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Design, reporting, and broader impact: COVID-19 budgeting in Singapore

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ABSTRACT

As governments undertake extraordinary policy measures in response to the COVID-19 pandemic, prevailing institutional factors can potentially compromise implementation success and subsequent outcomes. This paper illustrates this issue by examining Singapore's budgetary response to COVID-19. The analysis reveals the fiscal response of the Singapore government to be a near-exemplification of crisis budgeting which, at the same time, entails a considerable drawdown from the country's national reserves to finance the forecasted budget deficit. However, a revision of the budget balances vis-à-vis international reporting standards finds that: (i) the budget deficit is substantially smaller; and (ii) the influence of the fiscal injections on the economy – the multiplier effect – is likely smaller than what official estimates imply. The primary emphasis here is that policymakers need to be conscious of the contemporaneous influence of prevailing institutional factors on policy effectiveness. This takes on greater significance for effective crisis-management and recovery amidst the continued uncertainty about COVID-19 and developments in international trade and resource flows in the medium-term.

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1. Introduction

This paper makes two arguments. The first is that prevailing institutional factors, referring to institutional specificities like the organizational/hierarchical structure and operational procedures and practices, can have a significant influence and impact on policy effectiveness. This can be the case despite a policy's design being consistent with the wider literature. Thus, it argues the need for policymakers to be aware of how these factors can potentially affect policy effectiveness.

The second is that, in light of prevailing reporting practices, the impact of Singapore's budgetary responses to the coronavirus disease 2019 (COVID-19) is likely to be more muted than what the size of the reported fiscal commitment may suggest.

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In particular, adjusting for the reporting idiosyncrasies, it finds the size of the budget deficit to be significantly smaller than official estimates.

Public expenditures internationally increased in line with curbs on the socioeconomic activity as governments sought to manage the transmission and socioeconomic effects of COVID-19.¹ Besides the annual government budget for fiscal year (FY) 2020 on February 18, 2020, Singapore introduced four additional budgetary packages on March 26, 2020, April 06, 2020, May 26, 2020, and August 17, 2020 to manage the impact of socioeconomic disruptions arising from the pandemic.² The fiscal commitment of the five budgetary announcements in response to COVID-19 totaled SGD 100.9 billion.

Briefly, the initial budgetary allocations in the FY2020 budget were largely aimed at managing transmissions and treatment of COVID-19. In the subsequent supplementary fiscal packages, key objectives were to minimize increases in unemployment by ensuring the continued operations of companies and job creation by the public sector, and limit the extent of socioeconomic disruption, especially economic hardship, due to disruptions from COVID-19.

Interim estimates as of October 05, 2020 project an overall fiscal deficit of SGD 74.2 billion. This emerges from official estimates of SGD 82.3 billion in revenues, and expenditures totaling SGD 156.6 billion. The size of the budgetary allocations and resulting deficit have the following implications.

Firstly, crises provide cause for deviations from regular budgeting practices and requirements to reduce the lag between formulation and delivery. However, the extent that the budgetary responses achieve the intended main fiscal objectives also depends on the fiscal policy instruments employed.

Secondly, the forecasted budget deficit is to be financed from budget surpluses accumulated over the previous government's term in office and withdrawal requests totaling SGD 52 billion from the country's national reserves.³ In the only previous withdrawal in 2009, the amount withdrawn was returned in 2011 (Chew 2017). In view of the size of the current requests, there will be concerns if similar is practised and, if so, its impact on subsequent budgets.⁴

Thirdly, it is intuitively appealing to draw inference about the budget's impact on the economy based on the budget balance – a seemingly-expansionary budget in this case. However, caution needs to be exercised when doing so as the prior literature on Singapore's budgetary reporting. For example, Kwan, Bali, and Asher (2016), report subtle differences in individual reporting practices against international reporting standards like the IMF's *Government Finance Statistics Manual* (GFSM). These serve to misrepresent the fiscal position and lead to erroneous inferences about the budget's wider impact.⁵

The analytical basis of this paper draws on Pinto (1981) who distinguishes between the focus of public sector budgeting in public economics vis-à-vis public administration. The former puts emphasis on the tradeoffs between competing allocations of fiscal resources in line with society's preferences. For the latter, some attention is placed on the contemporaneity of social preferences and institutional constraints. Resource allocations are made such that the budget's objectives can be viably implemented and achieved vis-à-vis the cross-objectives of society's wants and institutional limits.⁶

However, that there may be unanticipated outcomes emerges from the influence of other institutional factors such as the institutional structure or operating procedures/practices whose effects are not immediately observable and/or identifiable. As such, these are not considered during the budgeting process (Pinto 1981, 28–29). This paper shows that this is the case with Singapore’s budgetary responses to COVID-19, pertaining specifically to the prevailing reporting practices of the Singapore budget.

Summarily, reviewing the budgetary announcements and measures, this paper finds Singapore’s budgetary response to be a near-exemplar of crisis budgeting. The main features and characteristics of crisis budgeting are discussed in the next section. However, the budget continues to exhibit reporting caveats which serve to overstate the size of the budget deficit and, correspondingly, understate the availability of fiscal space.⁷

A limited revision of the budget balances following the GFSM’s reporting guidelines finds that the budget deficit is potentially smaller than official projections. More significantly, the revised budget balances suggest that the withdrawal necessary from the national reserves to finance the budget is only about 10% of the amount tabled. The revised estimates also suggest that the impact of the budgetary measures on the economy – the multiplier effect – will be smaller than what official estimates may imply.

Thus, as governments undertake further and considerably aggressive fiscal commitments in response to the wide-ranging effects of COVID-19, this paper emphasizes the essentiality of recognizing the role of *existing* institutional factors in ensuring that the intended policy objectives can be achieved. Otherwise, effective implementation can be compromised and with it, the extent of crisis management and post-crisis recovery.⁸

The rest of the paper is organized as follows. The next section reviews the range of measures introduced in the budget in response to COVID-19 and the correspondence to crisis budgeting. Section 3 discusses the official estimates of the fiscal position and reporting nuances. A revision of the budget balances following the GFSM is undertaken in Section 4. This allows for a better assessment of the extent of fiscal space available. The likely impact of the budget in light of the revised budget balances is also discussed in this section. The final section reiterates the main findings and arguments of the paper.

2. Covid-19 budgetary response

2.1. Budgetary measures

This subsection reviews the major allocations in the budget in response to COVID-19. Further details are found in the annexes of the ministerial statements for the respective budgetary announcements.⁹

2.1.1. Budget 2020 – Unity budget

The Unity Budget was read on February 18, 2020 and provided for SGD 6.4 billion toward the management of COVID-19 and its socioeconomic impact. Of this, SGD 800 million was further allocated to the Ministry of Health’s budgetary allocations for the treatment and management of COVID-19 cases, and SGD 30 million to community assistance organizations.

To facilitate employment retention, a new Jobs Support Scheme (JSS) provided companies with a one-off wage subsidy of 8% of the first SGD 3,600 of gross monthly wages for the final three months of 2019 to employees who are Singapore citizens or Permanent Residents. Additional allocations were made for a one-off increase in the subsidy rate and reduction in eligibility to the Wage Credit Scheme (WCS).

Companies received a fixed-rate corporate income tax rebate of 25% (subject to a cap of SGD 15,000) and commercial property tax rebates ranging from 10 to 30%. These were supplemented by additional grants, and fee and rental waivers to specific industries. In addition, provisions were made for greater risk-sharing by the government on various enterprise-lending schemes (loan guarantees).

Citizens receive a lump-sum transfer of between SGD 100 and SGD 300. Lower-income groups, households with children, and the elderly receive additional grants in cash or in kind. Provisions were also made for an additional one-time supplementary payment of 20% of gross wages for beneficiaries under the Workfare Income Supplement Scheme (WIS) and various user-charge rebates.

2.1.2. Supplementary budget 1 – Resilience budget

This was read on March 26, 2020 and considerably expanded on the provisions in response to COVID-19 in the Unity budget with estimated provisions of SGD 48.4 billion. In particular, JSS wage subsidies were increased to between 25 and 75% following a tiered classification of industrial sectors for a higher gross monthly wage ceiling of SGD 4,600, and for 9 months until July 2020.¹⁰

To further reduce firm operating costs, commercial property tax rebates were increased to between 30 and 100%. This was supplemented by additional rental and fee waivers and sector-specific grants. An additional SGD 20 billion was allocated as loan capital to facilitate an anticipated increase in enterprise borrowing. This was accompanied by increased risk-sharing by the public sector in various enterprise-loan schemes. Increased allocations and matching grants for job creation, skills re-training, and community assistance organizations were budgeted for to encourage citizenry hiring.

Lump-sum transfers to citizens were tripled to SGD 300-SGD 900 with corresponding increases to the additional grants to lower-income groups, families with children, and the elderly. The one-time WIS wage supplement was increased to SGD 3,000 for all beneficiaries.

As there are no statutorily-determined unemployment benefits in Singapore, additional provisions were made for financial assistance schemes for citizens and permanent residents who were rendered unemployed or experienced severe income loss (defined as a reduction of at least 30%) because of circumstances due to COVID-19. The latter category includes self-employed individuals.

2.1.3. Supplementary budget 2 – Solidarity budget

The Solidarity Budget was delivered on April 06, 2020. Prior to its reading, the central bank – the Monetary Authority of Singapore (MAS) – instituted loan repayment deferral measures for individuals and small-medium enterprises, and low(er) cost lending facilities for enterprises and banks.

The emphasis of this budget was to limit economic hardship and job losses from COVID-19 at a budgeted SGD 5.1 billion. Major provisions in the announcement include allocations for an SGD 300 *unconditional* transfer to all citizens. The wage subsidy under the JSS was increased to 75% for *all* companies for the first SGD 4,600 in gross monthly wages for April and May 2020, with corresponding waivers to foreign worker levies. Eligibility requirements to various assistance schemes were further reduced to enable greater access, particularly by the self-employed, with corresponding increases in budgetary allocations.

More significant with this announcement were the tabling and passing of the *COVID-19 (Temporary Measures) Act 2020* (the Act) and the imposition of the “circuit breaker” measures – a *de facto* lockdown – on April 07, 2020. The Act is significant in that, besides regulating the conduct of the socioeconomic activity, it included stipulations on the conduct of commercial and economic responsibility and liability that are attributable to circumstances due to COVID-19.¹¹

For this and the Resilience budget, withdrawal requests of SGD 4 billion and SGD 17 billion from the national reserves were respectively tabled to finance the budget’s provisions.

2.1.4. Supplementary budget 3 – Fortitude budget

The Fortitude Budget was read on May 26, 2020, a week before a scheduled phased (staggered) reopening of the economy on June 02, 2020. The focus was to minimize unemployment increases by limiting the cumulative economic impact of the circuit breaker period and beyond on firms,¹² and on job creation and skills upgrading. Estimated provisions for this budget are SGD 33 billion, part of which is to be financed by an SGD 31 billion request from the national reserves.

Major allocations in this budget include SGD 3.8 billion for extensions of the various schemes after the circuit breaker measures were extended on April 21, 2020,¹³ SGD 2 billion for furthering job creation and training/retraining. This is supplemented by an increase in the hiring incentives of citizens across all age groups and SGD 2 billion for additional rental relief and property tax rebates to commercial tenants.

Citizen households each received a one-off utility rebate of SGD 100 and matching grants were allocated to community services and social support schemes to enable extended access and assistance.¹⁴

SGD 2.9 billion was provisioned for an extension of the JSS subsidy for companies unable to resume operations from June 02, 2020 until the earlier of August 2020 or when they resume operations. For these companies, the subsidy rate varies between 25 and 75% for an expanded tiered classification of industrial sectors. This was complemented by foreign worker levy rebates for June and July, sector-specific grants, and additions to enterprise lending schemes.

Notably, a further SGD 13 billion was allotted to the government’s Contingencies Funds in this budgetary announcement. This is besides the SGD 3 billion typically allocated (Ministry of Finance 2020, Fortitude Budget, 23).

2.1.5. Ministerial statement

This announcement committed a further SGD 8 billion on August 17, 2020. The provisions are to be financed by reallocations from existing development projects and expenditures that were delayed because of the disruptions from COVID-19.

Allocations were made for an extension of the JSS until March 2021, but at reduced levels of support following a tiered ranking of industries. SGD 1 billion was allocated for a new job creation programme to encourage the employment of the citizen labor force. Firms receive a wage subsidy of between 25 and 50% for new citizenry hires for a year. Additional fiscal injections were provided to the aerospace, aviation and tourism sectors which were the most severely affected by the disruptions from COVID-19.

Additional provisions were made for extensions to the eligibility and criteria of the one-off WIS wage supplement and to public assistance grants for individuals rendered unemployed or experienced income loss as a result of COVID-19.

Another ministerial statement was made on October 05, 2020 announcing extensions to several of the existing wage support and job creation schemes, and updates on the continued reopening of the economy with no changes to the interim budget estimates and position that were announced on August 17, 2020.

2.2. Crisis budgeting

The budget is laudable for the intensity of responses – four sets of budgetary measures in fourteen weeks – and the quantity of fiscal resources committed to managing the impact of COVID-19. This is unusual in Singapore’s public financial management as supplementary budgets are seldom introduced and, if so, the additional fiscal commitments were often considerably measured. Conceptually, the budget reflects most of the characteristics and features of a government’s budgetary response to a crisis – “crisis budgeting.”

Schick (2010) characterizes crisis budgeting as where governments introduce and implement budgetary measures that differ considerably from the practices in regular budget cycles. These include large and frequent budgetary adjustments, little influence of previous budgeting precedents on the current, increased provisions for grants and assistance to households and firms, and substantial increases in the budget deficit and debt burden.

A further feature of crisis budgeting is that it typically requires the substantial use of the following classes of instruments in the fiscal response: (i) the provision of grants; (ii) loans; (iii) guarantees; (iv) extra-budgetary entities; and (v) central bank fiscal activities (Schick 2010, Section 1).

It is clear from budgetary measures introduced that the range of fiscal instruments highlighted was quite comprehensively utilized in response to COVID-19. The exception is that there was no establishment of extra-budgetary entities. However, this is likely due to the extensive commercial and regulatory roles undertaken by the various statutory boards in Singapore. These public sector agencies likely limited the likelihood of any “too big to fail” companies emerging.¹⁵ Thus, the budgetary response to the management of COVID-19 is a near-archetype of crisis budgeting.

3. Fiscal position

3.1. Overview

Table 1 collates and presents the official fiscal positions following each budgetary announcement.¹⁶ It is clear that the sizable estimates of the official budget deficit arise from lower revenue estimates, higher expenditures, and increased discretionary transfers to households and businesses (“special transfers excluding top-ups to endowment and trust funds”). However, the specific form(s) that these take, for example, from tax expenditures/rebates, fiscal injections, etc., is ambiguous due to a lack of disaggregated reporting.

Additionally, that the net investment returns contribution has remained unchanged over the five budgetary announcements suggests that the amount acquisitioned is an administered amount.¹⁷

It was announced in the respective ministerial statements that the deficit is to be financed by the accumulated surpluses of the current government’s previous budgets and withdrawals of up to SGD 17 billion for the Resilience Budget, SGD 4 billion for the Solidarity Budget, and SGD 31 billion for the Fortitude Budget from Singapore’s national reserves. The immediate implication here is that there will be minimal increases in government debt needed to finance the budget.

However, the extended influence of the projected deficit is ambiguous since, as mentioned earlier, it is unclear how/if the withdrawals will feature in future budgetary planning. More importantly, several reporting nuances of the Singapore budget serve to undermine the accuracy of the budget balances in Table 1.

3.2. Reporting nuances

Details and idiosyncrasies of the Singapore budget are well-discussed in the literature, for example, Blöndal (2006); Kwan, Bali, and Asher (2016). The following recurring practices are directly relevant here: (i) the budget is reported in cash terms but accrual accounting is practiced for decision-making; and (ii) divergence in the treatment of land rents, investment income, budgetary allocations to trust funds, and provisions for loans and guarantees from international reporting standards – the GFSM in this case.

Cash reporting provides an intuitive and accessible illustration of the budget position and priorities. But it also implies that all budgetary allocations will be disbursed in the given year. This yields erroneous impressions of the government’s fiscal position if the budget allocations also comprise of multi-year allocations, government-financed loans, and guarantees. The latter are more appropriately included on an accrual basis instead (Schick 2010, Section 1). This is besides that, procedurally, loans and guarantees are reported separately from current revenue and expenditure estimates.

Next, there is a long-standing practice of reporting land rents as capital income and excluding them from current revenues, for example, IMF (2015, paragraph 35). However, land sales in Singapore largely refer to the time-limited leasing of land parcels by the government for development and are, in substance, akin to a differential excise tax that companies include in their production costs and pricing. In the absence

Table 1. Revenue and expenditure (in SGD billion)^a.

	Budget 2020 (Unity budget)	Budget supplement 1 (Resilience budget)	Budget supplement 2 (Solidarity budget)	Budget supplement 3 (Fortitude budget)	Ministerial statement (05 oct 2020) ^b
Operating revenue	76.0	70.8	70.4	68.8	63.7
Less:					
Total expenditure	83.6	89.1	89.8	110.5	102.1
Primary surplus/(Deficit)	(7.6)	(18.3)	(19.4)	(41.7)	(38.3)
Less:					
Special transfers	22.0	39.6	43.6	51.2	54.5
Excluding top-ups to endowment and trust funds	4.7	22.3	26.3	33.9	37.1
Basic surplus/(deficit) ^c	(12.3)	(40.5)	(45.6)	(75.6)	(75.5)
Top-ups to endowment and trust funds	17.3	17.3	17.3	17.3	17.3
Add:					
Net investment returns contribution ^d	18.6	18.6	18.6	18.6	18.6
Overall budget surplus/(Deficit)	(10.9)	(39.2)	(44.3)	(74.3)	(74.2)

^aMinistry of Finance (2020).

^bAs mentioned in Section 2.1.5, the interim budget estimates and position for the October 05, 2020 Ministerial Statement is unchanged from that reported on August 17, 2020. As such, only the October 05 budget estimates are reported here.

^cThis is obtained as (Primary surplus/(Deficit) – Special transfers excluding top-ups to endowment and trust funds). This is defined to give an indication of the annual impact of the government's revenue and expenditures on the economy. However, it has no international equivalent. For this and other definitions of terms in the budget, see: <https://data.gov.sg/dataset/government-fiscal-position-annual>

^dNet investment returns contribution is from the returns to the government's investments among its assets of SGD 1.1 trillion (Ministry of Finance 2020). Up to half of the investment returns may be acquired for budgetary purposes, but neither total returns nor the share that was utilized for the current budget are reported.

of ownership transfers, these revenues constitute land rents and should be included in the determination of the primary and overall balances.¹⁸

Similar reporting detractions persist with respect to the classification of transfers to endowment and contingency funds. Despite the names, for example, Contingency Funds, these cannot be utilized until the relevant Supply Bill has been tabled and assented to by the Parliament and President of the Republic of Singapore respectively. As such, allocations to such funds constitute withdrawals from the economy – savings – and not expenditure. Instead, only disbursements from such funds for the procurement of goods and services, grants and/or transfers to individuals, etc., should be recognized as expenditures (Kwan, Bali, and Asher 2016, 416).¹⁹

4. Fiscal space

4.1. Budgetary revisions

It is clear that the highlighted reporting practices serve to inflate the size of current expenditures and understate revenues. Correspondingly, they deflate (inflate) the size of the budget surplus (deficit) and biases inference about the extent of fiscal space that is available. Some revisions to the official budget balances are necessary for a more appropriate inference on the extent of fiscal space available and also on the potential broader impact of the budget.

A conservative revision of the budget balances is undertaken with respect to [Table 1](#). Specifically, this adjusts for the prevailing practices of excluding land rents from current revenues, classifying transfers to endowment and contingency funds as expenditures, and the omission of investment income as a determinant of the primary balance (Kwan, Bali, and Asher 2016, 416). The revised budget balances are presented in [Table 2](#).²⁰

It is clear that the revised budget balances present a considerably different depiction of the fiscal position than official estimates. Two observations are evident.

Firstly, including land rent (“sale of land”) revenues and excluding transfers to endowment and trust funds actually renders the FY2020 (“Unity”) budget to be in surplus. Despite the increase in expenditures and transfers (“special transfers excluding top-ups to endowment and trust funds”), the deficit is considerably smaller than official estimates – revisions to the interim estimates of October 05, 2020 finds the budget deficit to be 37% that of the official estimate.

Secondly, and more significantly, the withdrawal necessary from Singapore’s national reserves is substantially smaller than the amount tabled. The budget deficit is to be financed by the accumulated over the previous government’s term of office and withdrawals totaling SGD 52 billion against a projected deficit of SGD 74.3 billion. Thus, the sum of the (unadjusted) surpluses of the previous government’s budgets prior to FY2020, that is, for FY2016 to FY2019, is SGD 22.3 billion.

It follows that, for the revised interim estimates, the required withdrawal from the national reserves to balance the budget is SGD 5.1 billion, or about 10% of the tabled request. The extent of fiscal space available is considerably greater than what official estimates would imply.

Table 2. Revised revenue and expenditure (in SGD billion)^a.

	Budget 2020 (Unity budget)	Budget supplement 1 (Resilience budget)	Budget supplement 2 (Solidarity budget)	Budget supplement 3 (Fortitude budget)	Ministerial statement (October 05, 2020)
Operating revenue	76.0	70.8	70.4	68.8	63.7
Add:					
Net investment returns contribution	18.6	18.6	18.6	18.6	18.6
Sale of land ^b	13.5	13.5	13.5	13.5	13.5
Less:					
Total expenditure	83.6	89.1	89.8	110.5	102.1
Special transfers excluding top-ups to endowment and trust funds	4.7	22.3	26.3	33.9	37.1
Add:					
Top-up to contingency funds ^c	3.0	3.0	3.0	16.0	16.0
Primary surplus/(deficit)	22.8	(5.5)	(10.6)	(27.5)	(27.4)
Overall budget surplus/(deficit) ^d	22.8	(5.5)	(10.6)	(27.5)	(27.4)

^aAuthor's calculations.

^bThis item has not been updated and/or adjusted in line with the supplementary budgets.

^cSimilar to top-ups to endowment and trust funds, top-ups to the Contingency Funds should be excluded from expenditure.

^dThat the primary and overall budget balances are the same arises from the lack of disaggregation in the budget's reporting. Also see Kwan, Bali, and Asher (2016, 417).

4.2. Fiscal impact

Besides fiscal space, the budget's reporting also influences its macroeconomic impact. There is a rich literature, for example, Fischer and Easterly (1990); Sims (1998) among others, on the importance of how the treatment of the government budget constraint, that is, the budget, affects its potential influence on the economy. This includes issues of the reporting of the budget's allocations.

Following Lim (2003), the broader impact of the budget's reporting can be deduced via a Keynesian-type multiplier process of the form:

$$\Delta Y = \frac{1}{1 - (\Delta C/\Delta Y)(1 - T)} \times \Delta G \quad (1)$$

where Y is national income, G is government expenditure and $(\Delta C/\Delta Y < 1)$ is the marginal propensity to consume. $T < 1$ is a vector of taxes such as income and property taxes, the Goods and Services Tax (GST) and various excise taxes.²¹ It also includes various user-charges and levies which have tax-like effects, for example, revenues from the lease of land that is currently classified as "sale of land."

Equation (1) thus states that the change in national income (ΔY) is directly proportional to the change in government spending (ΔG) by the factor given by the first term of the right-hand side of Equation (1), that is, the multiplier.²²

In the short-run, $(\Delta C/\Delta Y)$ and T can be assumed to be constant and ΔY is wholly determined by ΔG . From Table 2, the lower expenditures after adjusting for the treatment of transfers to the endowment and trust funds as expenditure renders it clear that the budget's impact on ΔY will be correspondingly smaller.

Next, the budget's expansionary impact is likely to be further tempered as individuals remained responsible for already-assessed tax liabilities. These were largely deferred for an initial anticipated period of the crisis. In other words, the size of T is constant despite the announcements of corporate property tax and user charge rebates. The impact of the latter and foreign worker levy waivers on the size of the multiplier is ambiguous as the extent of pass-through from these instruments depends on a range of factors like the income elasticity of demand, the elasticity of substitution between goods.

In addition, recall that land sales revenues in Singapore are, in effect, land rents. This exerts an influence akin to a complicated excise tax as firms factor the costs for the duration of the lease into prices.

Consequently, the multiplier effect of the budgetary measures in response to COVID-19 is *a priori* indeterminate. This has spillover effects on employment and since it depends on Y , future government revenues.²³

5. Concluding comments

Preliminarily, Singapore's budgetary response to COVID-19 is very commendable on the intensity and quantity of resources committed. It is also considerably thorough on the range of instruments that were deployed. An examination of the budgetary

measures introduced finds that it closely reflects the conceptual design and characteristics of crisis budgeting.

A principal feature of crisis budgeting is a concurrent increase in the budget deficit and public debt from the sudden increase in government expenditures. For Singapore, post-crisis debt management will not be a problem because of the government's requests for withdrawals totaling SGD 52 billion from the country's national reserves to finance the budget deficit. This negates the need for deficit financing of the budget but it does raise some uncertainty about the extent of fiscal space available, particularly if the withdrawals are to be returned subsequently.

However, official estimates of the deficit arise from, among others, the non-inclusion of land rents to revenue and reporting loan provisions and various contingent liabilities (guarantees) as expenditure in the budget's reporting. A conservative revision in line with the GFSM finds that the withdrawal necessary from the national reserves to balance the budget is significantly smaller at about 10% of the official request. Thus, there is greater fiscal space available than implied from the official budget estimates.

In the immediate aftermath, that is, for 2020, the government budget constraint is unlikely to be affected too substantially as responsibility for already-assessed tax and other liabilities remain in effect. But a smaller actual expenditure suggests that the multiplier effect of the budget on the economy will also be smaller.²⁴

The broader emphasis here is the need for policymakers to be cognizant of the contemporaneous influence of (even seemingly innocuous) institutional features and operating procedures and practices on the extent of policy effectiveness. This is the case here where, because of prevailing reporting idiosyncrasies, the impact of Singapore's budgetary responses to COVID-19 is likely to be less than what may be inferred from the size of the fiscal commitments. This is *despite* the announced budgetary responses being a near-archetype of crisis budgeting as described in the wider literature (e.g. Schick 2010).

The influence of a weaker fiscal stimulus will have a stronger bearing on subsequent recovery (and government revenues) as the medium- to longer-term economic outlook is likely to remain subdued because of ambiguity over COVID-19's epidemiological influence on economic activity (IMF 2020, 5). This will be exacerbated by signs of increasing restrictions on international trade and factor mobility.

Assessing Australia's COVID-19 response, Edmond, Holden, and Preston (2020, 564) argue that policy debates put considerable focus on the reported fiscal position than the outcomes or objectives of fiscal policy. Similarly, there has been relatively less focus on existing institutional factors that can serve to compromise policy effectiveness. This paper presents one such illustration from the Singapore budget in the anticipation that it will serve to stimulate further such research.

Notes

1. See the Policy Tracker by the International Monetary Fund (IMF) for descriptions of fiscal responses around the world. <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>
2. The FY2020 budget and supplementary budgets on March 26, 2020, April 06, 2020 and May 26, 2020 are also named as the Unity, Resilience, Solidarity, and Fortitude Budgets

respectively. Unless specifically mentioned, the budgetary announcements are collectively referred to as ‘the budget’ in this paper.

3. Information on the size and composition of Singapore’s national reserves is not publicly available except that they comprise of the country’s net assets, and that budgetary surpluses accrued at the end of each government’s term are added to it (Chew 2020). The previous government’s term concluded when a general election was called on July 10, 2020. The new government began its term on August 24, 2020. However, the announced budgetary commitments for FY2020 remain in effect.
4. The corollary for most economies is an increase in government debt and servicing.
5. This is also the case internationally. Besides misrepresenting the budgetary position, non-uniform reporting also renders it difficult for international comparisons. See Fischer and Easterly (1990, Appendix) and Cohen et al. (2015) for evidence and further discussions.
6. Analogously, the two approaches towards public budgeting may be construed as striving for allocative efficiency and productive efficiency respectively.
7. Following IMF (2016, 6), fiscal space refers to the ability of a government to introduce additional discretionary fiscal policy, such as increasing spending or reducing taxes, without undermining fiscal sustainability and/or macroeconomic stability as a result.
8. This aspect is well-illustrated from the varied outcomes following the implementation of austerity measures as a result of differing public sector accounting practices. See Cohen et al. (2015).
9. These are Annex A-1 and Annex C-1 in the Unity Budget, Annex B of the Resilience and Solidarity Budgets, Annexes B and C-1 for the Fortitude Budget, and Annexes B-1 and B2 of the Ministerial Statement on 17 August 2020. For a review of the budgeting process in Singapore, see Blöndal (2006).
10. The time frames covered are October–December 2019 and February–July 2020.
11. This contrasts with the Severe Acute Respiratory Syndrome (SARS) outbreak and H1N1-2009 influenza outbreak in 2003 and 2009 respectively where the *Infectious Disease Act (CAP 137)* was evoked. The latter authorises restrictions on individual and social movements and activity, but has no specific jurisdiction on commercial responsibility and liability.
12. Some firms and sectors were unable to resume operations on 02 June 2020 as the reopening planned for a gradual and controlled resumption of socioeconomic activity.
13. The circuit breaker measures were intended to be from April 07, 2020 to May 04, 2020. However, a surge in infections led to an extension to June 01, 2020. Various grants and schemes from the three prior budgets were extended in line with the extension.
14. Considerably less economic support was provisioned for permanent residents and foreign workers in the budget. The latter total 2.2 million in a population total of 5.7 million with foreign workers numbering 1.67 million. Notably, foreign workers are the most susceptible to employment loss and comprised the substantial share of new infections from April 2020.
15. See Quah (2010) for a detailed discussion on the roles and influence of statutory boards in Singapore.
16. These are from Annex D-2 of the Unity Budget, C-2 of the Resilience and Solidarity Budgets, and D-1 of the Fortitude Budget and Ministerial Statement of 05 October 2020.
17. In addition, as total investment returns are not reported, it cannot be verified if the statutory limit that only a maximum of half of total investment returns may be used for budgetary purposes (note d; Table 1) has been reached. The proportion that was acquisitioned for the budget is similarly not reported.
18. IMF (2015, paragraph 35) recommends a supplementary budget report following the reporting guidelines of the GFSM to reflect this reporting anomaly.
19. Some of these disbursements are reported in Table 1.3 of the *Analysis of Revenue and Expenditure* document accompanying the budget (Ministry of Finance 2020). However, it is unclear where they are reflected in the budget specifically.

20. Adjustments for allocations for loans, e.g. the allotted SGD 20 billion loan capital, and provisions for risk-sharing in various loan and credit schemes are not included in the revisions in Table 2 due to a lack of disaggregated reporting.
21. For FY2020, these constitute almost 88 percent of operating revenue.
22. As Singapore is a trade-dependent economy, the denominator of the multiplier is more appropriately specified as: $1 - (\Delta C/\Delta Y)(1 - T) + (\Delta M/\Delta Y)$, where $(\Delta M/\Delta Y)$ is the marginal propensity to import. As a small open economy, the marginal propensity to import can be assumed to be constant and, as such, be omitted from Equation (1) without consequences to the discussion here.
23. The evidence is similarly equivocal about the size of the fiscal multiplier as it depends on a range of factors such as the focus of the stimulus, anticipatory effects, policy persistence, etc. Ramey (2019) surveys the recent empirical literature and finds that multipliers from increased government purchases are often less than one and can have crowding-out effects. There is less evidence to conclude the effects of tax cuts and household transfers on the economy.
24. Note that when examining the welfare and macroeconomic impacts of the budget's responses, for existing schemes and programs, only the *additional* provisions that were made in response to COVID-19 should be considered and *not* the total amounts that were allocated/disbursed.

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