0.142)	0.619^{***} (0.131)
LDP's vote share	0.289 (1.091)	1.246 (1.133)	2.533 (1.554)	-0.128 (1.134)	0.643 (1.212)	4.129^{***} (1.532)	-0.129 (1.149)	0.514 (1.270)	5.000^{***} (1.524)
Real GDP growth	2.167 (2.137)	-0.773 (1.772)	-3.601 (2.556)	-1.027 (2.598)	-2.651 (2.598)	2.587 (3.408)	-1.741 (2.548)	-3.380 (2.631)	2.772 (3.319)
Govt. Debt to GDP ratio				-18.170^{**} (8.917)	-11.239 (8.021)	34.771^{***} (10.763)	-17.067^{*} (9.935)	-12.267 (10.136)	49.535^{***} (14.892)
US GDP Growth				2.597 (2.759)	-0.995 (2.808)	1.272 (3.753)	2.723 (2.738)	-1.279 (2.863)	$2.994 \\ (3.668)$
Unemployment rate							-13.069 (8.126)	-5.953 (8.632)	-12.726 (11.259)
Deaths by disaster							-0.008 (0.008)	-0.008 (0.009)	-0.010 (0.011)
Constant	22.894 (48.506)	-24.114 (54.711)	-79.374 (67.409)	132.575^{*} (78.108)	63.614 (80.472)	-313.594^{***} (94.078)	178.238^{**} (79.209)	103.769 (85.118)	-378.959^{***} (93.465)
Observations	63	63	63	63	63	63	62	62	62
Note: Standard ei The years under t	rrors in parenth he DPJ adminis	teses. *p<0.1 stration are	; $*^{p<0.05}$; $*^{*}_{p}$ omitted (2009-	p<0.01 2012)					

Table 3: Effect of Non-LDP's Macroeconomic discussion on LDP's discussion

also note that the LDP's vote share has a positive and significant effect on the supply-side growth discussion, while it has no significant effect on demand growth and fiscal stability discussion. This suggests that the LDP, all else equal, increases their supply-side growth discussion when they have robust voter support in the previous elections. Likewise, the government debt to GDP ratio negatively influences the LDP's distribution discussion, whereas it positively correlates with their supply-side discussion.

In order to substantively interpret the results, Figure 5 highlights the relative risk of the LDP's discussion associated with each factor in Model 2 of Table 3. Each plotted point shows the probability of changing the LDP's focus on each macroeconomic goal when each economic and political factor changes from the 25th to 75th percentile during the sample period. The top bar in the left panel in Figure 5 indicates, all else equal, the effect of changing the non-LDP's discussion on distribution policies from less intensive (25 percentile) to intensive (75 percentile) increases the probability of increasing the LDP's discussion of distribution policies any given year by a statistically significant 60.9 % (95%)CI: 18.2% more likely to 2.2 times more likely). Likewise, the top bars in the middle and right panel in Figure 5 show the non-LDP's discussions on fiscal stability and supply-side growth. Both are positive and statistically significant; the change in non-LDP discussion increases the probability of increasing the LDP's discussion of fiscal stability and supplyside growth policies by 67.4 percent (95% CI:35.2% to 2.1 times) and 70.3 percent (95% CI: 38.4% to 2.1 times), respectively. All results support our hypothesis (Hypothesis 1) that the LDP increases its focus on the policy goal that the non-LDP increased to exploit non-LDP's policy space.

Looking at other political and economic factors, no other factors substantially change the LDP's discussion on fiscal stability goals, while changing the LDP's vote share and the government debt to GDP ratio increases the probability of altering the LDP's focus on the supply-side economic goal by a statistically significant 27.6 percent (95% CI: 6.5% to 55.2%) and 3.3 times (95% CI: 42.8% to 8.8 times), respectively. On the other hand, the increase



Figure 5: Relative risk of non-LDP's macroeconomic discussion on LDP's discussion

Note: Each plotted point shows the relative risk of changing the LDP's focus on each macroeconomic goal when each economic and political factor changes from the 25th to 75th percentile during the sample period.

Horizontal thin and thick bars are the 95% and 90% confidence intervals, respectively.

in the government debt to GDP ratio negative and statistically significant impact on the LDP's policy focus on the distribution policy.

Conditional Effects of the non-LDP discussion

We also expect the policy focus by the non-LDP may be effective under certain political and economic conditions (Hypothesis 2a and 2b). To test these hypotheses, we interact the non-LDP's discussion with the LDP vote share and GDP growth in separate estimations.

First, we reestimate Model 2 in Table 3 by interacting non-LDP's discussion with the LDP vote share. Figure 6 shows graphically the marginal effect of the non-LDP's discussion of three macroeconomic policies on the LDP's discussion contingent on the LDP vote share. The solid line is the marginal effect, and the shaded areas indicate the 95% confidence interval. The upward marginal effect means that the LDP is more likely to increase their discussion by capturing the non-LDP discussion when they have more robust voter support,



Figure 6: Conditional Effects of non-LDP's macroeconomic discussion on LDP's discussion

Note: Shaded areas are 95% confidence intervals.

while the downward marginal effect suggests that the LDP is more likely to increase their discussion when the voter support is not secured. The flat marginal effect means the effect of the non-LDP discussion on the LDP's discussion does not change by the voter support.

The left panel of Figure 6 indicates the contradicted results among three macroeconomic goals. Our hypothesis (Hypothesis 2a) predicts the downward, but positive marginal effects: the LDP is less likely to follow the non-LDP's discussion of all three macroeconomic goals under robust electoral support because the LDP does not need to capture the policy innovations from the opposing parties to gain political supports from the public. Consistent with our hypothesis, the marginal effects of all policy goals are positive and statistically

significant. However, the marginal effect of the fiscal stability goal and supply-side growth goal discussion is upward-sloping, while the distribution policy goal shows a slight downward marginal effect or almost no effect. This suggests that the LDP exploits the opportunity to increase fiscal stability and supply-side growth policies when both the voters and the opposing parties are supportive of doing so.

Likewise, the right panel of Figure 6 indicates the economic conditional effects of the non-LDP discussion. Similar to the political condition, the marginal effects of the non-LDP discussion on all policy goals are positive and statistically significant. Moreover, the directions of the slopes are also consistent with our hypothesis (Hypothesis 2a): under strong economic conditions, the LDP is more likely to follow the non-LDP's supply-side cues, while the LDP is more likely to follow the non-LDP's distribution cues under weak economic conditions. The marginal effect on the distribution policy discussion is downward sloping, while the marginal effect on the supply-side growth policy discussion is upward, suggesting that the LDP concerns more about distribution policy to gain support from the voters when the economy is in a downtrend.

Subsample Estimation Before and After 1994

As discussed above, we hypothesize that the LDP's exploitation strategy would be strengthened after the electoral reform of 1994. To test this hypothesis, we split the data into pre-1994 and post-1994. Because the sample size of the yearly data in the previous estimation is small to estimate the two periods separately, we disaggregate the document-topic distribution of each macroeconomic goal for LDP and non-LDP into monthly data. Thus, our outcome variable and the primary explanatory variable are analyzed with monthly data. As such, we also disaggregate the real GDP growth rate into quarterly data, and unemployment rate into monthly data. The rest of the explanatory variables remain in yearly data.

The results are reported in Figure 7 and Table A1 and A2. Figure 7 highlights the relative risk of the LDP's discussion associated with each factor, modeling the covariates that are



Figure 7: Relative Risk of Non-LDP's Macroeconomic Discussion on LDP's Discussion Before and After 1994

Note: Each plotted point shows the relative risk of changing the LDP's focus on each macroeconomic goal when each economic and political factor changes from the 25th to 75th percentile during the sample period.

Horizontal thin and thick bars are the 95% and 90% confidence intervals, respectively.

the same as Model 2 in Table 3 and Figure 5. We find the results do not support our expectation that the LDP should strengthen its exploitation strategy after 1994 (Hypothesis 3).

The top blue bar in the Figure 7 indicates that, all else equal, the effect of changing the non-LDP's discussion on each policies from less intensive (25 percentile) to intensive (75 percentile) increases the probability of increasing the LDP's discussion of distribution policies any given month before 1994, while the red bars indicates those effect after 1994. In the right panel, the top bars show the effect of non-LDP's discussions on supply-side growth are positive and statistically significant in both estimation periods. However, in the middle panel, the top bars indicate that the effect of non-LDP's discussions on fiscal stability is statistically significant for the pre-1994 estimation, whereas the effect is not statistically significant for the post-1994. Finally, the left panel shows that the effects of non-LDP's discussions on distribution are not statistically significant for both pre-1994 and post-1994 analysis. Thus, contrary to the hypothesis, the empirical analysis suggests that the LDP did not employ well its exploitation strategy for two of three policy goals: distribution and fiscal stability policies.

One possible interpretation of this result is that, while the LDP was largely dominant after the electoral reform in 1994, the failure of its exploitation strategy caused the regime transition to the DPJ in 2009. Since 1993, the LDP had lost their one-party dominance and was forced to find their coalition partner to maintain their regime. At the same time, the LDP split up, and many new political parties were created. These instabilities among the LDP together with the slow adoption process of the new electoral system may cause the ambiguous policy stance under the economic policy trilemma. Another instability occurred after the Koizumi administration when the prime minister changed every year, making the policy stance ambiguous. Meanwhile, the several economic shocks, including the Great Financial Crisis in 2008, the Tohoku Earthquake in 2011, and the global COVID pandemic in 2020, may have evoked the LDP's exploitation strategy, especially in the supply-side macroeconomic policy under large fiscal stimulus packages.

Conclusion

How do leading political parties maneuver their macroeconomic policies, especially the allocation of fiscal resources, so that they can continue to stay in power in the face of a changing economic environment? This paper is the first cut in examining the shifting policy choices in an evolving economy with a long-term view. We have developed a theory of economic policy trilemma, where the parties can choose only two of the three policy goals among supply-side growth, distribution and fiscal stability to understand the options and constraints that these parties face in tackling the economic challenges and appealing to the voters. In the case of Japan, the LDP has ruled the country as its leading party for over seven decades as the country's economy transformed from a war-ravaged struggling one, to the economic juggernaut to then a mature economy trying to revive growth. By examining the Diet debates using text analysis, we found that the LDP has indeed followed the focal debates conducted by the non-LDP, and worked to capture the emerging issues particularly related to distribution policies at hard times. Meanwhile, the regression results show a significant feature that the LDP has advocated its clientelistic supply-side policies when the times are good. With the fiscal window opening either under crisis-led fiscal stimulus or very loose monetary policy, the LDP was able to choose both the supply-side growth policy and distribution policy, further narrowing the economic policy space available to the opposition parties.

After 1994, the LDP's ability to implement an effective exploitation strategy became constrained where the LDP ended up opting for increasingly ambivalent positions among the triple goals. It is only with the occasional but massive fiscal stimulus packages and relying on its traditional supply-side strategy has the LDP (in the form of a coalitional government) been able to maintain its electoral lead. The party's first electoral defeat in 54 years to the DPJ was an illustration of such difficulty.

Policy implication of this study, therefore, is that it is electorally imperative to get the mandates of economic policy trilemma right. Failing to take advantage of the leading party's prerogative to straddle the policy priorities and exploit the oppositions' potential electoral gains in such a context will cost the leading party dearly. From this perspective, Prime Minister Kishida's signature economic policy paradigm called "New Form of Capitalism" is running such a risk. His administration advocates the "virtuous cycle between distribution and growth," while the actual policy does not seem to capture any policy opening advocated by opposition parties. Meanwhile, Japan's macroeconomic space in 2023 is tightening with rising inflation rate and ballooning fiscal debt.

This project is at its early stage, where we apply the concept of economic policy trilemma to the longevity of certain incumbent parties by detecting their successful economic policy and strategies. Given the three-way trade-off among competing policies under resource constraints (with the option of loosening such fiscal resource constraints), the political parties face choices that determine their electoral fate. We see vast potential in theorizing these trilemma dynamics and their implication on electoral strategy. It is still premature to discuss conclusively that the secret of the LDP's successes lies exclusively in this maneuver, but we hope to continue investigating this and related hypotheses. For that, we still have quite a bit of work in front of us. In our next iterations, we will address the following three major tasks.

First, we need to clarify further the dichotomy between supply-side/growth-oriented policies versus distribution policies. There are policies that can actually contribute to both growth and distribution (certain consumer-oriented policies), while it is difficult to categorize other important economic policies such as economic liberalization, in one category as they have multiple effects from stimulating consumption through deregulation to restructuring the economy. At this point, we assume supply-side growth is mostly emerging from the LDP's clientelistic policies. Nonetheless, infrastructure investment, a typical supply-side measure of building roads and bridges in the rural areas (where the LDP support is the strongest), can certainly have contributed to the redistribution of resources to the deprived regions.

Second, we find that the Diet debates database is a valuable resource for analysis. However, we have not thus far investigated why the Diet members say what they say at the committee sessions. So far, we take them at face value as they represent policy positions of these politicians. Meanwhile, these discussions could also be a way to present politicians' other concerns such as establishing intra-party consensus or a pro forma performance of their expertise. These words can also emerge in response to hot topics in the media or a way for each politician in appealing to their constituents (Kage 2017, 85-86). It would be important for us to dig deeper into the data as we push this analysis forward.

Third, our ambition is to move beyond the case of Japan to see if this economic policy trilemma and the incumbent party's agenda manipulation could actually lead them to survive tough economic times and shifting electoral challenges. In the world after the global financial crisis and the COVID-19 crisis, when fiscal stimulus was the key instrument of macroeconomic policy, we believe that merging the analysis of fiscal politics with the distributional and electoral strategy would lead to an important political insight for democracies.

References

- Amano, Kenya, and Saori Katada. 2022. "Chapter 17, Economic Policy Trilemma: Macroeconomic Politics in the 2021 Election." In Japan Decides 2021, ed. Robert Pekkanen, Dan Smith, and Steve Reed. Palgrave pp. 255–274.
- Block, Steven A. 2002. "Political Business Cycles, Democratization, and Economic Reform: The Case of Africa." *Journal of Development Economics* 67(1): 205–228.
- Boix, Carles. 1998. Political Parties, Growth and Equality: Conservative and Social Democratic Economic Strategies in the World Economy. Cambridge: Cambridge University Press.
- Breunig, Christian, and Marius R. Busemeyer. 2012. "Fiscal Austerity and the Tradeoff between Public Investment and Social Spending." *Journal of European Public Policy* 19(6): 921–938.
- Broadbent, Jeffrey. 2002. "Comment: The Institutional Roots of the Japanese Construction State." ASIEN: The German Journal on Contemporary Asia 84: 43–46.
- Calder, Kent E. 1988. Crisis and Compensation: Public Policy and Political Stability in Japan. Princeton University Press.
- Catalinac, Amy. 2016. "From Pork to Policy: The Rise of Programmatic Campaigning in Japanese Elections." The Journal of Politics 78(1): 1–18.
- Catalinac, Amy, Bruce Bueno de Mesquita, and Alastair Smith. 2020. "A Tournament Theory of Pork Barrel Politics: The Case of Japan." *Comparative Political Studies* 53(10-11): 1619–1655.
- Cox, Gary W., and Frances Rosenbluth. 1994. "Reducing Nomination Errors: Factional Competition and Party Strategy in Japan." *Electoral Studies* 13(1): 4–16.
- Curtis, Gerald. 1971. Election Campaigning, Japanese Style. Columbia University Press.
- Curtis, Gerald, and Masumi Ishikawa. 1983. Doken Kokka Nippon [Construction State Japan]. Kobun-sha.
- Dore, Richard. 1994. "Equality-efficiency Trade-offs: Japanese Perceptions and Choices." In *The Japanese Firm. Sources of Competitive Strength*, ed. Masahiko Aoki, and Richard Dore. Oxford: Oxford University Press pp. 379–392.
- Eshima, Shusei, Kosuke Imai, and Tomoya Sasaki. 2023. "Keyword-Assisted Topic Models." American Journal of Political Science.
- Fukuda, Shinichi, and Sou Kei. 2002. "Nihon ni okeru zaisei seisaku no inpakuto: 1990 nendai no ibento sutadi." Nihon ginko kinyu kenkyujo, Kinyu Kenkyu.
- Fukui, Haruhiro, and Shingo N. Fukai. 1996. "Pork Barrel Politics, Networks, and Local Economic Development in Contemporary Japan." Asian Survey 36(3): 268–286.

- Golden, David G., and James M. Poterba. 1980. "The Price of Popularity: The Political Business Cycle Reexamined." *American Journal of Political Science* 24(4): 696–714.
- Grimmer, Justin. 2010. "A Bayesian Hierarchical Topic Model for Political Texts: Measuring Expressed Agendas in Senate Press Releases." *Political Analysis* 18(1): 1–35.
- Grimmer, Justin, and Brandon M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21(3): 267–297.
- Hoshi, Takeo, and Phillip Y. Lipscy, eds. 2021. The Political Economy of the Abe Government and Abenomics Reforms. Cambridge University Press.
- Inoguchi, Takashi, and Motoaki Iwai. 1987. Zoku Giino Kenkyu: Jimintou Seiken wo Gyujiru Shuyakutachi. Nihon Keizai Shinbun Shuppan.
- Kage, Rieko. 2017. Who Judges?: Designing Jury Systems in Japan, East Asia, and Europe. Cambridge University Press.
- Kaihara, Hiroshi. 2008. "Japan's Political Economy and Koizumi's Structural Reform: A Rise and Fall of Neoclassical Economic Reform in Japan." *East Asia* 25: 389–405.
- Key, V. O. 1966. *The Responsible Electorate*. The Belknap Press of Harvard University Press.
- Kusano, Atsushi. 2005. Rekidai Shusho no Keizai Seisaku Zen deta [The Entire Database of the Successive Prime Ministers' Economic Policies]. Kadokawa Tema 21 Tokyo: Kadokawa Shoten.
- Lohmann, Susanne. 1998. "Rationalizing the Political Business Cycle: a Workhorse Model." *Economics and Politics* 10(1): 1–17.
- Maeda, Ko. 2010. "Factors behind the Historic Defeat of Japan's Liberal Democratic Party in 2009." Asian Survey 50(5): 888–907.
- Muramatsu, Michio, and Wataru Kitamura. 2010. "Zaisei akaji no Seijigaku [Political Analysis of Fiscal Deficit]." In Kozo Mondai to Kisei Kanwa; Buburu defure kino nihon keizai to keizai seisaku [Structural Problem and Deregulation: The Japanese Economy and its economic policies under the Bubble and Deflation Era], ed. Juro Teranishi. Tokyo: Keio University Press pp. 149–185.
- Noble, Gregory W. 2010. "The Decline of Particularism in Japanese Politics." *Journal of East Asian Studies* 10(2): 239–273.
- Pempel, T. J. 1982. Creative Conservatism: Public Policy in Japan. Philadelphia: Temple University Press.
- Pempel, T. J. 1998. Regime Shift: Comparative Dynamics of the Japanese Political Economy. Ithaca, NY: Cornell University Press.

- Pempel, T. J. 2010. "Between Pork and Productivity: The Collapse of the Liberal Democratic Party." *The Journal of Japanese Studies* 36(2): 227–251.
- Pempel, T. J., ed. 1990. Uncommon Democracies: The One-Party Dominant Regimes. Ithaca, NY: Cornell University Press.
- Pierson, Paul. 2001. "Coping with Permanent Austerity Welfare State Restructuring in Affluent Democracies." In *The New Politics of the Welfare State*. Oxford University Press pp. 410–456.
- Polsby, Nelson W. 1984. Political Innovation in America: The Politics of Policy initiation. New Haven, CT: Yale University Press.
- Przeworski, Adam, and Michael Wallerstein. 1988. "Structural dependence of the state on capital." American Political Science Review 82(1): 11–29.
- Reed, Steven R. 2022. "Patronage and Predominance: How the LDP Maintains Its Hold on Power." Social Science Japan Journal 25(1): 83–100.
- Roberts, Margaret E., Brandon M. Stewart, and Edoardo M. Airoldi. 2016. "A Model of Text for Experimentation in the Social Sciences." *Journal of the American Statistical Association* 111(515): 988–1003.
- Rosenbluth, Frances McCall, and Michael F. Thies. 2010. Japan Transformed: Political Change and Economic Restructuring. Princeton University Press.
- Sakiyama, Tateki. 2012. "18-cho en nni tasshita higashi nihon daishinnsai no fukkyu fukou keihi: motomerareru shinsai karano fukkyu fukkou to zaisei kiritsu no iji." *Rippouto Chosa* (June).
- Shinoda, Tomohito. 2012. "Japan's Failed Experiment: The DPJ and Institutional Change for Political Leadership." Asian Survey 52(5): 799–821.
- Swank, Duane. 1992. "Politics and the Structural Dependence of the State in Democratic Capitalist Nations." American Political Science Review 86(1): 38–54.
- Tanaka, Hideaki. 2014. "Economic and Fiscal Management under the Democratic Party of Japan (DPJ) Administration." OECD Journal on Budgeting 14(1): 9–33.
- Yoshioka, Shinji, and Hirofumi Kawasaki. 2016. Japan's High-Growth Postwar Period: The Role of Economic Plans. Technical report ESRI Research Note No.27 Tokyo: .

		Out	come variable	e: LDP's disci	ussion (Mor	ithly Data fro	om 1956 to 19	93)	
		Model 1			Model 2			Model 3	
	Distribution	Fiscal Stability	Supply-side Growth	Distribution	Fiscal Stability	Supply-side Growth	Distribution	Fiscal Stability	Supply-side Growth
Non-LDP's discussion	0.122^{*} (0.067)	0.163^{***} (0.056)	0.178^{***} (0.060)	$0.102 \\ (0.067)$	0.156^{***} (0.056)	0.170^{***} (0.061)	0.091 (0.068)	0.156^{***} (0.057)	0.178^{***} (0.062)
LDP's vote share	0.419 (1.533)	-2.973^{***} (0.999)	-0.140 (0.902)	-1.898 (1.754)	-2.282^{**} (1.133)	-0.803 (1.040)	-2.426 (2.338)	-3.658^{**} (1.506)	-0.492 (1.295)
Real GDP growth	2.506 (2.674)	-2.978^{*} (1.710)	3.627^{**} (1.564)	-1.190 (3.250)	-3.432 (2.088)	3.212^{*} (1.915)	-1.907 (3.849)	-2.273 (2.449)	3.754^{*} (2.133)
Govt. Debt to GDP ratio				-38.730^{***} (14.493)	8.795 (9.224)	-9.651 (8.513)	-42.639^{*} (25.320)	-12.349 (16.023)	-7.333 (13.930)
US GDP Growth				$0.234 \\ (3.703)$	4.005^{*} (2.372)	-1.547 (2.181)	-0.819 (3.812)	3.534 (2.429)	-0.826 (2.111)
Unemployment rate							-3.475 (34.915)	29.378 (22.334)	3.092 (19.310)
Deaths by disaster							0.003 (0.011)	-0.005 (0.007)	-0.002 (0.006)
Constant	80.391 (72.151)	278.665^{***} (49.002)	37.542 (42.671)	342.244^{***} (121.342)	206.874^{***} (77.909)	109.125 (71.728)	397.977^{***} (140.935)	283.269^{***} (90.048)	73.187 (77.607)
Observations	371	371	371	371	371	371	361	361	361

Table A1: Effect of Non-LDP's Macroeconomic discussion on LDP's discussion Before 1994

Note: Standard errors in parentheses. *p<0.1; **p<0.05; ***p<0.01

		Outo	some variable	: LDP's discu	ussion (Mo	nthly Data fr	om 1994 to 20	022)	
		Model 1			Model 2			Model 3	
	Distribution	Fiscal Stability	Supply-side Growth	Distribution	Fiscal Stability	Supply-side Growth	Distribution	Fiscal Stability	Supply-side Growth
Non-LDP's discussion	-0.093 (0.103)	-0.031 (0.062)	0.291^{***} (0.070)	-0.101 (0.103)	-0.042 (0.063)	0.236^{***} (0.069)	-0.111 (0.104)	-0.033 (0.063)	0.199^{***} (0.069)
LDP's vote share	-0.747 (1.175)	-0.100 (0.922)	11.678^{***} (2.204)	0.700 (1.701)	-0.512 (1.321)	2.856 (3.011)	-0.620 (2.008)	-0.191 (1.564)	-2.351 (3.522)
Real GDP growth	-0.239 (2.390)	0.646 (1.851)	1.862 (4.374)	-1.550 (3.457)	2.781 (2.699)	5.777 (6.123)	-1.314 (3.460)	2.507 (2.704)	6.417 (6.050)
Govt. Debt to GDP ratio				-22.959 (23.622)	0.224 (18.383)	160.337^{***} (42.419)	-14.696 (26.011)	2.813 (20.232)	205.257^{***} (46.521)
US GDP Growth				1.288 (4.635)	-3.676 (3.659)	-0.008 (8.211)	0.627 (4.677)	-2.836 (3.701)	-1.515 (8.178)
Unemployment rate							-9.047 (6.186)	6.298 (4.811)	-27.837^{**} (10.932)
Deaths by disaster							-0.001 (0.002)	-0.001 (0.001)	-0.004 (0.003)
Constant	78.777 (50.718)	58.793 (40.308)	-398.279^{***} (93.371)	132.153 (94.539)	82.727 (75.509)	-834.476^{***} (169.914)	184.262^{*} (104.318)	29.360 (83.620)	-720.704^{***} (183.104)
Observations	239	239	239	239	239	239	239	239	239
Note: Standard en The years under t	rrors in parenthe he DPJ adminis	eses. *p<0.1 stration are	; ** $p<0.05$; *** $_{F}$ omitted (Septer	<0.01 mber, 2009 to №	Vovember 20	12)			

Table A2: Effect of Non-LDP's Macroeconomic discussion on LDP's discussion After 1994