PORT STEPHENS COUNCIL

Consolidated Report

Independent Financial Analysis – 2022

New England Education and Research Proprietary Limited
Emeritus Professor Brian Dollery & Professor Joseph Drew

Background

Port Stephens Council has engaged Professor Joseph Drew and Emeritus Professor Brian Dollery of the University of New England to commission four reports to aid in assessing Council's overall financial sustainability and a potential application for a special rate variation.

The Centre for Local Government at UNE is a multi-disciplinary centre for research, consultancy, and education activities to all sectors of Local Government. Of critical importance, Professor Drew has conducted similar reports for Cootamundra-Gundagai Council that were included in their successful 2021-22 SRV and was widely accepted by the community as an independent voice with a level of depth and insight beyond standard practices.

Report 1: Financial Sustainability

- Fifty metrics examined, rigorous empirical work including econometric modelling and data envelopment analysis, concludes that PSC is facing a financial crisis that needs to be addressed.
- While PSC has met its goal for operating ratio in the past, due to the ongoing impacts of COVID-19 this will not be possible in the short or long term. Stemming from the sudden drop-off in Holiday Park revenue, the absence of Airport dividends, and drastically reduced Children Services revenue.
- PSC has become exposed to commercial risks in its struggle to maintain sufficient revenues in addressing its inadequate rate base.
- A Special Rate Variation is recommended to address ongoing financial sustainability.

Report 2: Capacity to Pay

- The report details the insufficiency of rates revenue for PSC in the short to long term.
- Review of rate structure with suggestions to improve both distributive justice and capacity to pay. Concerns with lowering or abolishing base amounts.
- Recommended capacity for a double-digit SRV application size and 3-year length – refer to p105.

Report 3: Efficiency Report

- Results of Data Envelopment Analysis (DEA) show PSC performed close to the typical result being 0.75 (1 being perfectly efficient).
- Confirmation that ratepayers, Councillors and IPART can be assured that PSC provides good value for money.

Recommendations for further improved Efficiency
1. Explicit Measures to Combat Fiscal Illusion – targeted campaign
2. Abolish Ward Structures – 3.4% increase in unit expenditure per additional ward
3. Review Corporate Structure – emphasis on the number of lower-level managers
4. Service Level Review – aligning the current process with a willingness to pay
5. Council Led Internal Efficiencies – deferral of discretionary projects, better procurement process, capture tourist revenue, more appropriate use of carefully tailored fees and charges

Report 4: Debt Capacity

- Previous debt is associated with discretionary projects which exacerbate fiscal illusion.
- Advice that PSC is already close to its debt capacity ceiling. $5.3 million consolidated and special case view (excluding Airport) $20 million.
- Commends prudent financial management exemplified through actions taken to continuously maintain debt at the lowest rates.
- Advice to defer any new debt liabilities until reduced risks and SRV approval. Discouraged financing costs of debt through reserves or the sale of land.

Definition

Fiscal illusion *occurs when local ratepayers do not understand the financial circumstances of their local council and underestimate the true cost of current municipal service provision (p1., Financial Sustainability Report)*

Port Stephens Council Financial Sustainability Report

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University of New England

DISCLAIMER

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EXECUTIVE SUMMARY

This Financial Sustainability Report paints a rather grim picture of financial sustainability challenges facing Port Stephens Council. Indeed, matters could hardly be more serious. However, it is noteworthy that senior management – especially those involved in financial matters – have done a sterling job. There is thus good reason to believe that their efforts have been pivotal in averting a financial crisis thusfar.

In this Report we recommend a number of measures that should be taken as soon as possible to assure financial sustainability. The consequences of the COVID publicpolicy response are far from over and some of the worst effects, such as inflation, are only now starting to emerge.

Moreover, it is abundantly clear that a special rate variation (SRV) is essential moving forward. The matter is not simply about ensuring adequate revenue receipts(an immediate concern), but it is also a pre-requisite for ongoing financial sustainability and intergenerational equity, as well as a remedy for dispelling dangerous levels of fiscal illusion.

1. INTRODUCTION

Financial sustainability in local government can be defined as the ability to meet the reasonable expectations of current residents in a way that does not put at risk the capacity of future generations to meet their own needs (Drew and Dollery, 2020).

This definition requires current municipal taxpayers to at least fund their share of the consumption of long-lived assets, in addition to the full costs of operational programs. Moreover, it emphasises reasonable expectations and thus cautions against allowing fiscal illusion to develop. Fiscal illusion occurs when local ratepayers do not understand the financial circumstances of their local council and underestimate the true cost of current municipal service provision (Drew, 2021).

At present two New South Wales (NSW) local governments are in administration as a result of their failure to demonstrate financial sustainability. Moreover, a number of other local councils find themselves in a precarious financial position, most notably rural and remote councils, high growth coastal communities, and many of the entities created in the 2016 forced amalgamation program (Drew, 2021). Indeed, past financial failures have not been predicted by regulatory authorities and they also came as an unexpected shock to elected councillors (Drew and Campbell, 2016).

Every local government in NSW ought to be concerned about financial sustainability. Moreover, because budget repair for failed councils involves significant increases to intergovernmental grants derived from a relatively fixed quantum of money, each new failure places additional pressure and risk onto the remainder of the jurisdictional cohort. Furthermore, COVID-19 policy responses have imposed additional costs on local authorities, raised the spectre of a lengthy period of high inflation and interrupted both the predictability and flow of revenue. It is thus prudent to exercise extreme caution with respect to finances at this time, especially in view of the continued uncertain outlook regarding both the problem and the policy response (see Appendix 1).

This Report examines fifty metrics and reflects a combined five decades of scholarly expertise in local government economics and finance. The authors have reviewed relevant council documentation and regulatory policies to inform their judgements. In addition, discussions have been held with key stakeholders and rigorous empirical work (including econometric modelling and data envelopment analysis) has also been conducted to ensure an accurate picture of Port Stephen's financial sustainability is established.

The most reliable comparison – for the purposes of evaluating local government financial sustainability – is Council itself at different time periods. This is because service levels, structures and policies tend to remain fairly constant within the single municipal entity. However, inevitably local government decision-makers wish to gain an understanding regarding how they compare to similar communities. We have thus

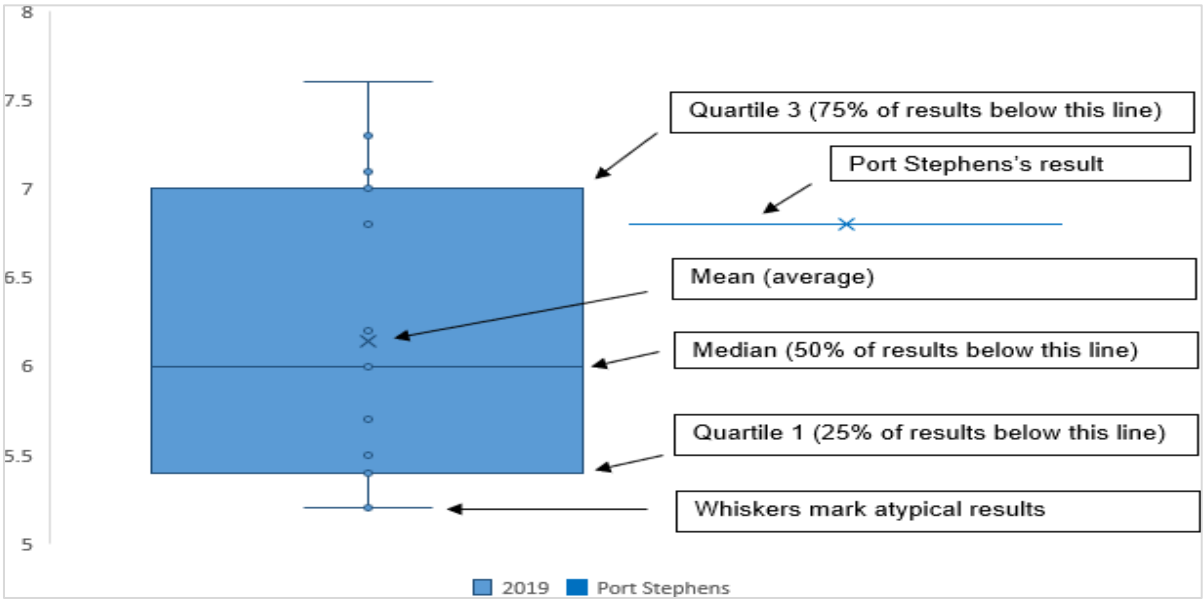
also compared Port Stephens' performance against a group of fourteen peer councils as detailed in Table 1. Peers have been drawn from multiple NSW Office of Local Government (OLG) categories as is appropriate when one wishes to have close comparisons and also acknowledges the chronic flaws in the extant classification system (Drew and Dollery, 2016).

TABLE 1. PEERS USED IN COMPARISONS

OLG 5 Councils	OLG 5 Councils	OLG 4 Councils	OLG 11 Councils
Coffs Harbour	Tweed	Cessnock	Muswellbrook
Newcastle	Maitland	Singleton	
Shoalhaven	Shellharbour	Tamworth	
Lake Macquarie	Wollongong	Wagga Wagga	
Port Macquarie			

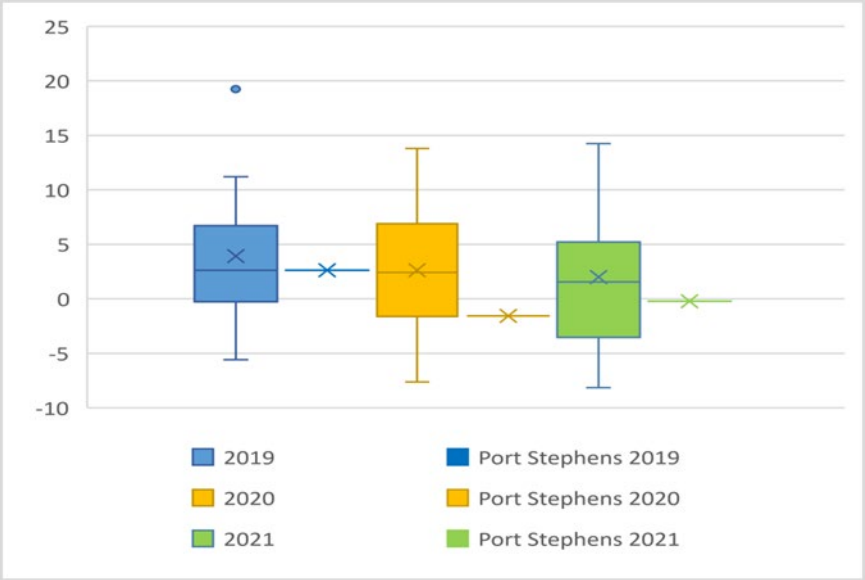
Comparative data is presented in box and whisker plots which are the best way to illustrate a particular council's performance relative to its peer group. Figure 1 explains how best to interpret such a plot.

FIGURE 1. INTERPRETING BOX AND WHISKER PLOTS



2. ANALYSIS

FIGURE 2. OPERATING PERFORMANCE RATIO



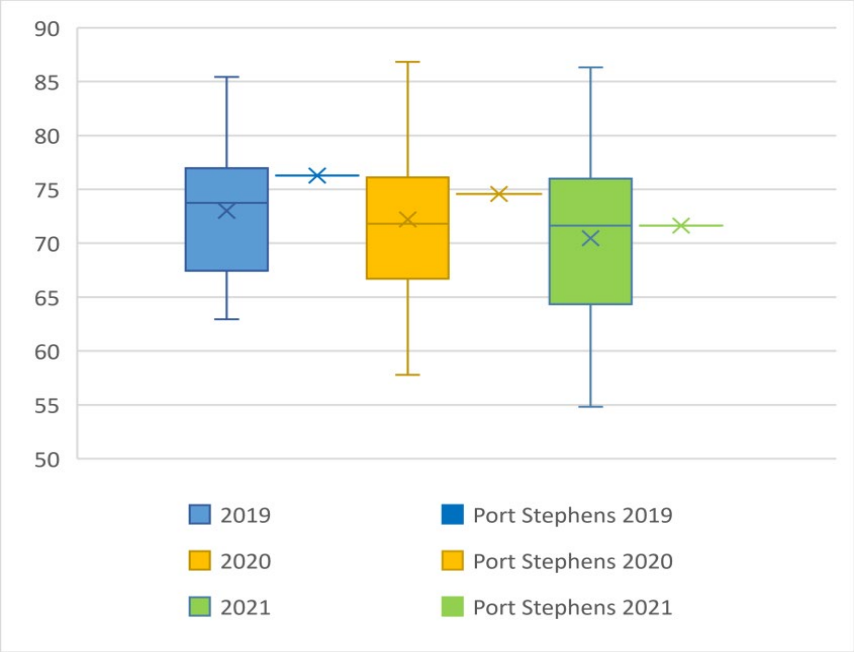
Perhaps the key ratio employed for decision making by councils and regulators alike is the operating ratio. Moreover, the Port Stephens Council's endeavours to keep this ratio above zero were prudent. However, it should be noted these prudent measures counted against it in its 2019-20 application for a Special Rate Variation (SRV)!

Unfortunately placing undue emphasis on a single ratio can tend to obscure important problems and risks associated with financial sustainability (which is why we survey some 49 other metrics in this Report). Historically, Port Stephens has tended to meet its goal of break-even on the operating ratio. However, since the advent of the COVID-19 policy responses, this has not been possible. The reason for this recent shortfall can be attributed largely to the sudden drop-off in commercial receipts, the absence of airport dividends, and drastically reduced services revenue[1].The results from the last few years highlight how exposed Port Stephens has become to commercial risk in its struggle to maintain sufficient revenues despite clearly inadequate taxation receipts.

[1] For 2021 the proportion of total fees and charges attributable to these non-core activities were: childcare (7.48%; $2,671 – all figures provided in thousands of dollars), holiday parks (40.60%; $14,506), and airport partnership (21.87%; $7,816) – in 2019 this was childcare (4.58%; $1,859), holiday parks (27.84%; $11,306), and airport partnerships (41.98%; $17,045).

As we will argue throughout this Report, inadequate taxation receipts have forced Port Stephens Council to take on significant risk which threatens financial sustainability, especially in the face of economic shocks. It is highly likely that furthershocks will occur in the future, either from COVID or some other unrelated problem. Moreover, it is by no means certain that Port Stephens will be able to withstand the impact of these potential imposts, unless significant action is undertaken to mitigate matters.

FIGURE 3. OWN SOURCE RATIO



In Figure 3 we present the own-source ratio which confirms our remarks about the operating results being associated with non-core local government revenues (and hence risk). Unfortunately, during the Fit for the Future program, a lot of uninformed commentary emerged regarding the need for local governments to grow their own-sourced revenue. Appropriate growth in own-source revenue – that is, for core local government services – is desirable because it improves the nexus between the cost of supply and the price paid and hence reduces fiscal illusion (see our observations with respect to the nexus ratio below). However, revenues obtained from non-core local government functions introduce heightened levels of risk and make communities more vulnerable in the face of economic shocks (as is clear from the 2021 financial year data in particular). Moreover, intergovernmental grants are critical for correcting

vertical fiscal imbalance[2] and also promoting horizontal fiscal equity[3], but also detract from the own-source revenue. Thus, it is sometimes the case that a high achievement in this metric may indeed be reflective, at least in part,of inadequate grant flows.

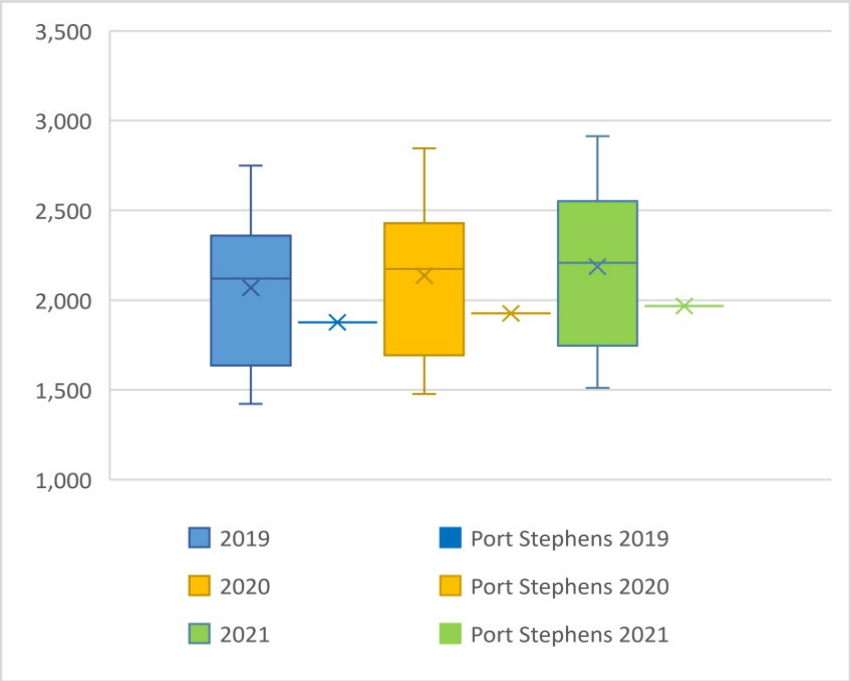
As Figure 4 demonstrates, financial assistance grants (FAGs) nominally allocated for the purposes of maintaining road infrastructure are inadequate for Port Stephens' needs. At present the council receives far less per kilometre than the typical peer group member (measured by either the median or the mean with the former being the more reliable statistic). For many years scholars have shown that the grant allocations in NSW – and indeed the whole country – are chaotic and indefensible aswell as inconsistent with the clear intent of the enabling legislation (Drew and Dollery, 2014; Drew, 2021). It is notable that the most recent community satisfaction survey at Port Stephens pinpointed high levels of discontent with the road network (45% satisfaction with road maintenance; 68% satisfaction with roadside maintenance) and clearly insufficient grant flows are part of the problem. Moreover, ifgrant flows for roads remain insufficient, then it will be necessary and appropriate to significantly increase taxation receipts [4] (that is to receive an SRV) to ensure that adequate and sustainable maintenance of roads can be assured. Notably the problem with the road component of the FAGs is compounded by real reductions foreshadowed to the Roads to Recovery grants.

[2] Vertical fiscal imbalance refers to the fact that in most federal systems of government, the national government typically collects greater revenues than it requires to discharge its remit. In contrast, because local government has a narrow tax base the opposite is true.

[3] This refers to the desirability of all local governments being able to provide a basic minimum level of localservices. Because some regions are richer than others – and also because different communities exhibit varying levels of need – horizontal equity can rarely be achieved without a specific grant scheme.

[4] Because local roads are public goods (non-excludable and non-rival) the appropriate source of funding is taxation: either direct taxation through levying of rates or increased allocation of tax receipts originating with higher tiers of government (intergovernmental grant allocations).

FIGURE 4. ROAD GRANT PER KILOMETRE



Matters are better for the general component of FAGs, at least in a relative sense. Here the median is the most appropriate comparative statistic because of the skewing associated with the extreme outlier (represented by the dot to the north of the graphs). However, it should be noted that in all likelihood the grants are still insufficient and not at the level that they ought to be set at due to both chaotic methodology and lack of commitment by the higher tier governments to the financialsustainability of rural and high-growth local governments (Drew, 2021).

Moreover, there is considerable uncertainty regarding the level of grant receipts moving forward, because of at least two factors. First, the federal budget is in deep deficit which will inevitably encourage politicians to look for cuts that generate minimum political costs (such as the FAG freeze implemented previously). Second, financial failures of other councils in NSW inevitably result in significant upwards ‘adjustments’ to FAGs for these councils. Because the total quantum is fixed, this means that the rest of the local authorities in the state jurisdiction receive less than what they would have otherwise received (Drew and Campbell, 2016). Given the riskof further local councils failing over the next few years, it would be optimistic to believe that FAG allocations to Port Stephens will continue to grow in future.

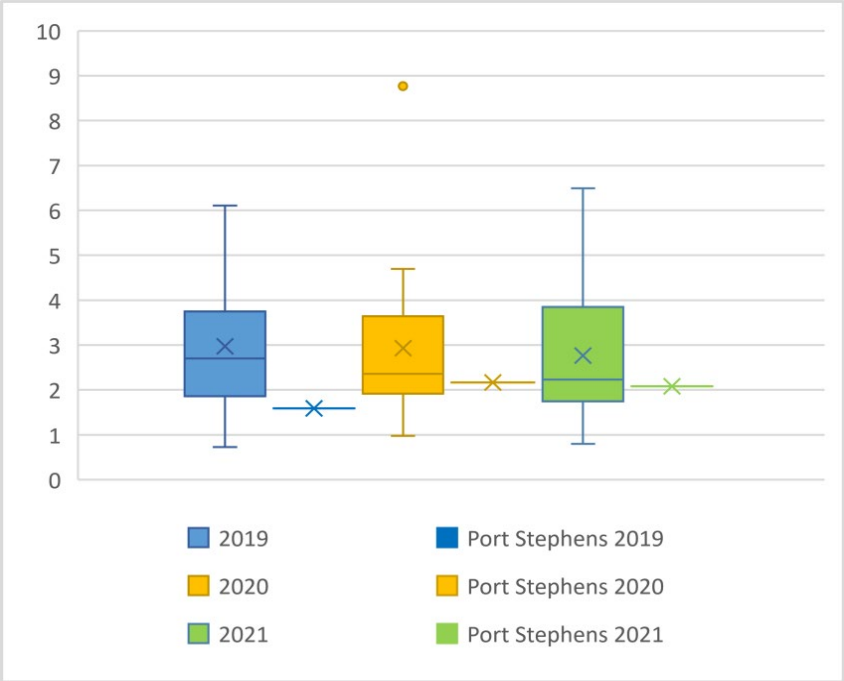
Once again, inadequate grants means that local councils need to respond bysecuring increased taxation receipts (through SRVs).

FIGURE 5. GENERAL COMPONENT OF FINANCIAL ASSISTANCE GRANT PER PERSON

The unrestricted current ratio is a liquidity ratio commonly employed to measure the sustainability of commercial businesses. Unfortunately, regulators have adopted thismetric without considering its appropriateness to the much more lumpy nature of municipal revenue. Unlike commercial businesses that are constantly accruing income from selling products, local government tends to receive most of its money according to quarterly invoices. Thus, meeting the benchmark of 1.50 should not be considered as reason for comfort. Indeed, most of the metrics used in NSW have arbitrary benchmarks and they are also insufficient to fully reflect the state of financial sustainability for a given council. In this regard, it is notable that the metricsdid not predict the last municipal financial failure, which is an obvious cause for concern regarding their fitness for purpose. Put differently, no local government should feel that achieving the benchmark for the liquidity ratio or the other regulatoryratios means that they are necessarily financially sustainable.

Port Stephens has chronically low (and recently declining) liquidity in a relative sense. When combined with its higher risk profile and concomitant susceptibility to economic shock, it is by no means certain that it will be able to pay its bills when theyfall due in the future. While we do not mean to induce unnecessary alarm, there should be no doubt that the situation is serious and warrants urgent attention.

FIGURE 6. UNRESTRICTED CURRENT RATIO

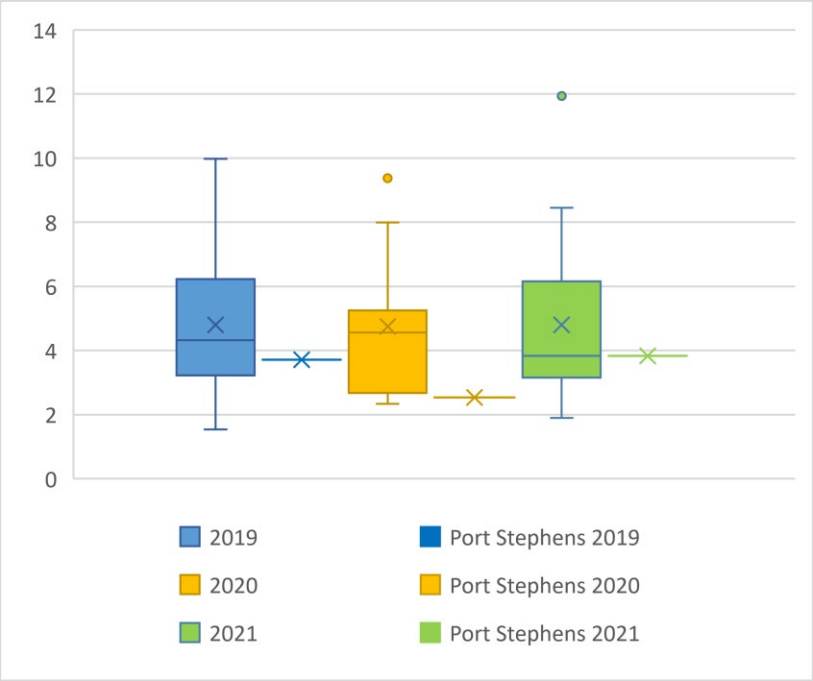


The debt service ratio suggests that Port Stephens has a relatively low capacity to take on additional debt. However, to fully understand this problem, debt capacity modelling will need to be undertaken (see Drew, 2021). We understand that Port Stephens plans to take on more debt to upgrade depots, council buildings and conduct public domain upgrades. We urge caution before doing so and do not consider this ratio (or its arbitrary benchmark) adequate for decision-making purposes. Nor should reliance be made on bank assessments because these institutions have demonstrated in the past that they are largely unconcerned aboutrepayment capacity due to their belief in extant soft budget constraints[5].

We also note that Port Stephens considers debt financing to be an important tool toassure intergenerational equity. However, as demonstrated by Drew (2020; 2021), intergenerational equity can only be achieved when certain strict criteria are observed, including a *quid pro quo* via increases to revenue (such as an SRV) or decreases in expenditure elsewhere in line with the expected consumption of the asset.

[5] That is, commercial banks understand that there will be a bailout should the council fail (as in the case of Central Darling Shire) (Drew and Campbell, 2016).

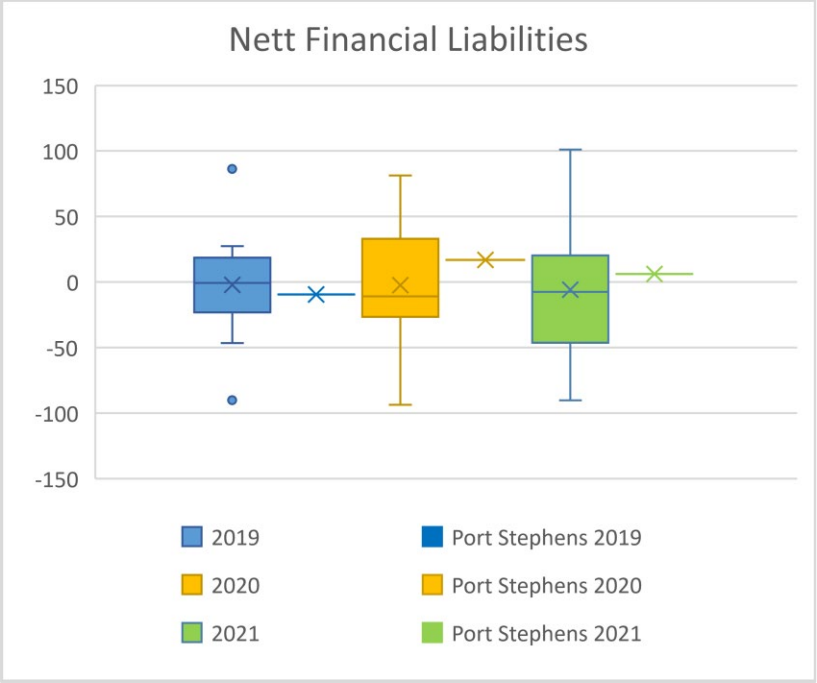
FIGURE 7. DEBT SERVICE RATIO



The nett financial liabilities ratio is much better (although still inadequate) at indicating debt capacity because it includes important liabilities (such as non-loanobligations related to staff) neglected by the former metric. This is probably the reason why versions of this metric are preferred by Queensland, South Australian and Western Australian regulatory authorities.

For this ratio a negative result is preferred (and generally expected) because this would mean that relevant assets exceed liabilities. The typical council in the peer group does have a near-zero or negative result as desired. However, the result forPort Stephens has been positive for the last two years. When considered in light ofthe ongoing risk posed by COVID-19 policy, as well as Port Stephens' proposed borrowings, this metric provides solid grounds for concern.

FIGURE 8. NETT FINANCIAL LIABILITIES



Depreciation accruals have been a source of ongoing difficulties for all local governments in Australia. As noted in the scholarly literature, full accrual accountingis problematic for governments because an active market does not exist for most infrastructure assets (and hence there is no reasonable fair market benchmark to judge asset value (Drew, 2020)). Moreover, accurate depreciation accruals are critical to a number of other metrics (especially the asset ratios) and also play an important role in financial sustainability planning.

The aggregate rate of depreciation at Port Stephens is on the low side in a relative sense as indicated by Figure 9. However, we should not jump to the conclusion that depreciation is being under-expensed (because usage rates and climatic conditionsare strong determinants for the accrual). Nonetheless, it does indicate the need for another look at the relevant schedules. If it transpires that depreciation has been under-expensed, then this would mean that the financial sustainability situation at Port Stephens is even more serious than it currently appears. Moreover, inaccuracies in depreciation tend to resolve as losses and gains on disposal which tend to result in unstable and unpredictable operating results.

To assist the process of potential problem identification, we have also disaggregateddata even further according to the four major common classes of depreciable items. This more disaggregated data is presented in Figures 10 through to 13.

FIGURE 9. TOTAL DEPRECIATION OF INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT DEFLATED BY CARRYING AMOUNT

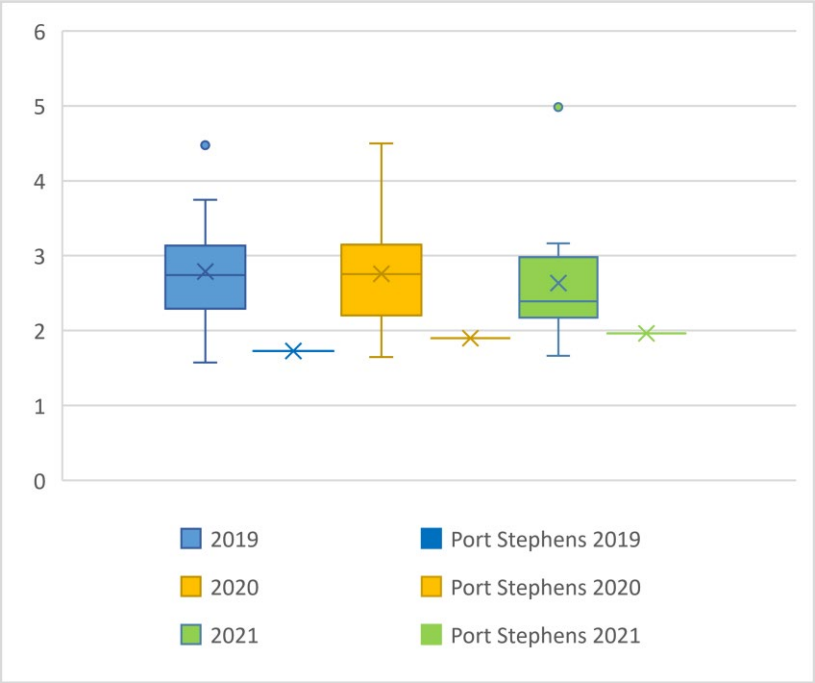
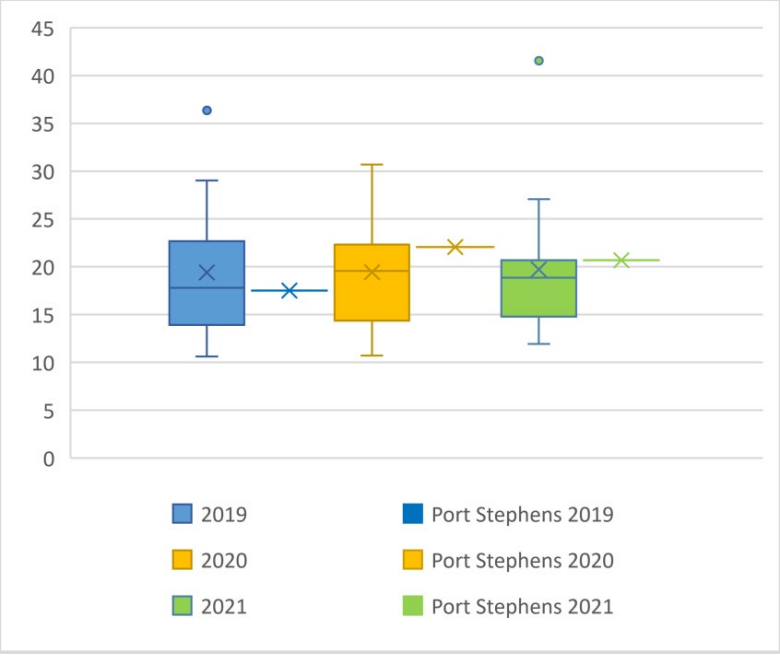


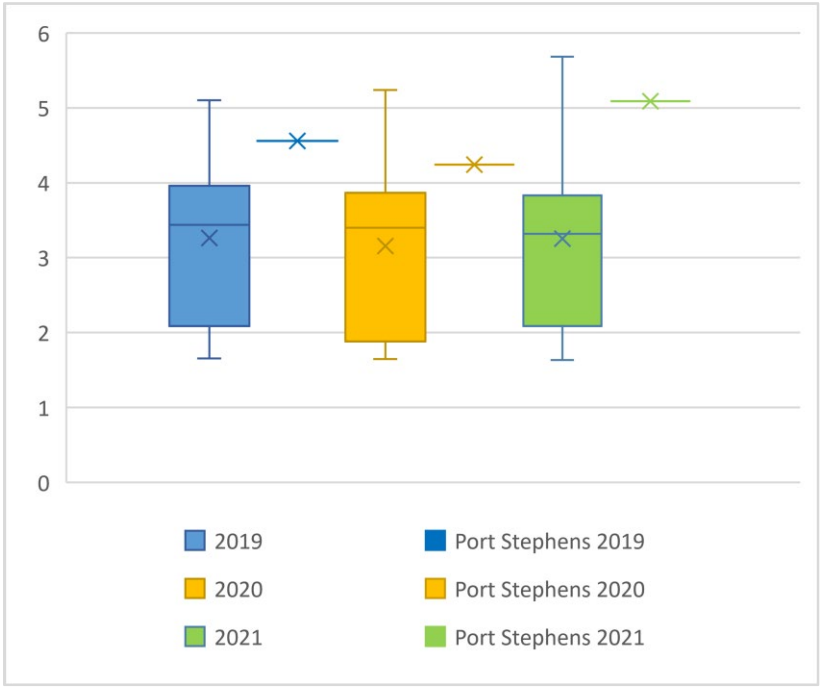
Figure 10 provides a comparison of the rate of depreciation for plant and equipment. It appears that Port Stephens is slightly more aggressive in its observation of this accrual than the peer group. This may mean that plant and equipment is being used more, not lasting as long as might be reasonably expected, or being depreciated too quickly.

FIGURE 10. DEPRECIATION OF PLANT AND EQUIPMENT DEFLATED BY CARRYING AMOUNT



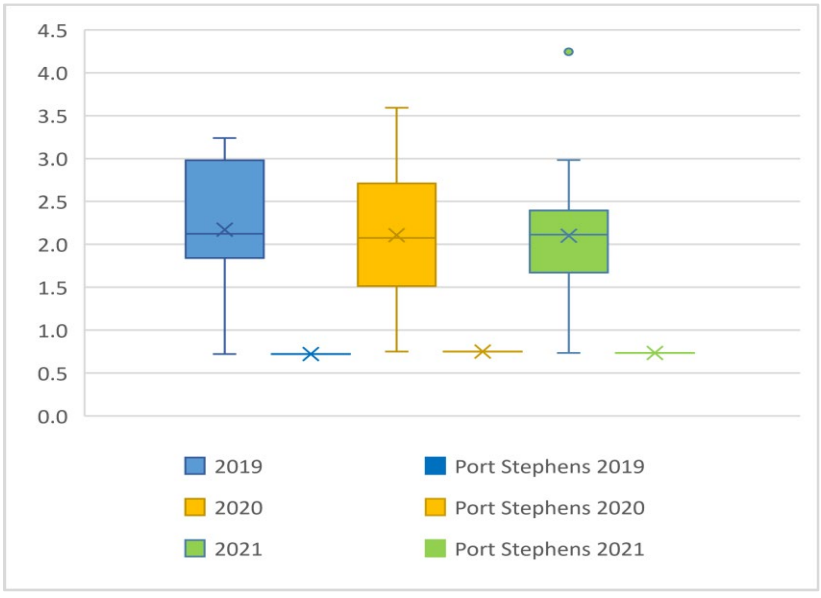
Similarly, Port Stephens is depreciating buildings much more aggressively than the rest of the peer group. As we have already noted, there could be good reasons for doing so, but the comparative data suggests the need for a review of the relevant schedules.

FIGURE 11. DEPRECIATION OF BUILDINGS DEFLATED BY CARRYING AMOUNT



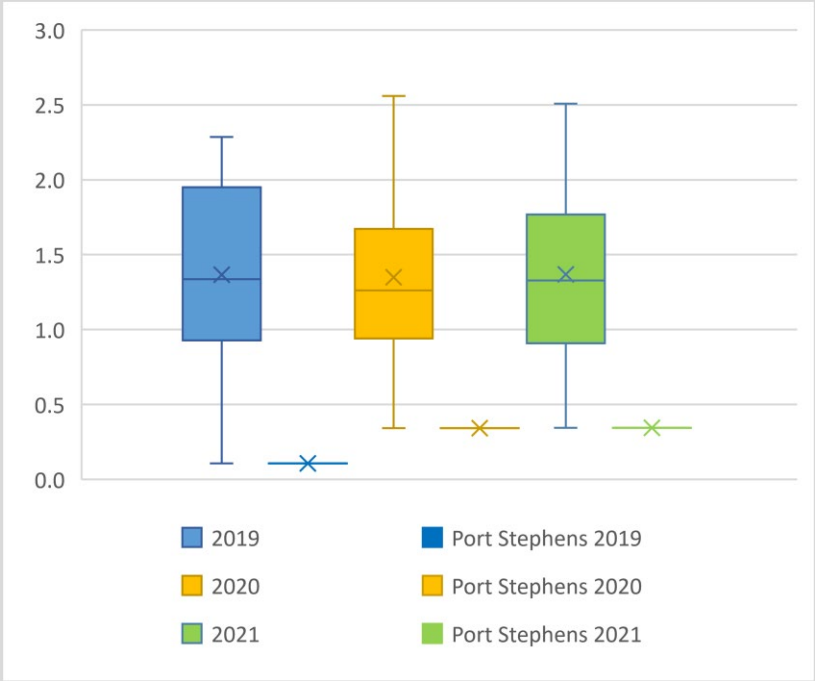
Depreciation of transport infrastructure seems concerning in a relative sense. Moreover, when we also consider the citizen dissatisfaction with this class of assets,there could be good reason to review these accruals upwards.

FIGURE 12. DEPRECIATION OF ROADS, BRIDGES AND FOOTPATHS DEFLATED BY CARRYINGAMOUNT



In a similar vein, accruals for stormwater seem lower than expected, although we offer some caution in interpreting this particular graph because some local governments do not adequately separate out non-depreciable earthworks.
Nevertheless, drainage asset schedules might warrant some review.

FIGURE 13. DEPRECIATION OF STORMWATER DRAINAGE DEFLATED BY CARRYING AMOUNT

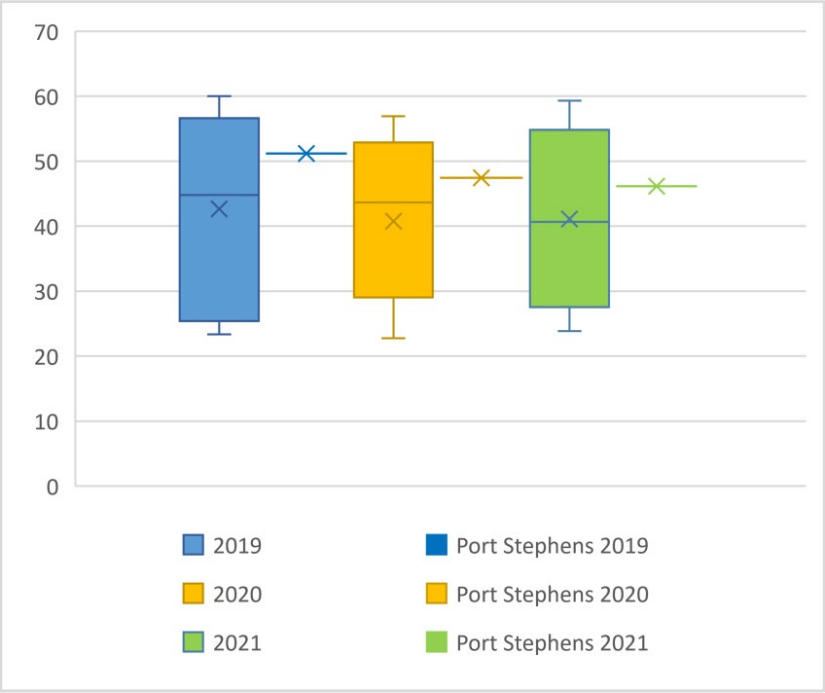


The nexus ratio is designed to measure how much of operational expenditure is covered by fees and charges. The nexus result for Port Stephens Council is quite high in both an absolute and comparative sense. Ordinarily this would be considered a good thing because it would indicate that the bulk of goods and services were funded by fees and charges as is appropriate for all non-public goods. However, because of the large revenue flows generally produced from Port Stephens' non-core businesses, the ratio seems to suggest cross-subsidisation of local residents by commercial operations of council. Whilst understandable in terms of the incredibly low taxation receipts received at Port Stephens (and the recent denial of an SRV), subsidisation of this kind exposes both local residents and council to significant risk, as demonstrated by the drop in the result for the last two years. Given the continued uncertainty surrounding the pandemic, policy responses to the pandemic and potential inflation, risk of this kind is problematic (see Appendix 1). Moreover, when councils aggressively pursue own-source revenue by operating non-core services this presents a number of other problems. First, it diverts organisational attention away from core functions. Second, it distorts local economies and eliminates much of the existential space for people and businesses. Third, it tends to create a better image of financial sustainability during good business conditions than might be warranted upon closer

inspection (hence the previous rejection of the SRV application). Fourth, and most importantly, it fuels fiscal illusion.

Fiscal illusion occurs when citizens do not understand the true cost of goods and services consumed nor the financial predicament of council. It is clear from the IPART (2020) ruling that fiscal illusion is particularly rife at Port Stephens. This not only contributed to the rejection of the SRV application, but is also a major driver of expenditure moving forward. When people receive a discount price for municipal services – and also think that their local government is in a good financial position – then economic theory predicts that they will demand an excessive quantity and quality of local municipal services. Hence fiscal illusion places financial sustainability in jeopardy.

FIGURE 14. NEXUS



Our observation regarding cross-subsidisation is further illuminated by the rates and annual charges data presented in Figure 15. As can be seen, revenue per assessment is far lower than the typical council in the peer group and generally sits at the very bottom of the second quartile. Moreover, the rather flat progression in this metric over the last three years suggests that fees (as well as local taxes) are being increased according to an index number. This is not a financially sustainable practice.

Fees and charges should generally be set according to supply-side methodology. This means that the fee should be equivalent to the long-run cost of producing one more unit (making provision for capital investment and the like). Clearly it is not possible to carefully review each and every fee each year. However, a schedule should be made so that each fee is reviewed at least once each political term with the emphasis being

placed on ensuring full cost recovery, except for cases where arobust rationale can be articulated for providing a specified subsidy from the common tax pool. Drew (2021) provides detailed instructions for setting fees and annual charges in a sustainable manner.

In view of the concerning threat to financial sustainability, as well as the delay to anSRV exacerbated by the COVID-postponed elections, we strongly recommend that Port Stephens reviews as many non-regulated fees and charges as possible for theupcoming operational plan. Other NSW councils we have worked with have been surprised by the discrepancy between extant fees and charges with respect to the actual costs of delivery. Failing to price local services at cost fuels fiscal illusion andalso visits inequity on the broader cohort of local government taxpayers (who are effectively forced to subsidise the consumption of local services by some localresidents (Drew, 2021)).

FIGURE 15. RATES, FEES AND ANNUAL CHARGES PER ASSESSMENT ($)

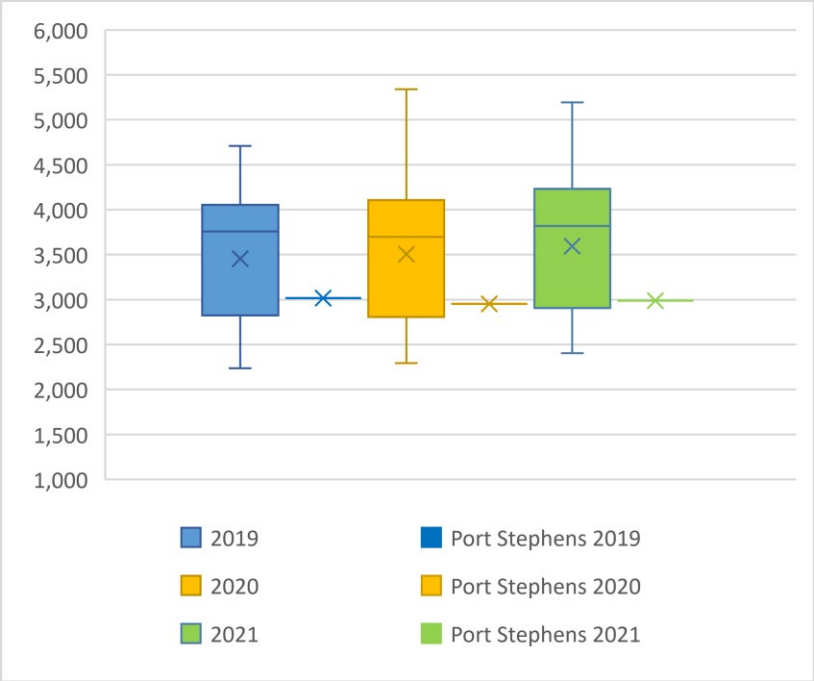
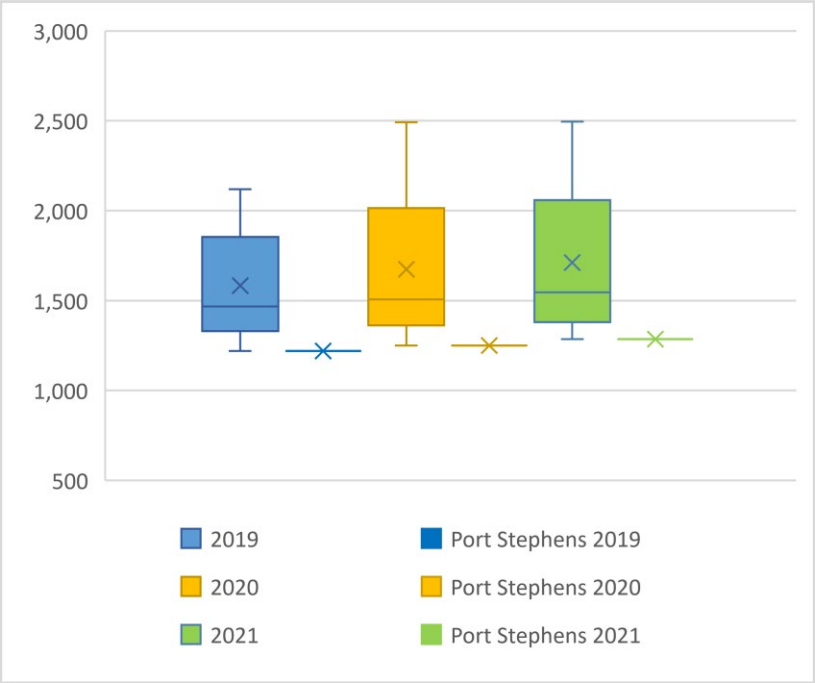


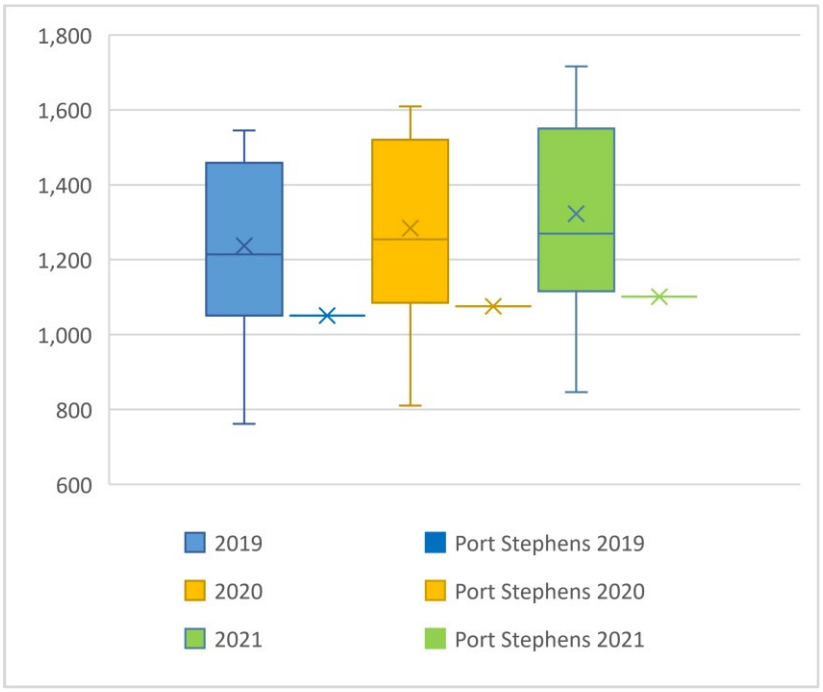
FIGURE 16. TOTAL RATES PER PROPERTY ASSESSMENT ($)



Residential rates in Port Stephens are extremely low on a comparative basis and generally sit in the bottom quartile of the peer group. This suggests that residents have not been paying the full price for the local public services that they consume. Itthus fuels fiscal illusion which explains both the unwillingness to pay (noted by IPART, 2020), as well as the demands for higher levels of services noted in council documentation. It also means that residents are visiting inequity on future taxpayers (because the *quid pro quo* for recent debt has clearly not occurred), which by definition means that matters are not financially sustainable. Put differently, past andplanned borrowings must be serviced through higher taxes or reductions to service levels for there to be any possibility of making the case that the current taxpayers have paid their fair share of long-lived assets consumed.

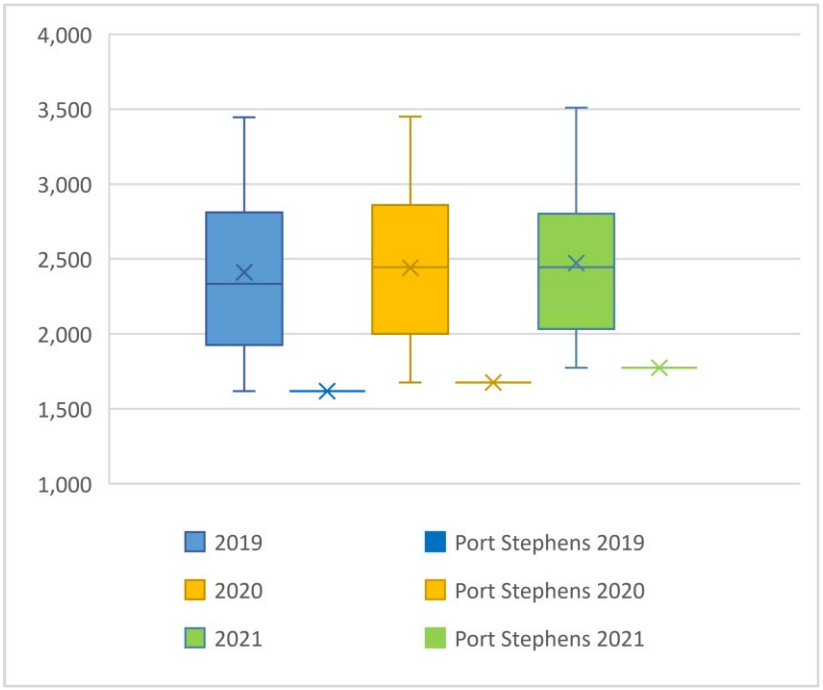
Only by canny financial management has Port Stephens managed to survive this long with such low residential property tax receipts. However, the risks taken to do so are now made plain.

FIGURE 17. RESIDENTIAL RATES PER ASSESSMENT ($)



Farm rates are also at incredibly low levels but are mitigated in part by the relatively low numbers of this kind of assessment.

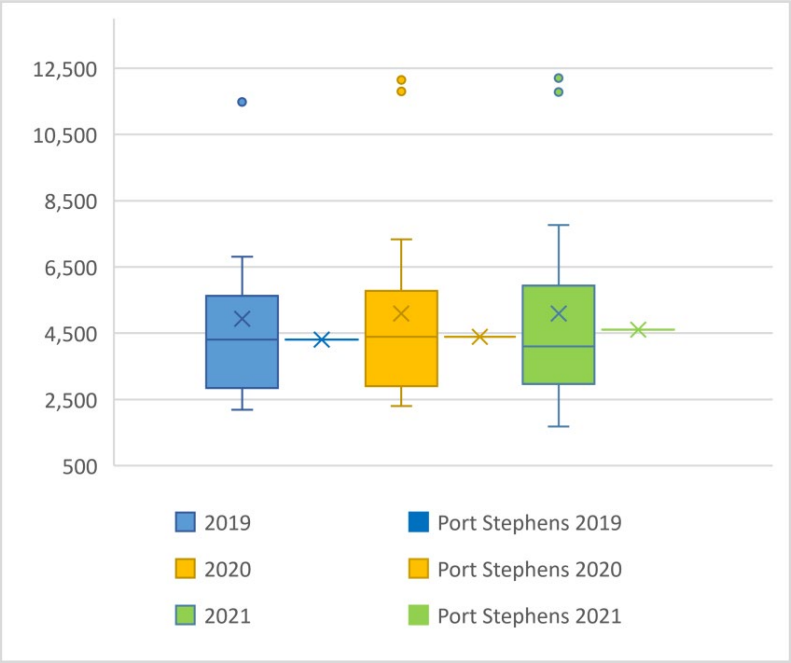
FIGURE 18. FARM RATES PER ASSESSMENT ($)



Interestingly, business rates on a per assessment basis at Port Stephens are typical of the cohort (as measured by the median). Given that the challenges of the COVID public policy response fall disproportionately on business, there is thus

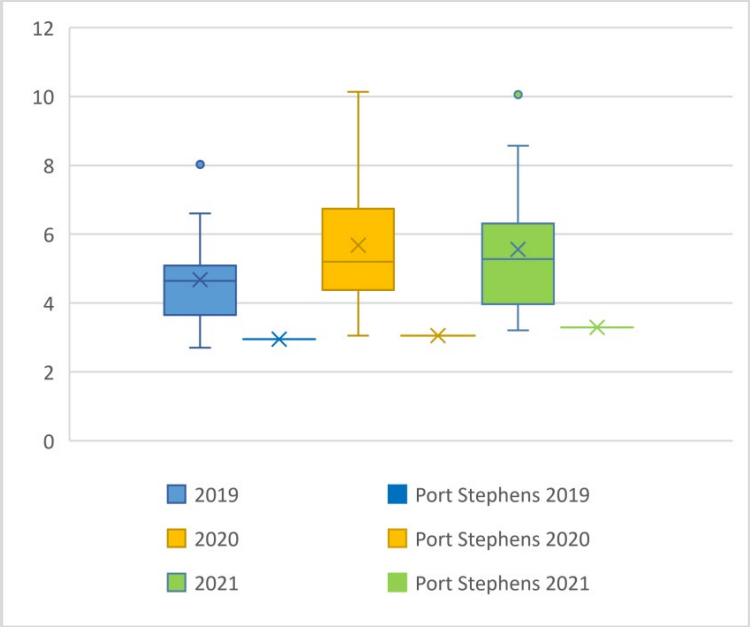
a *prima facie* strong case to be made for allocating most of any future SRV to the residential and farm taxpayers. This would exert less stress on the local economy and also serve tobest address the fiscal illusion problem. Further commentary on this question will beprovided in the Capacity to Pay report.

FIGURE 19. BUSINESS RATES PER ASSESSMENT ($)



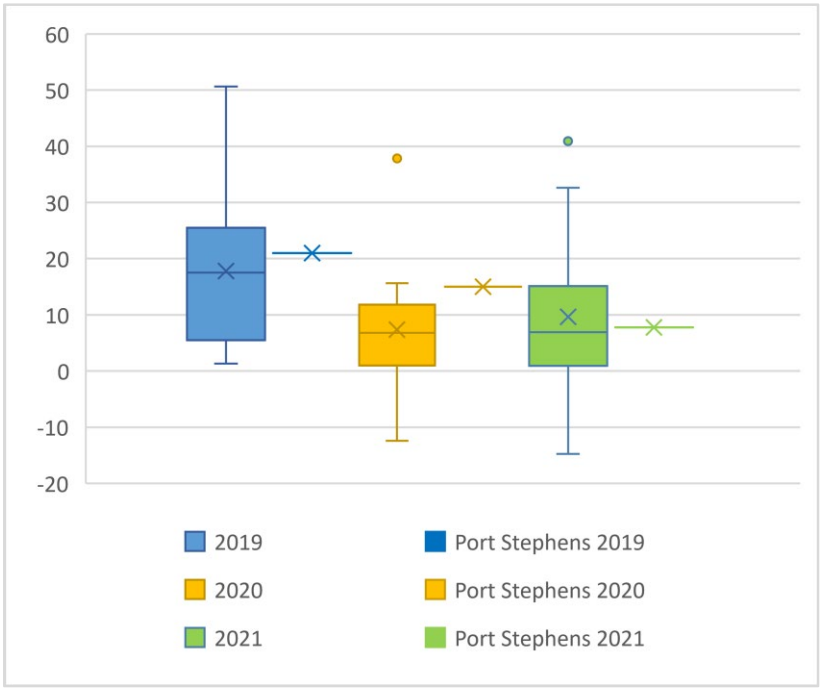
In Figure 20 we present the rates and charges outstanding data. Port Stephens hasthe best data in the peer group which is far from surprising given the extremely low rates of taxation levied in its local government area. This metric suggests strong capacity to pay a more adequate rate of taxation that is needed to assure financial sustainability, establish intergenerational equity, reduce risk and combat high levels of fiscal illusion. Further information will be provided in the Capacity to Pay report.

FIGURE 20. RATES AND CHARGES OUTSTANDING



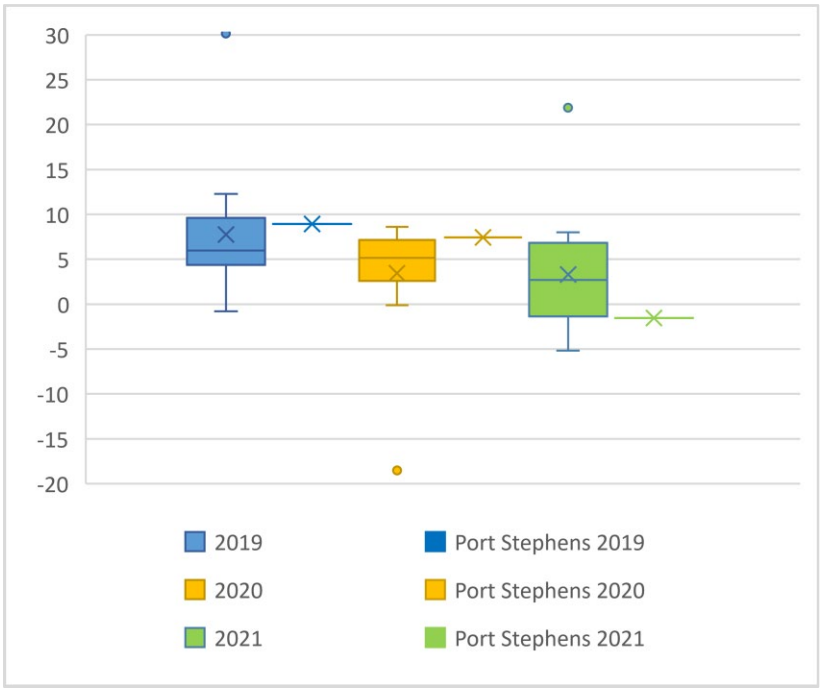
Empirical research into local government has demonstrated an important and oft-overlooked link between budget accuracy and technical efficiency (defined by economists as the conversion of inputs (staff and money) into outputs (local government goods and services)) (McQuestin, Noguchi and Drew, 2020).
Essentially, higher budget accuracy translates into higher efficiency. In addition, budget accuracy has a clear association with financial sustainability and thus warrants some attention. Generally, council staff at Port Stephens have done a goodjob of predicting revenue, with the understandable exception of 2020 (COVID assistance). This is a further indication of the skill exercised by financial and senior management at the council that have clearly been crucial in surviving, despite significant obstacles (grant and taxation revenues, in particular). It might be noted that a positive result suggests council received more revenue than it had budgeted.

FIGURE 21. DEVIATION FROM BUDGETED REVENUE



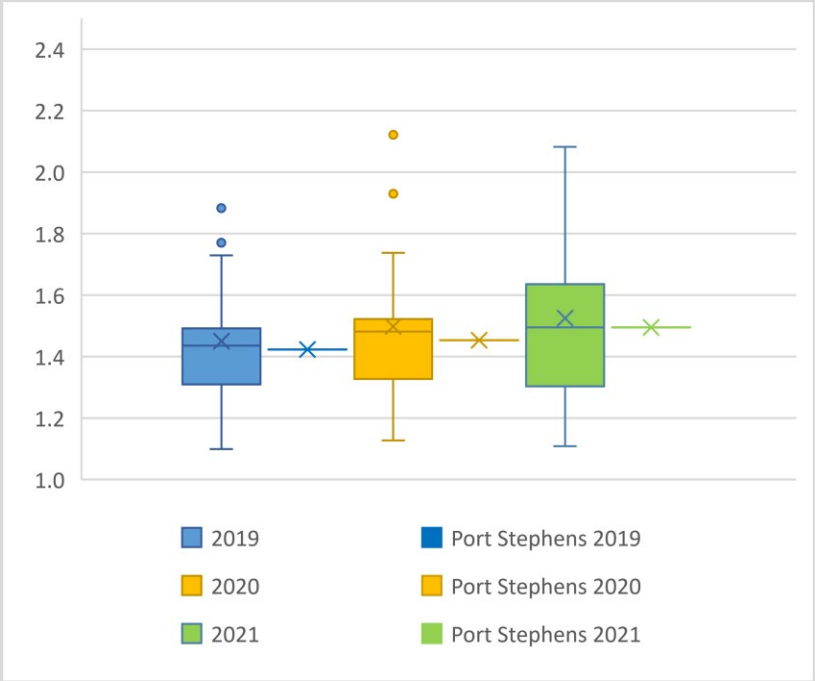
Matters were not quite as good on the expenditure side in 2019 and 2020, notwithstanding the understandable and unpredictable blowout in 2020. However, in2021, senior staff have exercised extraordinary cost control. This will have to also bea feature in 2022 and 2023 (until such time as adequate additional revenue can be realised).

FIGURE 22. DEVIATION FROM BUDGETED EXPENDITURE



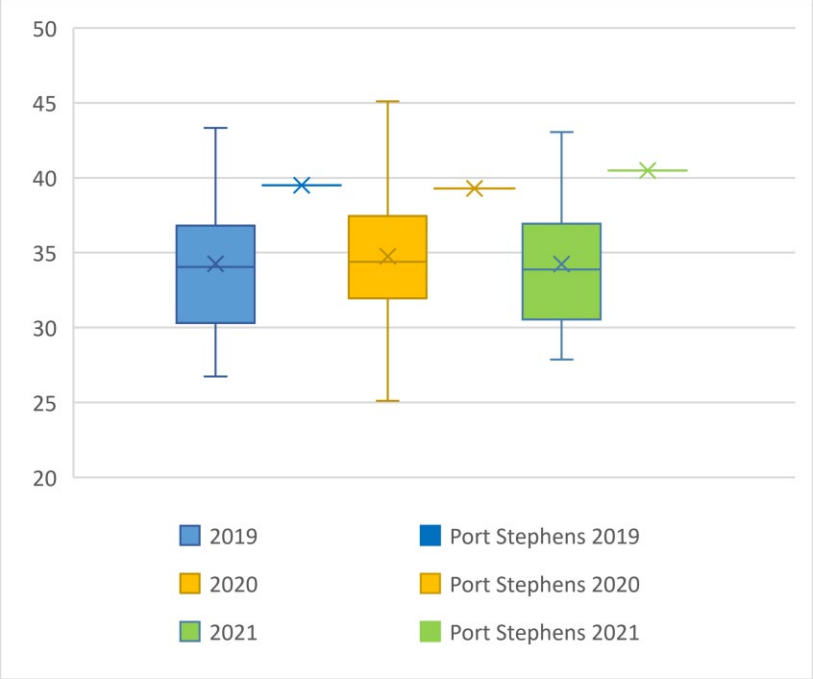
Good cost control is also evident with regard to staff expenditure. In a comparative sense, Port Stephens spends slightly less on staff per assessment than its typical peer. We note from council documents that leave entitlements are carefully monitored and staff encouraged to regularly take leave. This practice exerts marginaldownward pressure on staff costs and it should also be extended to long-service leave. It is noteworthy that the gap between typical staff expenditure in the peer group and Port Stephens has closed in the most recent year which suggests that attention should remain on controlling this cost item.

FIGURE 23. STAFF EXPENDITURE PER ASSESSMENT



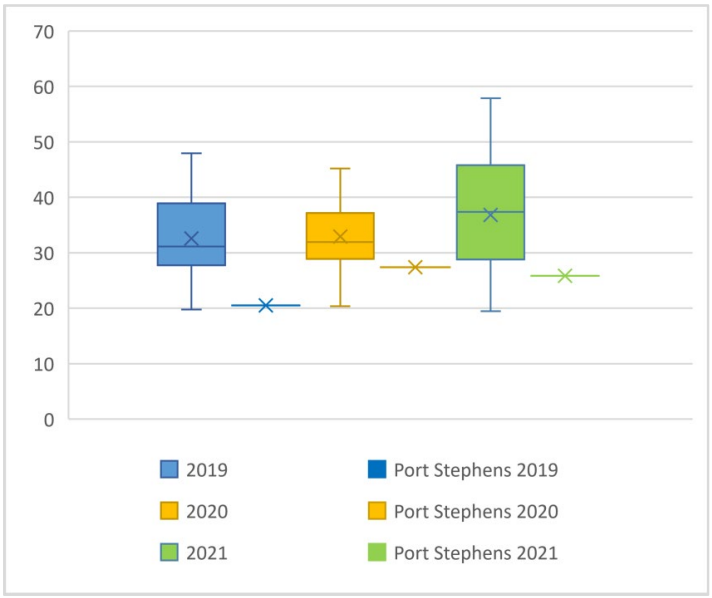
In terms of the proportion of the budget spent on staff, Port Stephens has a much better outcome than its peer group. When we interpret this metric in terms of the average staff expenses per property, it clearly indicates lower than usual material, contract and other expenses. This is yet a further indication of excellent cost control,but it may have implications for service levels in future (especially with respect to maintenance of infrastructure assets as suggested by recent citizen survey results).

FIGURE 24. PROPORTION OF EXPENDITURE ON STAFF



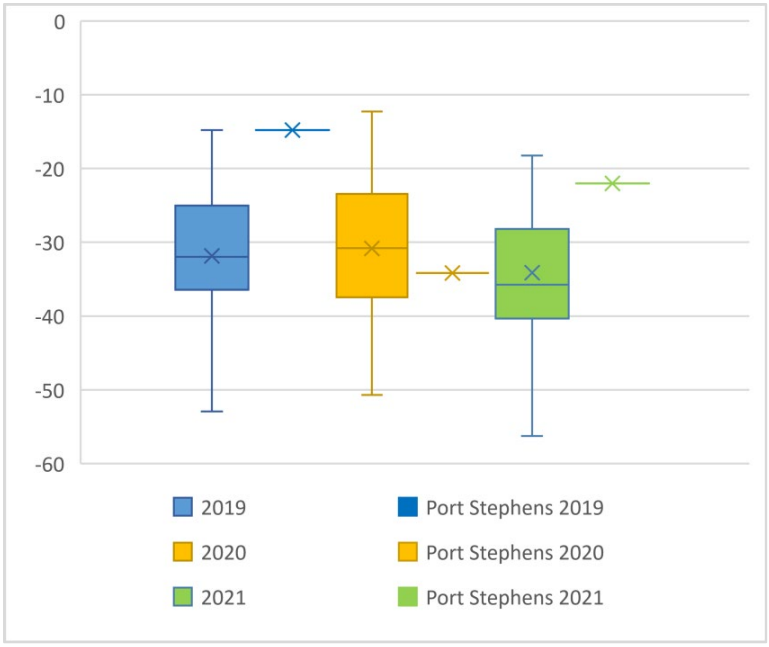
Cash flow is essential to the liquidity of a local government. Generally local governments in Australia have highly positive operating cash flow, very negative investing cash flows and near-to-zero cash flows for financing activities. Port Stephens has consistently recorded much lower operating cash flows than the typical member of its peer group. This should be considered to be a very concerningmatter. Further investigation suggests that insufficient taxation receipts are the majorcause of the problem. This is not a sustainable position going forward, especially when considered in relation to the relatively parlous state of cash holdings (see Figure 31 onwards).

FIGURE 25. OPERATING CASH FLOWS (DEFLATED BY REVENUE)



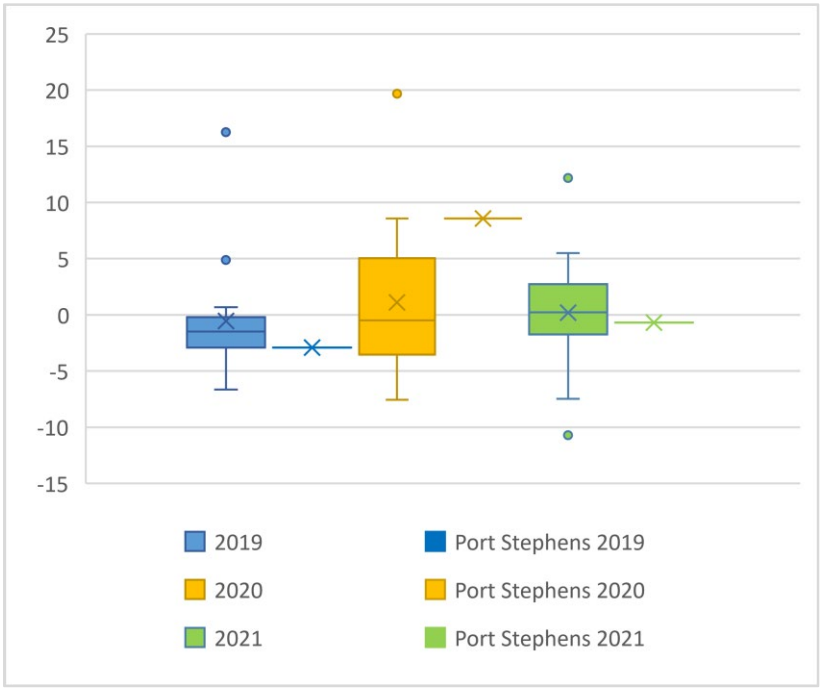
The investing cash flows are not as negative as the typical peer, which suggests that Port Stephens is likely to be under-investing in important community infrastructure. Moreover, we note that forthcoming investments in infrastructure appear to be planned to be funded through debt. As we noted earlier, it is by no means certain that Port Stephens has sufficient debt capacity and we recommend postponing the planned investments. Indeed, Council will need to exercise very careful expenditure controls until additional revenue can be obtained. Port Stephens is thus advised to defer discretionary spending until matters improve. In addition, unless there is eitheran increase in revenue or decrease in other expenditure, then it is quite unlikely thatdebt funding will be defensible in terms of intergenerational equity.

FIGURE 26. INVESTING CASH FLOWS (DEFLATED BY REVENUE)



Financing cash flows tend to be lumpy in nature. As we have discussed previously, debt levels are a concern as reflected by the strong inflows from borrowing in 2020.

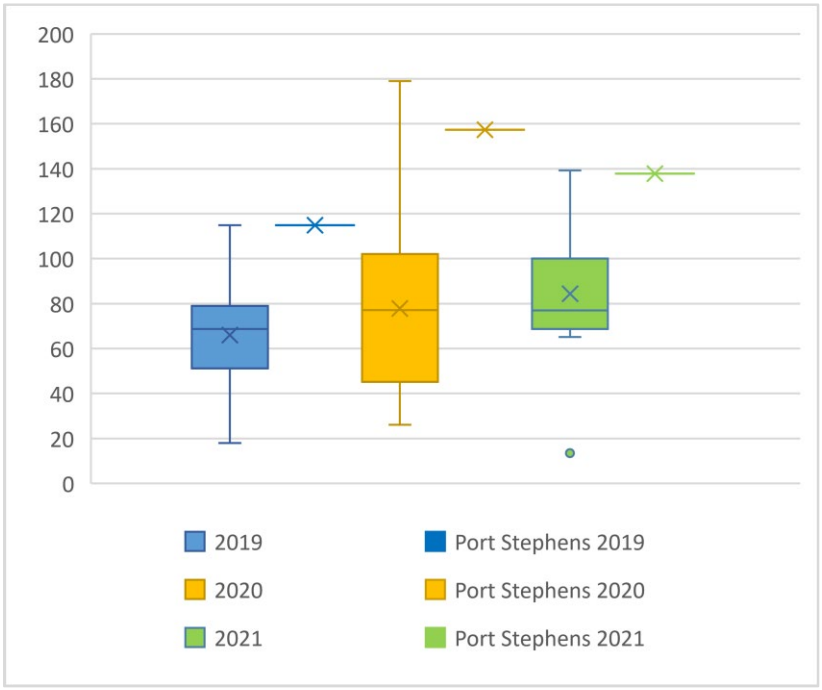
FIGURE 27. FINANCING CASH FLOWS (DEFLATED BY REVENUE)



A good deal of caution needs to be exercised with respect to the three asset ratios employed in NSW which (taken together) attempt to measure the hard aspects of financial sustainability. Indeed, there is significant scholarly evidence to suggest that the renewals and backlog ratios are extremely unreliable (Drew, 2017; Drew and Grant, 2017; Drew, 2020). Some of the problems stem from ongoing confusion with respect to depreciation. Other problems are caused by the difficulty experienced in defining variables such as 'satisfactory standard', or 'required maintenance'. In addition, definitional drift between years renders intertemporal comparisons also unreliable. Moreover, during *Fit for the Future* a number of the peer councils deliberately distorted data to meet state government benchmarks and this also makes comparisons to the peer group unreliable.

The buildings and infrastructure renewal ratio data presented in Figure 28 should be considered a case in point. The denominator uses unreliable depreciation data whichis associated with a number of problems that we have previously alerted readers of this report to. Indeed, the depreciation rate at Port Stephens seems lower than expected in a relative sense and this will largely explain the results which *prima facie* suggest that Council is consistently spending more on renewals than is required. In view of the fact that IPART (2020) cited infrastructure renewal and backlogs in its decision to reject the previous SRV request it would be prudent to carefully review depreciation schedules as indicated earlier.

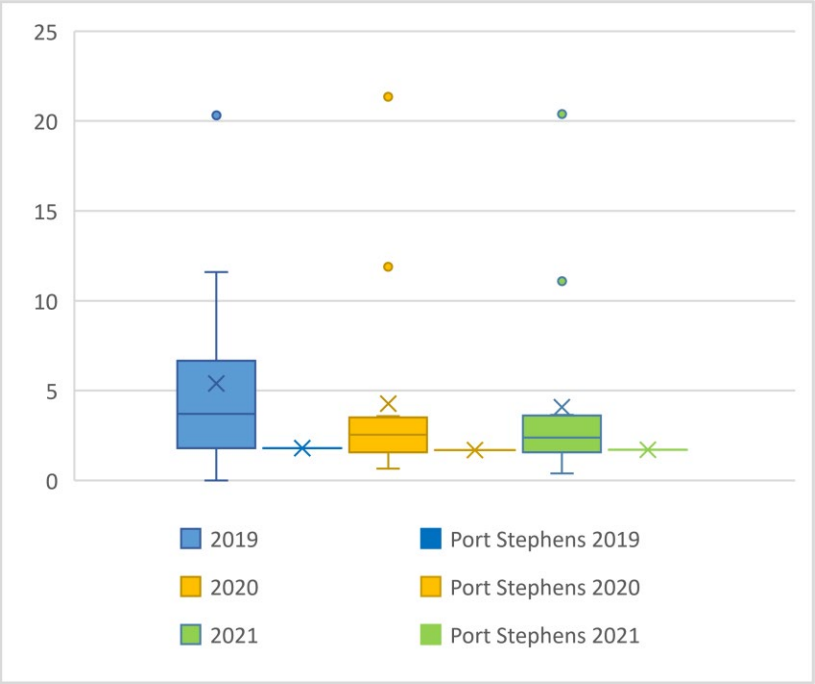
FIGURE 28. BUILDINGS AND INFRASTRUCTURE RENEWAL RATIO



The backlog ratio also looks good for Port Stephens Council in a relative sense andon the surface. Here the variable of concern is input as the numerator – estimated cost to bring assets to a satisfactory condition. Accurately recording this data is a problem for most local governments. We strongly suggest that Council construct a comprehensive definition of 'satisfactory', with photographic examples of the kinds of conditions that are deemed to be satisfactory or not, to mitigate the definitional vacuum that exists at a jurisdictional level and also combat definitional drift.

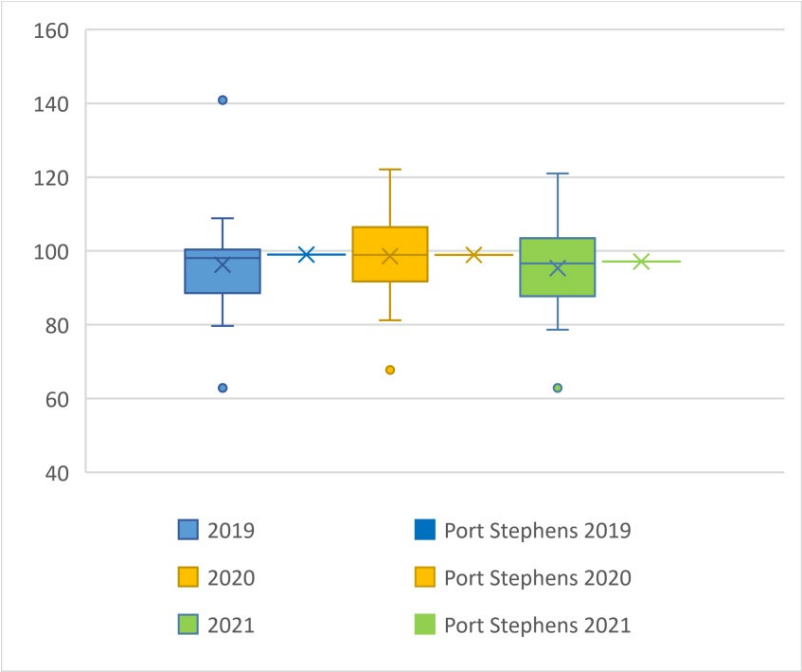
Moreover, in view of the recent citizen satisfaction survey results there might be acase for believing that the Council definition of satisfactory is at odds with the preferences of its citizens. We thus recommend that Port Stephens consider conducting some focus groups to review photographic evidence of infrastructure conditions in order to arrive at a shared understanding on this matter. We suspect that when this activity is completed, Council will be obliged to review this ratio upwards for the next set of financial statements.

FIGURE 29. INFRASTRUCTURE BACKLOG RATIO



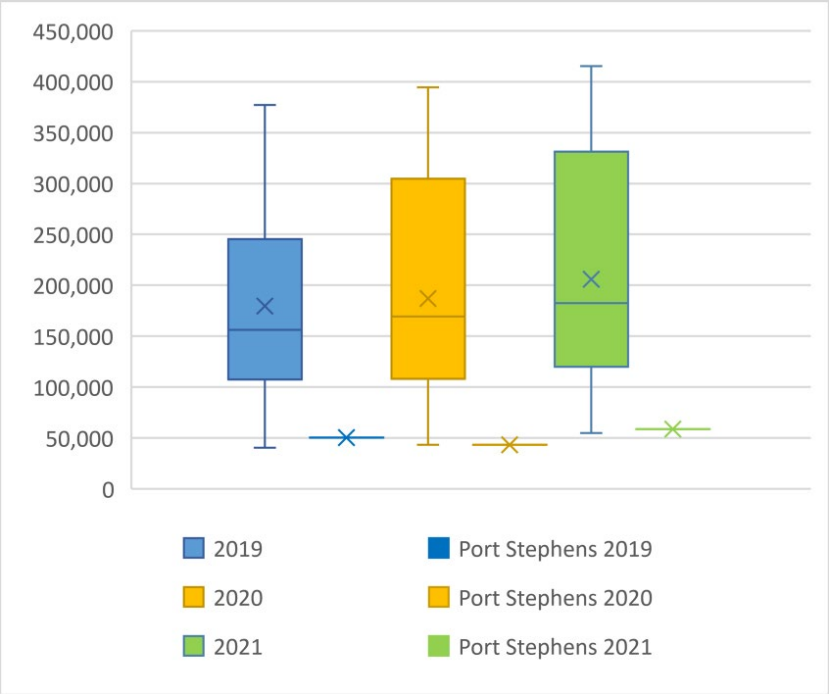
For the asset maintenance ratio the problem resides with the denominator – required asset maintenance – although matters tend to be on a firmer foundation for this input owing to a better evidential base. For this metric Port Stephens is pretty typical of the peer group and there is thus less likely to be a need for significant adjustments to this particular data moving forward.

FIGURE 30. ASSET MAINTENANCE RATIO



We now turn our attention from assets to cash holdings. Figure 31 presents total cash and equivalents data for Port Stephens and its peer group. It is painfully clearthat cash holdings at Port Stephens are at very low levels in a relative sense. It is noteworthy that these figures include both restricted and unrestricted holdings.

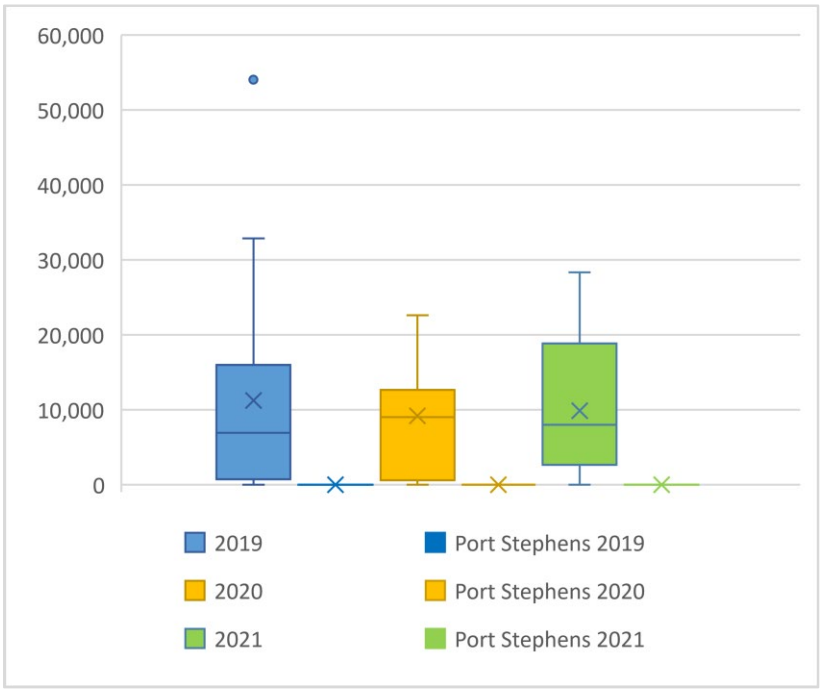
FIGURE 31. TOTAL CASH, CASH EQUIVALENTS AND INVESTMENTS ($000)



In Figure 32, we plot the crucial unrestricted cash position for Ports Stephens Council relative to the peer group. Matters could hardly be more serious in a financial sustainability sense and support our previous prescriptions: (i) the suspension of discretionary spending where practical, (ii) a thorough review of pricing for non-regulated fees and charges to be reflected in the 2022-23 Operational Plan, (iii) deferment of new debt drawdowns until capacity has been measured and (iv) a SRV. Hopefully the Council's non-core operations – such as holiday parks, after school care and the like – will pick up in the new calendar year. However, given the continued uncertainty surrounding the pandemic and attendant public policy responses, it would be prudent to take strong measures as soon as possible.

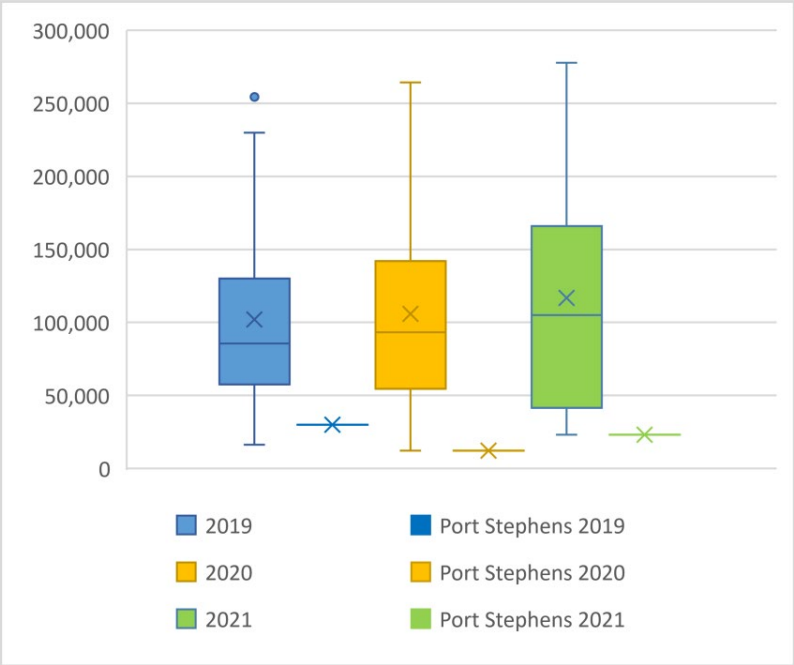
Moreover, the inflation outlook is not good and is compounded further by the disastrous new IPART rate cap methodology (IPART, 2021) which decrees a mere 1.3% increase to rates for next year when the best-case scenario for inflation is likelyto be 3%. This means that the parlous state of unrestricted cash reserves at Port Stephens is even more serious than it might at first appear.

FIGURE 32. TOTAL UNRESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS ($000)



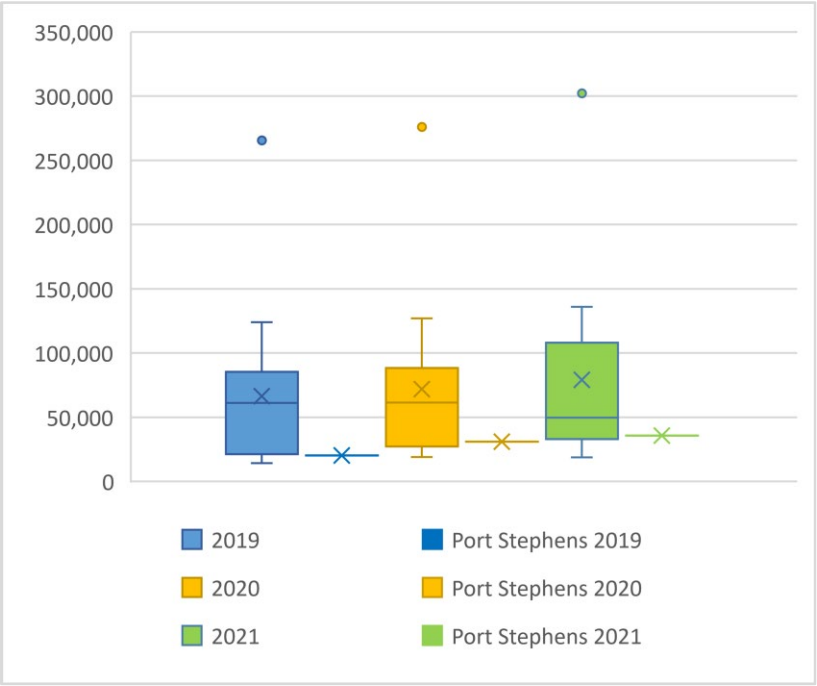
Externally restricted reserves are also at low levels in a relative sense. This does not play a direct part in meeting present liquidity needs, but is important to long-run financial sustainability. The most likely causes for low reserves could be: (i) comparatively low developer contributions, (ii) recent completions of developer fee related projects or (iii) relatively low rates of development. We recommend that developer contribution schedules be reviewed along with the review of fees and charges that Port Stephens needs to conduct early next calendar year.

FIGURE 33. TOTAL EXTERNALLY RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS($000)



Internally restricted reserves provide a little comfort and could be used if the COVID pandemic and public policy conditions do not improve. It is noteworthy that internal reserves are lower than most of the peer group and are a reflection of low revenues, expanding infrastructure and a preference for debt as a means of funding infrastructure. We reiterate our comments regarding the need for current generations to contribute revenue or savings at least in proportion to the consumption of long- lived assets for intergenerational equity to be met. Moreover, the combined message that needs to be understood by councillors arising from our analysis of reserves is that there is simply no money available for any new discretionary programs and projects for some time (probably until at least September 2023 assuming IPART makes the prudent decision on an SRV application that is necessary to assure financial sustainability).

FIGURE 34. TOTAL INTERNALLY RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS($000)

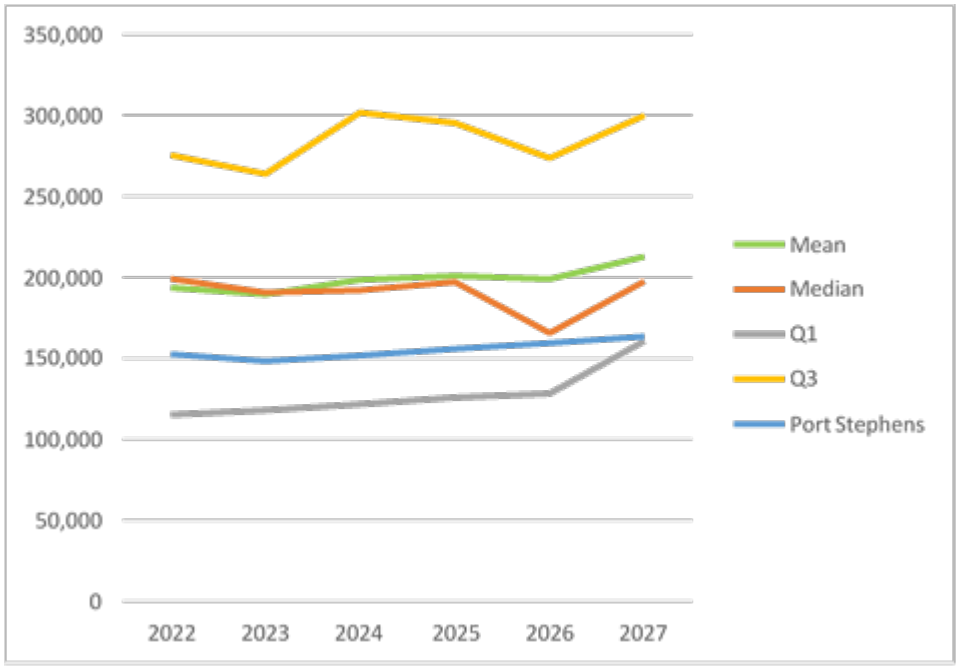


We now turn to a comparative analysis of Long-Term Financial Plans (LTFP). In order to facilitate the maximum number of comparisons we have had to restrict our analysis to the years up to and including 2027. Data cited is for standard scenarios. Moreover, we also note that the Cessnock data is missing from much of the followingwork.

LTFP are inherently unstable and inaccurate. They involve the making of a number of assumptions that might seem reasonable at the time when projections are first made, but can quickly appear rather incongruous with respect to facts on the ground.For example, Port Stephens reasonably assumed a 2% rate cap increase, but IPART (2021) recently advised that the increase for 2022-23 would be just 1.3 percent. In addition, Council predicted that grant revenue would continue to increaseat 2.2% per annum, when the current budgetary plight of higher tier governments suggests the possibility of reductions to the quantum in real terms. Furthermore, the standard model assumes commercial receipts will not be adversely affected by new COVID policy responses, nor impacted by a likely slowing economy in the forward years. The income projections also assume that the airport dividend is reinstated in 2023, which we feel is an optimistic assumption.

Despite these assumptions – which now appear questionable – Port Stephens is expecting revenue to grow quite slowly and remain firmly in the lower half of the second quartile until 2027. This is a concern given what we have already had to sayabout reserves and proposed works.

FIGURE 35. TOTAL INCOME ($000)

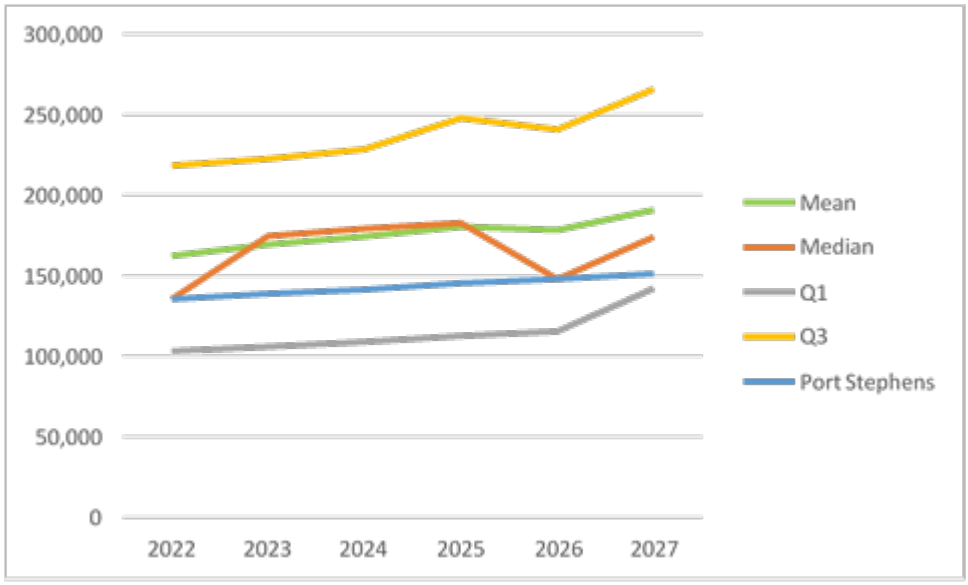


Expenditure assumptions probably also warrant revisiting in the wake of the COVID public policy responses. In particular, it is now clear to almost everyone – except perhaps the members of the Reserve Bank of Australia (RBA) Board – that we are entering a lengthy cycle of elevated inflation. Thus, most of the assumptions regarding increases to wages, contracts and materials look overly optimistic. At the very least these assumed rates of growth should be increased to the top of the RBA target band (3%[6]). However, this would likely prove insufficient given continuing high Producer Price Indices numbers in China and America that are approaching ten percent. In addition, the LTFP assumes no major new capital works in the next ten years which we believe will be difficult to comply with given high rates of development, an incoming new council with many new faces and extant levels of citizen satisfaction (arising from entrenched fiscal illusion). Indeed, the assumption of 150 new rateable properties per year is almost certainly an under-estimate and it must be remembered that on the whole growth in assessments is associated with nett additional expenditure (Drew, 2021).

We thus expect expenditure to actually rise much more steeply than predicted, which is a problem given that it is already forecast to close in on the typical result for the peer group over the next six years or so.

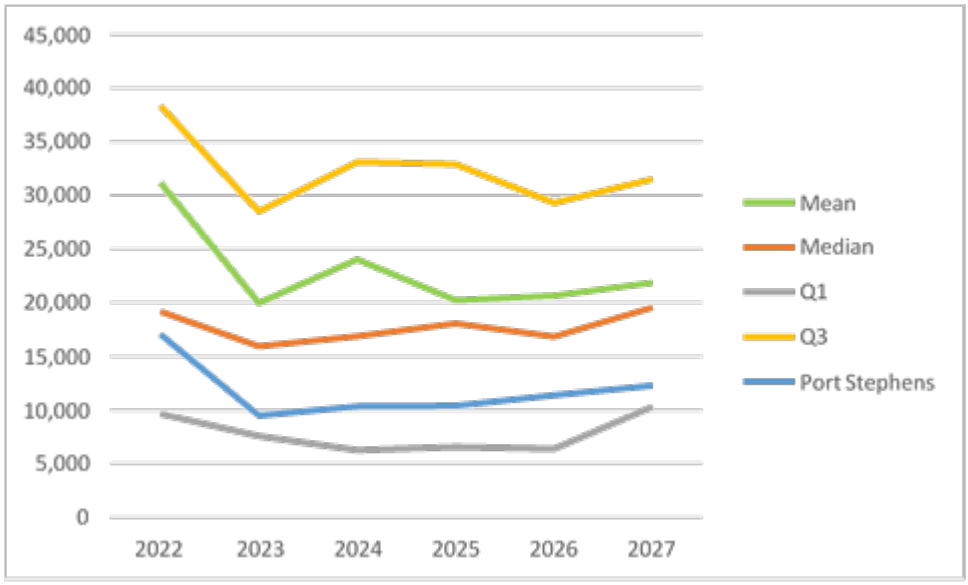
[6] Of course, the timing of the next EBA and expiry of existing contracts will need to be taken into account.

FIGURE 36. TOTAL EXPENDITURE ($000)



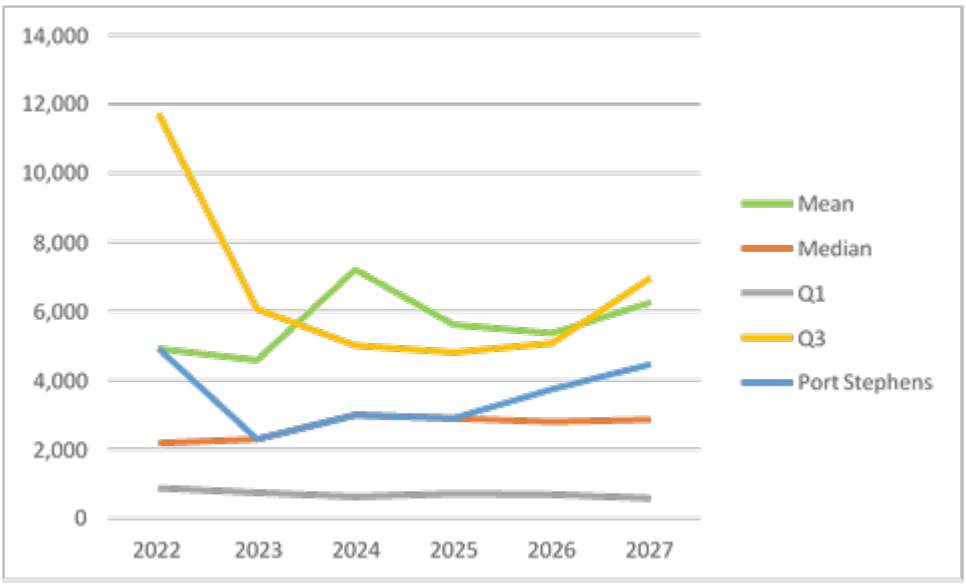
The nett operating result is predicted to improve over time. However, given our reservations regarding forecast predictions, we do not anticipate that this will actually occur unless significant changes to both revenue and expenditure are made. Given the current state of cash holdings – as well as the ongoing uncertainty regarding COVID and associated policy responses – changes that ought to be made to the LTFP are likely to paint a very concerning picture.

FIGURE 37. NETT OPERATING RESULT ($000)



The picture is a little better in a relative sense when capital grants are excluded. However, our reservations regarding the veracity of assumptions means that little comfort should be taken from Figure 38.

FIGURE 38. NETT OPERATING RESULT WITHOUT CAPITAL GRANTS ($000)



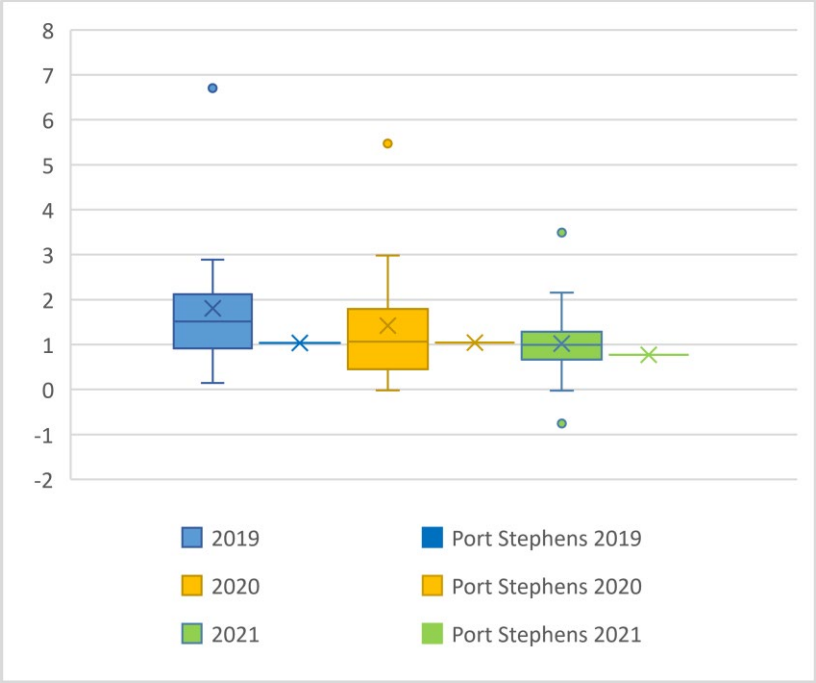
Growth in the number of rates assessments is an important determinant of financial sustainability. Because NSW councils operate under a rate cap regime, growth in assessment numbers contributes comparatively little to revenue (with the main contribution through fees and charges, some of which are regulated or must only be set at cost recovery[7]). Yet new residents bring new demands for services and exert additional pressure on current infrastructure. Growth in assessments thus generally represents a nett negative to financial sustainability in NSW local government (Drew,2021).

Growth at Port Stephens is relatively typical of its peer group, but it should be remembered that the peer group encompasses a number of high growth areas.Moreover, since the advent of COVID more people have chosen to move out ofcapital cities in favour of regional communities. Furthermore, the population in Australia is ageing and people often desire to live in picturesque seaside communities in their retirement years (Drew, 2021).

All of this means that Port Stephens ought to expect even more development in the future, which will undoubtedly place more strain on its already stressed financial condition.

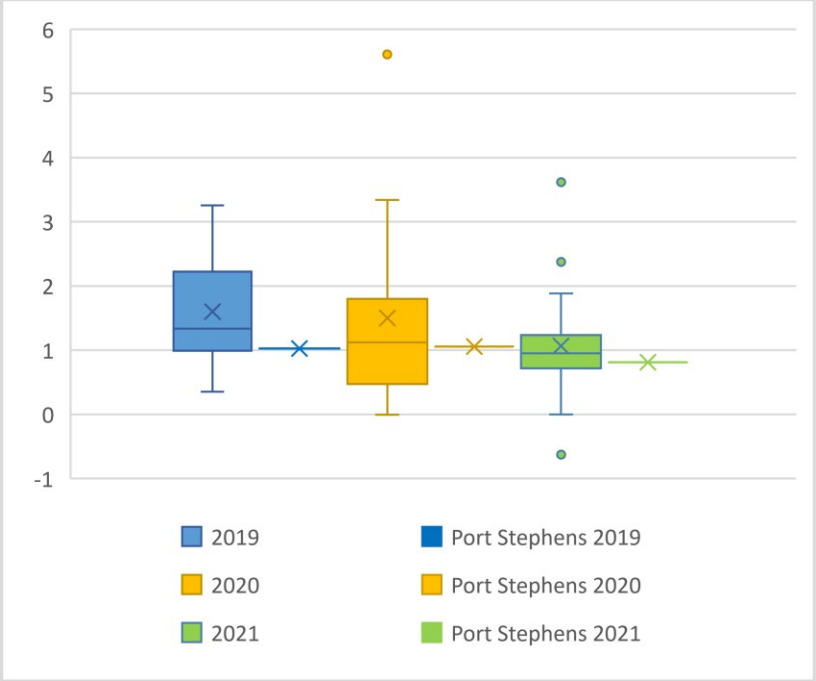
[7] In view of the new IPART methodology population growth may act to increase the cap. However, given theproportion of aged persons moving to Port Stephens it is unlikely that population growth factors will keep pace with growth in expenditure terms (which is driven by both numbers of properties and socio-demographic need).

FIGURE 39. GROWTH IN NUMBER OF ASSESSMENTS



Growth in residential assessments has been relatively strong and is likely to accelerate from 2021 levels.

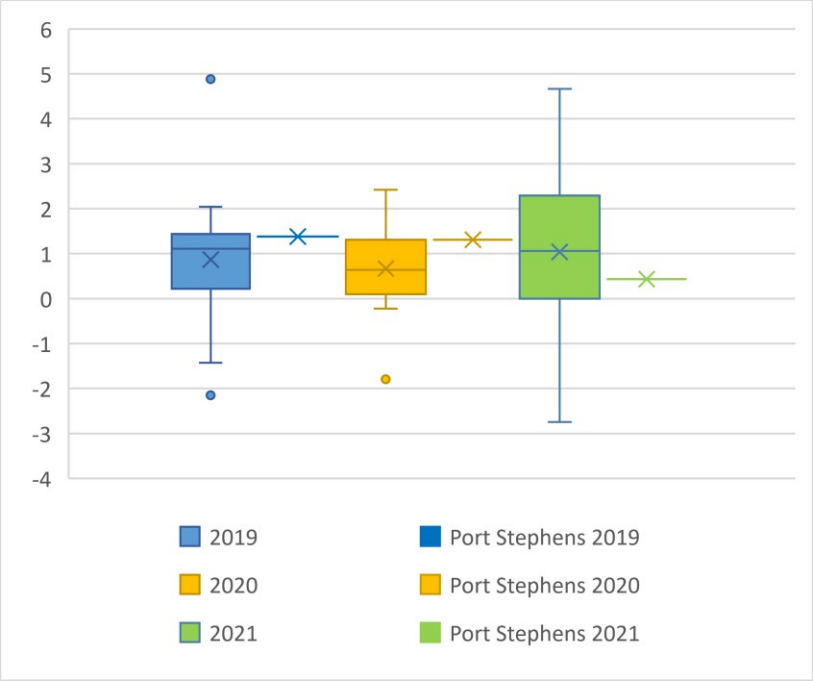
FIGURE 40. GROWTH IN NUMBER OF RESIDENTIAL ASSESSMENTS



However, growth in business assessments has been much slower of late. Many of the businesses in the Port Stephens local government area revolve around the service industry which has been hit particularly hard. Because of continued policy uncertainty related to COVID, business investment is unlikely to grow as fast as

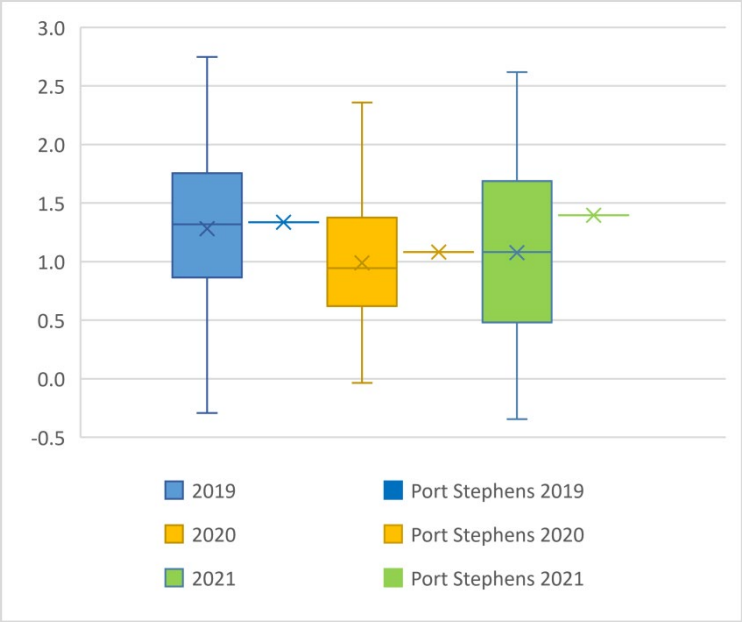
residential investment for the next few years. Indeed, as the immediate post-COVIDboom fades, many economists expect growth to revert back to lower-than-trendlevels. This is not good for the local community, but it may relieve a little of the pressure for spending on Port Stephens Council.

FIGURE 41. GROWTH IN NUMBER OF BUSINESS ASSESSMENTS



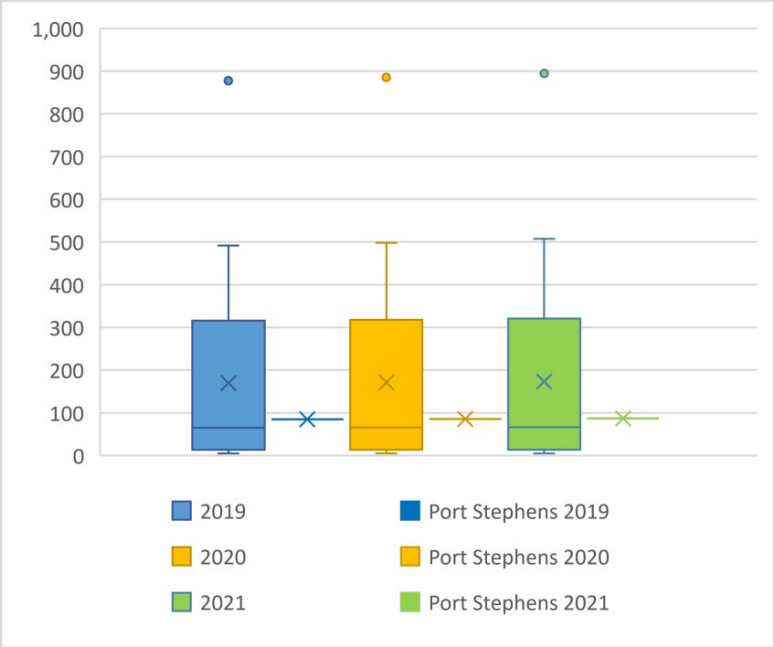
Population growth is slightly above the typical result for the peer group. As a host of econometric studies show, expenditure need is most closely related to growth in assessments as well as socio-demographic factors (which we consider from Figure 44 onwards) (Drew, 2021). However, population growth has become more importantas a result of recent ill-advised changes to the rate cap methodology (IPART, 2021) (see also the video on this topic on the YouTube site 'Professor Joseph Drew's World of Local Government'). Thus, the slightly higher level of growth means that Port Stephens received a slightly higher rate cap (1.3% compared to the 0.7% most councils received), notwithstanding the fact that it is clearly insufficient for the new higher inflation cycle.

FIGURE 42. POPULATION GROWTH



Population density is important because of the potential for economies of density (whereby costs are initially expected to decrease as population density increases).Port Stephens is more-or-less typical of the peer group (according to the median) which means that it is not disadvantaged in relative terms. However, to promote sustainability emphasis should be placed on encouraging in-fill and brownfield development over the much more expensive greenfield options.

FIGURE 43. POPULATION DENSITY



In Figure 44 we plot comparative data for aged pensioners over time. Port Stephens has relatively high levels of aged pensioners even when compared to its peer group which includes a lot of desirable retirement destinations. This is extremely problematic because the mandated pensioner discount is only partially funded by the NSW Government. Moreover, a host of scholarly work shows that pensioners are positively correlated with increased expenditure demand (Drew, 2021). Indeed, the proportion of pensioners should be considered to be a significant threat to financial sustainability (notwithstanding that COVID has left most pensioners in a far better economic position relative to many workers).

FIGURE 44. AGED PENSION

Moreover, matters are only likely to get worse over coming years. Figure 45 shows the proportion of people likely to retire in the next five years. The numbers are very high for Port Stephens and suggest that even without the large numbers of expectedinternal migrant retirees financial sustainability will get rather more difficult in the near future.

FIGURE 45. PERCENTAGE OF POPULATION AGED 60-64

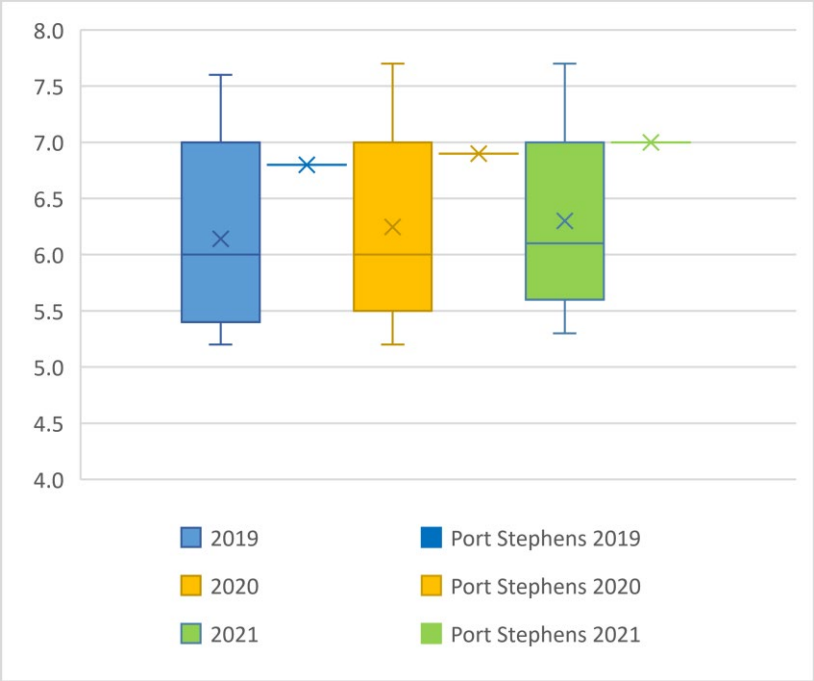
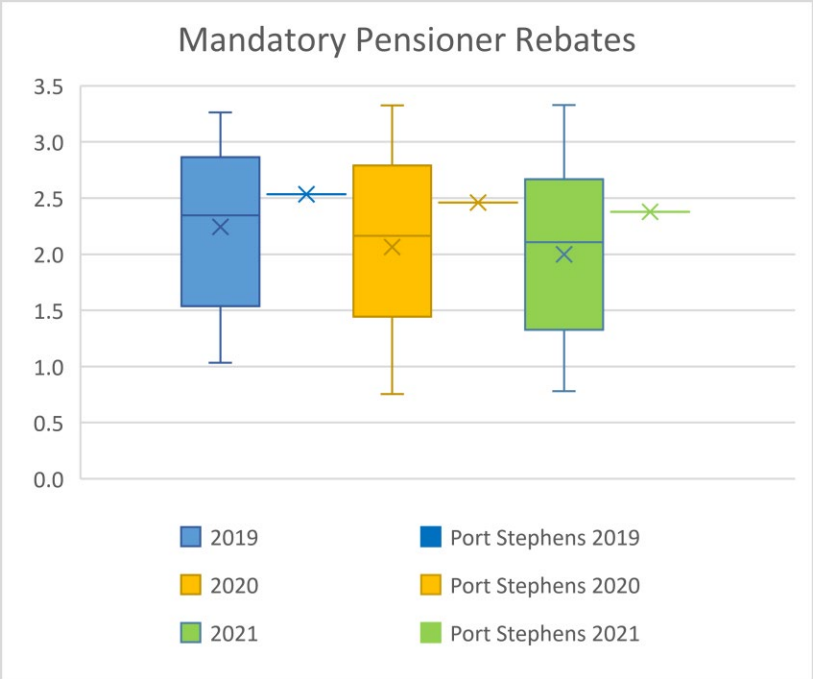


Figure 46 provides a comparative analysis of the effect of pensioner rebates expressed as a proportion of total collectible rate revenue. As can be seen, this is a weighty problem for Council and yet another reason why a SRV is imperative.

FIGURE 46. PENSIONER REBATE (AS A PROPORTION OF RATE REVENUE)



Figures 47 to 49 inclusive present some other data regarding the relative rate of receipt of various welfare payments. Generally Port Stephens is pretty typical of the

peer group and it is thus not under a particular relative disadvantage. However, it is interesting to note the large increase in Newstart and Jobseeker allowance in 2021 (a one year lag applies to this ABS data) which confirms the susceptibility of Port Stephens to shocks to its service industries. This has important implications for revenue receipts, as we have already discussed.

FIGURE 47. DISABILITY SUPPORT PENSION

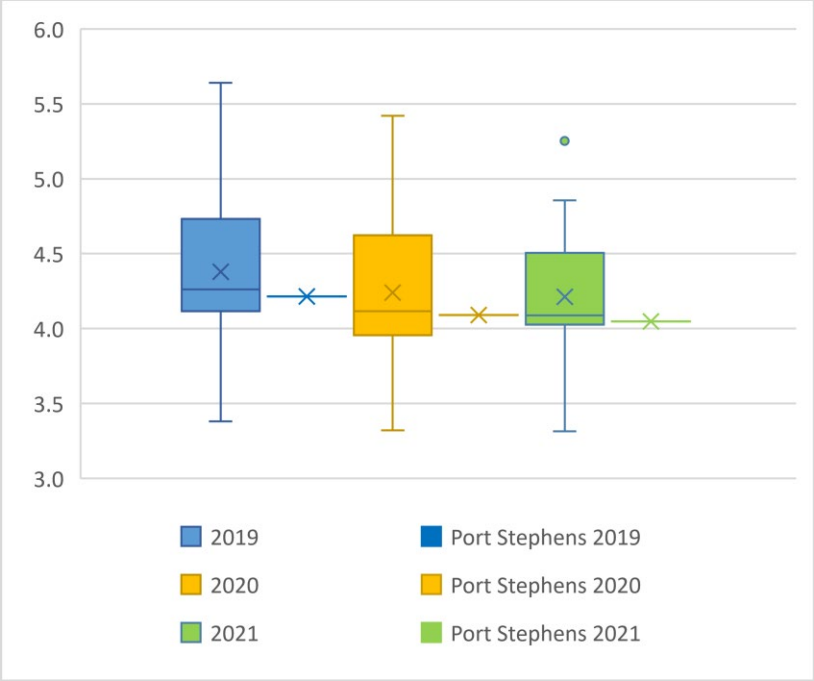


FIGURE 48. NEWSTART ALLOWANCE/ JOBSEEKER

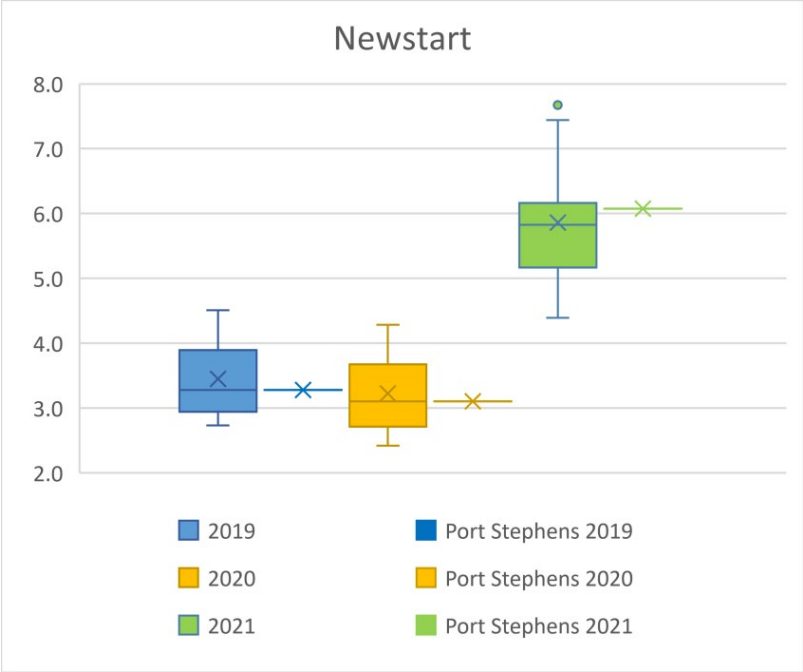
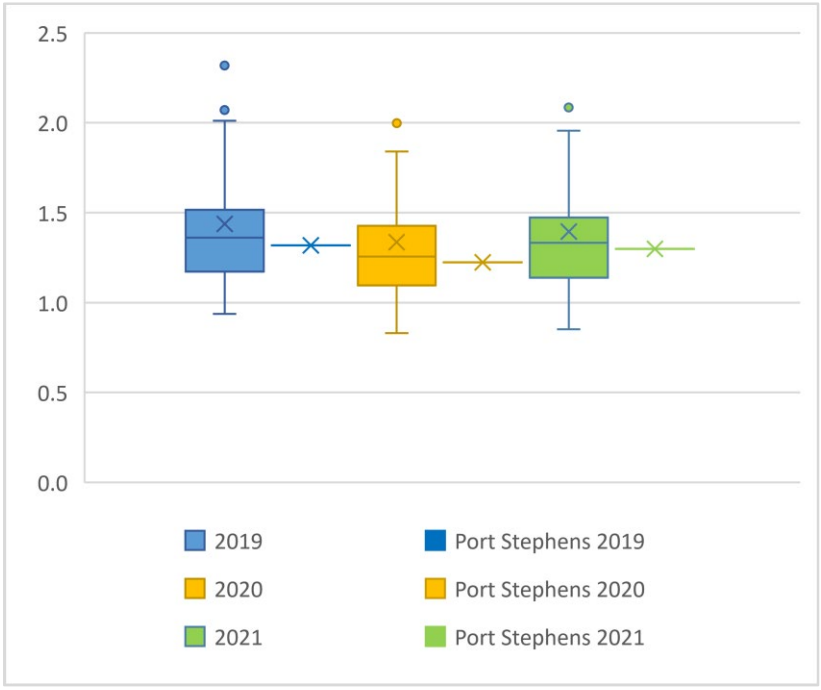
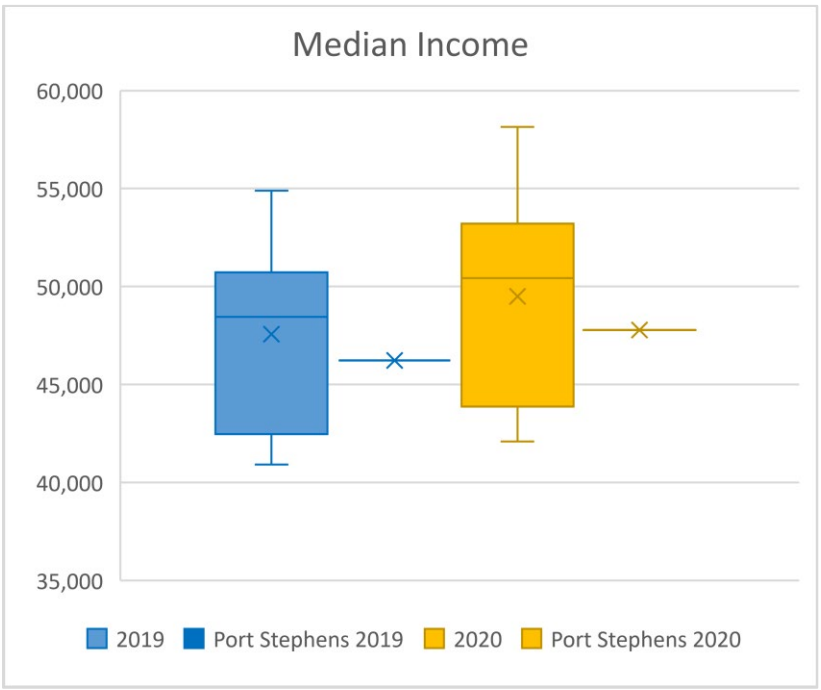


FIGURE 49. SINGLE PARENT PENSION



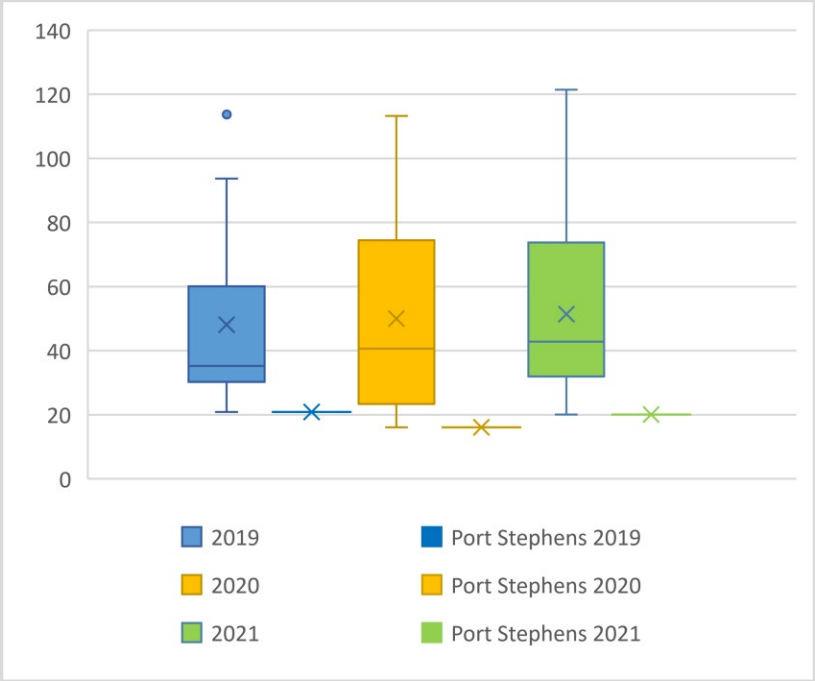
The median employee income is also important because along with other socio-demographic factors (such as the proportion of persons on an aged pension) it is known to drive expenditure higher. Fortunately, in this particular area Port Stephens has not scored highly in a relative sense. This means that the Council will have relatively less pressure (from income earners) for higher expenditure than some of its peers.

FIGURE 50. MEDIAN EMPLOYEE INCOME



The final data that we look at is the cash expense cover ratio (expressed in weeks). Both in a relative and absolute sense matters are very serious. It is thus imperative that an SRV is approved.

FIGURE 51. CASH EXPENSE COVER RATIO (WEEKS)



3. CONCLUSION

As we have stressed throughout this Report, considerable work must be done to ensure ongoing financial sustainability, especially given the significant risks on the horizon. In particular, a SRV is absolutely essential to (i) ensure financial sustainability, (ii) meet intergenerational equity, (iii) dispel fiscal illusion and (iv) collect adequate revenue in a legitimate manner. In our Capacity to Pay Report, we will deal with this matter in detail. Moreover, our Efficiency Report will look at relative technical efficiency and cast further light on where efforts should be concentrated moving forward. Accordingly, the Financial Sustainability Report must be read in concert with the Port Stephens Capacity to Pay Report, the Port Stephens Efficiency Report and the Port Stephens Debt Report.

APPENDIX 1: INFLATION AND ECONOMIC GROWTH

Over the past two years, market economists across the developed world have carefully considered the economic impact of COVID fiscal stimulus packages and associate monetary easing by central banks. During this period, billions of dollars have been injected into the economies of advanced economies by way of fiscal intervention accompanied by substantial quantitative monetary expansion. To date,the net result has been historically low interest rates, promising increases in economic activity and rising Consumer Price Indexes (CPI) and Producer Price Indexes (PPI) across the developed world.

In general, central banks in most advanced countries, including the Reserve Bank ofAustralia (RBA), had ascribed the observed increases in their CPIs and PPIs to various supply shortages arising from COVID lockdowns, constraints on internationaltrade and changes in consumer demand. However, over the past month continued price inflation has seen some major central banks express concern over rising inflation, such as 6.8% in the US, 6% in Germany and 5.1% in the UK in November 2021. This has led several central banks to reduce their stimulatory policies.

For instance, in the UK continued strong aggregate demand, engendered by massive government expenditure financed through borrowing from the Bank of England, has seen an ongoing increase in British inflation. While inflation was 0.7%in early 2021, by November it stood at 5.1%. As a consequence, the Bank of England finally felt obliged to lift interest rates from a record low of 0.1% to 0.25% inearly December. However, this still meant real rates are negative by almost 5%.

Other central banks are also beginning to unwind their COVID stimulus programs and raise interest rates. For example, both the US Federal Reserve and the European Central Bank have moved to tighten monetary policy in response to concerns over inflation. Consumer prices in the US increased by 6.8% in November 2021 over November 2020, the largest increase in almost four decades. In Australia,RBA governor Philip Lowe announced in December that its $4billion per week bond buying program would probably end in February 2022, with inflation edging towards 3%. The RBA now anticipates inflation in 2022 will approximate 3%.

Alongside rising inflation, we have seen most developed economies bounce back interms of economic growth after the initial depressing effects of lockdowns and other COVID measures. In Australia, the RBA forecasts economic growth of about 3% in 2021, 5.5% in 2022 and 2.5% in 2023.

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Port Stephens Council

Capacity to Pay Report

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EXECUTIVE SUMMARY

This report details the insufficiency of local government taxation revenue for the port stephens local government area. We also review the extant rate structure used by port stephens council and offer suggestions to improve both the distributive justice and capacity to pay aspects of its municipal tax. The centrepiece of this report is a sophisticated multiple regression analysis over a long panel of data that precisely quantifies the extant shortfall in receipts. We conclude the report with an enumeration of the changes to existing tax arrangements that are important to ensure ongoing financial sustainability for port stephens council.

1. INTRODUCTION

Taxation is a critical source of funding to support the provision of local public goods and services as well as subsidise merit goods and goods with positive externalities. Public goods and services are both non-excludable[1] and non-rival[2] in consumption.These items contribute to the common good and it is not practical to levy a fee or charge for their use. They must thus be funded through taxation. By contrast, merit goods embody various desirable attributes and thus may warrant some level of subsidy from the common tax pool to elicit higher levels of consumption (Drew, 2021). Similarly, goods with positive externalities provide benefits to the wider society (beyond those internalised by the user) and may thus be considered worthy of subsidy. The main point to grasp is that taxation is a moral responsibility accruingas a result of one's membership in a community – it is definitely not a fee for service(a common misapprehension that leads to inefficient taxation structures that are difficult to defend in a moral sense; see Drew (2020)).

In Australian local government systems, the tax base is narrow and focussed on landvalue (Dollery, Crase and Johnstone, 2006). Use of unimproved land value has a number of qualities to recommend it, including: (i) relative ease of calculation; (ii) efficiency[3]; (iii) clear liability[4]; and (iv) nexus[5]. In addition, the property tax has a strong moral foundation since it is largely based on unearned wealth created by others (George, 2010). Put differently, the increase in unimproved land value captures just a small fraction of the wealth created for an individual through the efforts of others (for example, through migration, the establishment of new industriesor the construction of new infrastructure). Thus, by paying a land tax one is really returning to the wider community some of the wealth that they have created. In this sense, a land tax is often seen as a tax on unrealised capital gains (Drew, 2020;2021).

In addition, failure to levy sufficient taxation can lead local governments to participatein risky activities, such as attempting to generate commercial revenues to subsidise taxation insufficiency or neglecting to conduct adequate maintenance on local infrastructure. Indeed, excessively low taxation can also encourage the levying of inappropriately high fees and charges for municipal services that are inequitable[7].

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1 It is neither reasonable nor practical to prevent someone from using the good or service, such as local roads.

2 One person's use of the good or service does not materially affect the capacity of others to use it, as in street lighting.

3 In the sense that an unimproved land tax tends not to distort economic decision-making.

4 It is clear who is liable for the tax and it is very difficult for one to avoid one's responsibility (for example, the objective of the tax cannot be moved to a tax haven).

5 Services at the local government level are still most closely associated with property rather than with people (although in Australian local government the mix is changing over time (Dollery *et al.* 2006)).

[6] Drew (2021) uses the powerful personal budget metaphor to explicate these matters further. In our personal finances, we expect to make sacrifices when we take out debt. We have either to earn more or cut back on costs in other areas.

[7] In this case, users of services are essentially forced to subsidise the moral obligation of taxpayerswho do not consume the fee-attracting item in question.

Moreover, inappropriately low levels of taxation fuel deleterious fiscal illusion. Fiscal illusion occurs when local residents do not understand the true cost of the local government goods and services they consume (Drew, 2020). It tends to result in excessively high levels of consumption as well as high demand for the expansion of local programs and local infrastructure. Fiscal illusion is also likely to result in strong community opposition to perfectly reasonable requests to pay financially sustainablerates of taxation (IPART, 2020). In these instances, careful and clear communicationto local residents is essential.

Taxation at Port Stephens Council is organised around three principal categories consistent with the Local Government Act (1993, NSW): residential, farm business and (non-farm) business. In addition, special consideration has been given to ratepayers affected by the Williamtown contamination. Table 1 – extracted from themost recent Operational Plan – details the rate structure at Port Stephens Council:

Category	Sub-Category	**Ad Valorem Rate c in $**	**Base Amount $**	Base Amount Yield %	Estimated Rate Yield '000s
Residential	n/a	0.2796	394.00	35	$35,789
Residential	Williamtown Primary Zone	0.1398	197.00	39	12
Residential	Williamtown Secondary Zone	0.2097	295.50	41	112
Residential	Williamtown Broader Zone	0.2516	354.60	40	223
Farmland	n/a	0.2796	394.00	21	$840
Farmland	Williamtown Primary Zone	0.1398	197.00	30	6
Farmland	Williamtown Secondary Zone	0.2097	295.50	27	19
Farmland	Williamtown Broader Zone	0.2516	354.60	26	21
Business	n/a	0.7727	1,684.00	35	$9,046
Mining	n/a	0.7727	n/a	n/a	Nil
				Total	**$46,068**

TABLE 1. ORDINARY RATE STRUCTURE

It is noteworthy that the farm business rate has been set at the same level as the residential rate of local government taxation notwithstanding the fact that most farm businesses can export at least some of the tax to the federal government as part of their usual tax affairs. This means that farm businesses in Port Stephens are not paying the same effective rate of taxation as most residential ratepayers (that is, they are receiving an effective discount and hence a subsidy).

Moreover, the rate levied on other (non-farm) business is 2.76 times higher than that paid by farm businesses. It would seem difficult to justify this disparity without resorting to an inappropriate fee-for-service kind of argument. However, it is noteworthy that non-farm businesses also generally have the capacity to export some of their local government taxation burden to the federal government.

Port Stephens makes use of a base rate. The main arguments for using base rates are: (i) that they flatten the disparity between rate assessment notices; (ii) that they ensure that owners of strata title properties or high-density dwellings make a reasonable contribution to the tax pool[8]; and (iii) that they reduce some of the volatility that can arise from revised property valuations. All of these claims are largely correct, but they come at a high cost to the most disadvantaged landowners in the community.

In essence, a base rate has the effect of reducing the size of the *ad valorem* factor. This means that people retain a relatively larger share of the unearned wealth reflected in unimproved land values. Thus, those who enjoy relatively higher increases to their land value will benefit far more, in absolute terms, than those who do not. Indeed, those who have their land value fall are guaranteed in a base rate environment to be the most disadvantaged. A decision must thus be made regarding whether it is reasonable to effectively place more of the burden on the relatively disadvantaged (and hence disturb distributive justice) in order to reduce rate volatilityor ensure strata title and high-density property owners pay a reasonable contribution.If indeed a base rate is retained, then it would be best to link the proportion funded by the base rate to the governance costs of the Council (Drew, 2021), which would probably see it fall considerably.

We have taken the trouble to outline some of the complexity of a land-based taxation system because it seems an opportune time to reflect on the equity and efficiency of these matters as part of the current review of capacity to pay.
The remainder of this Report is set out as follows. In section 2, we conduct a broad overview of Port Stephens taxation rates relative to a peer group of fourteen councils. In section 3, we conduct a more detailed review of residential rates. Section 4 considers business income variables. In section 5, we present robust econometric modelling of the total tax capacity for the Port Stephens local government area. We conclude the Report in section 6 with our recommendations for Council moving forward.

[8] The objective here is to improve distributive justice by ensuring that strata title and high density owners pay more than what they otherwise would. However, in so doing it is inevitable that distributive justice will be eroded for owners of low value property. The best solution would probably be a separate category for high-density dwellings and strata holders, but the legislation does not appear to facilitate this potential remedy.

2. OVERVIEW OF RATES AT PORT STEPHENS COUNCIL AND ITS PEERS

In section 2, we provide a comparative perspective on local government taxes at Port Stephens relative to the fourteen-member peer group also used in our Financial Sustainability Report.

To provide a synoptic relative overview the best option is a box and whisker plot. Figure 1 provides information on how to read the graphs that follow.

FIGURE 1. INTERPRETING BOX AND WHISKER PLOTS

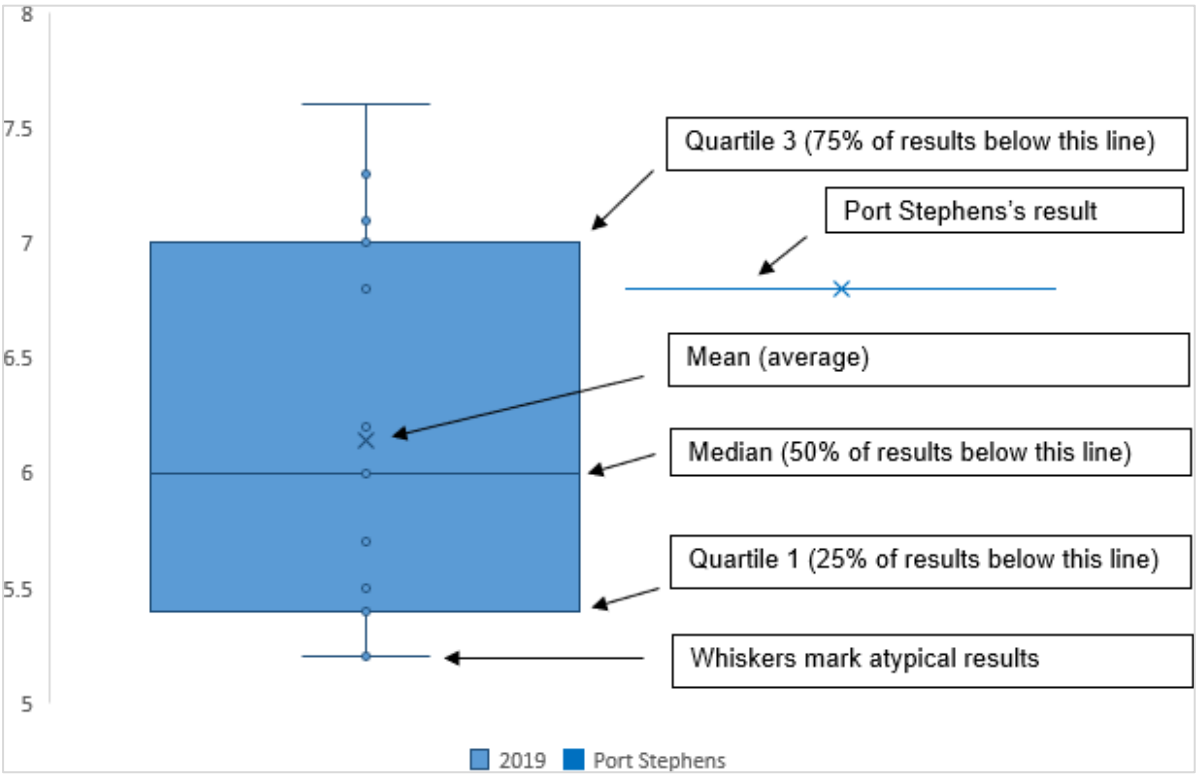
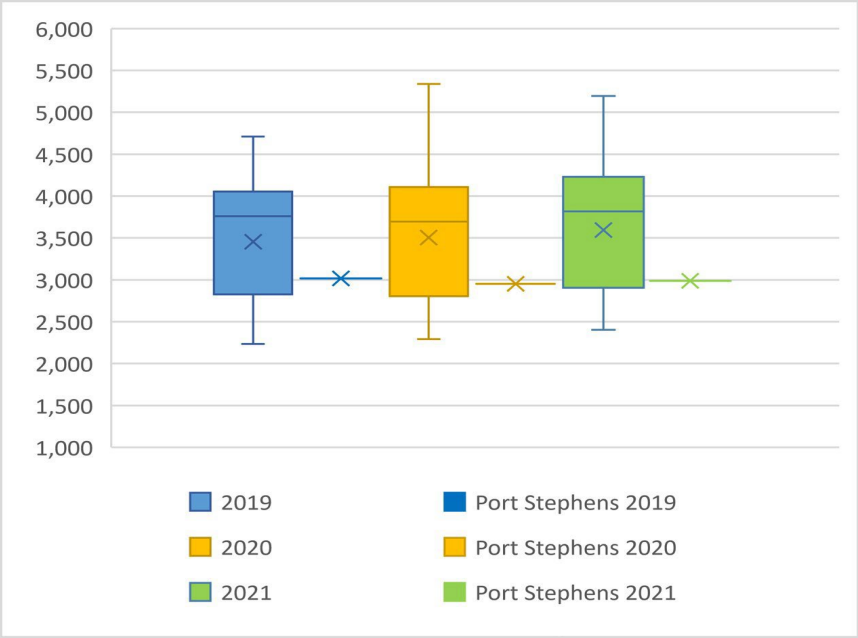


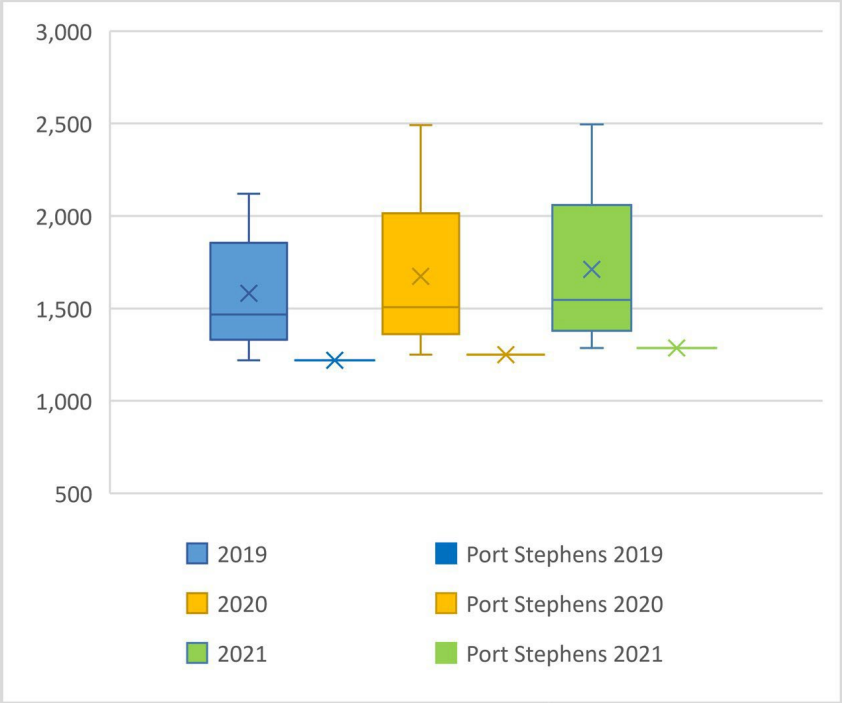
Figure 2 provides details of rates and annual charges on a per assessment basis to allow for reasonable comparisons. As can be seen, Port Stephens has scored close to the bottom of the second quartile in recent years. This does not bode well for revenue sufficiency.

FIGURE 2. RATES, FEES AND ANNUAL CHARGES PER ASSESSMENT ($)



Moreover, in Figure 3 we find that total rates on a per property basis are in fact the lowest in the peer group and have been for at least three years. This result seems to support our early suggestion in this Report that taxation insufficiency tends to result in higher fees and annual charges that may both distort price signals and lead to inequities.

FIGURE 3. TOTAL RATES PER PROPERTY ASSESSMENT ($)



Given our brief review of the actual tax rates levied by Port Stephens Council (see Table 1), it is reasonable to suspect that the insufficiency might be centred mainly upon residential and farm tax rates. In Table 2, we provide details of the average tax take (by category) as required by IPART for the purpose of demonstrating capacity for a Special Rate Variation (SRV). It certainly seems that the rate of taxation levied at Port Stephens is well below the typical level for the peer group in both the residential and farm categories, but comparable for business. We will further illustrate the comparative levels in Figure 4, Figure 5 and Figure 6 below.

TABLE 2. COMPARISON OF AVERAGE RATES, 2020-21.

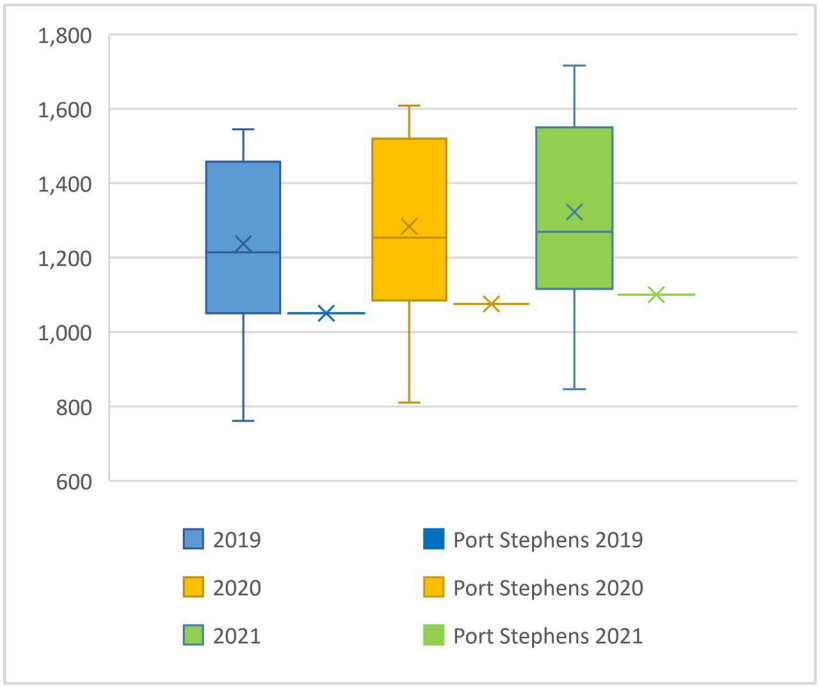
Council	**Residential**	**Farm**	**Business**
Port Stephens	$1,100.75	$1,774.59	$4,602.47
Coffs Harbour	$1,230.47	$2,105.26	$4,101.04
Lake Macquarie	$1,504.59	$2,216.22	$5,022.19
Maitland	$1,715.98	$3,510.67	$7,763.30
Newcastle	$1,597.40	$2,444.44	$12,200.16
Port Macquarie-Hastings	$1,248.97	$2,032.26	$3,817.97
Shellharbour	$1,615.63	$3,324.32	$5,040.24
Shoalhaven	$1,294.17	$2,547.01	$2,169.00
Tweed	$1,473.68	$2,177.05	$2,967.38

Wollongong	$1,549.68	$2,677.69	$11,782.60
Cessnock	$1,269.31	$2,905.26	$3,613.29
Muswellbrook	$846.75	$2,624.45	$1,683.79
Singleton	$1,181.84	$1,992.38	$2,448.12
Tamworth	$1,089.78	$1,968.22	$3,306.11
Wagga Wagga	$1,115.63	$2,802.98	$5,940.43
AVERAGE	$1,322.31	$2,473.52	$5,097.21
STANDARD DEVIATION	244.03	508.85	3196.40
MEDIAN	$1,269.31	$2,444.44	$4,101.04
QUARTILE 1	$1,148.74	$2,068.76	$3,136.75
QUARTILE 3	$1,527.14	$2,740.33	$5,490.33
INTERQUARTILE RANGE	378.40	671.57	2353.59
PORT STEPHENS	$1,100.75	$1,774.59	$4,602.47

Figure 4 further illustrates that the residential rates (on a per assessment basis) applied in Port Stephens are consistently in the lowest quartile in a relative sense. If we assume that current residential ratepayers in the peer group are able to manage their taxation obligations, then the Figure 4 box and whisker plots suggest adequate scope for upward revision.

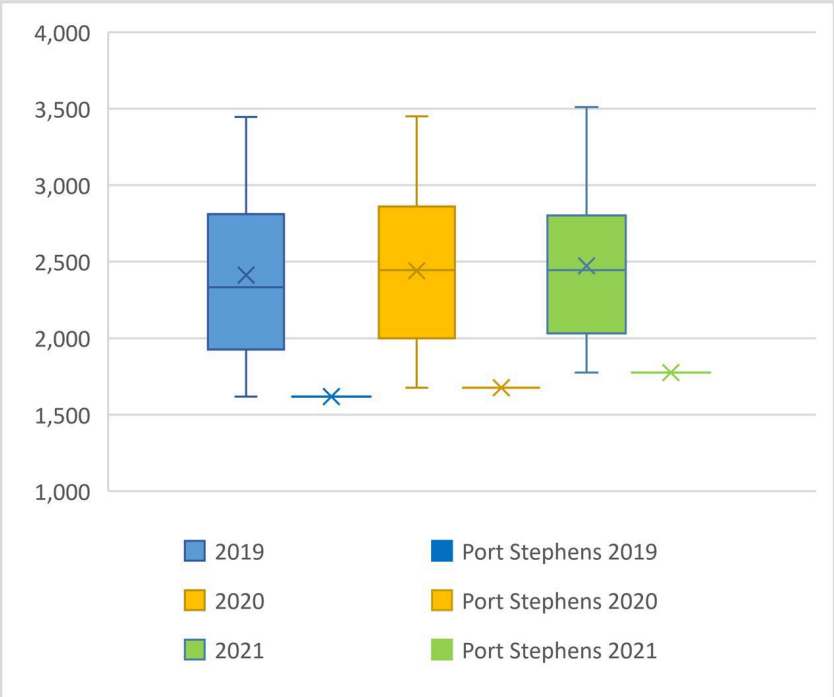
It is noteworthy that relatively low rates of taxation are particularly threatening in the residential category because this is where most of the demand for municipal services manates. It is also where most of the political power resides in the local government area. Given the grim state of affairs painted in our Report on the financial sustainability of Council, it would be prudent to strike a more appropriate level of taxation for this category.

FIGURE 4. RESIDENTIAL RATES PER ASSESSMENT ($)



For farm rates, matters are even worse in a relative sense. Not only is this an important problem for ongoing financial sustainability (albeit mitigated in part by the relatively lower numbers of farm assessments), but it echoes the potential inequity that we noted earlier: most farm businesses have the capacity to export at least some of their local government rates as a tax deduction. This effectively means thatthere is a failure to observe distributive justice with respect to the comparative burden of farm businesses relative to most residential properties.

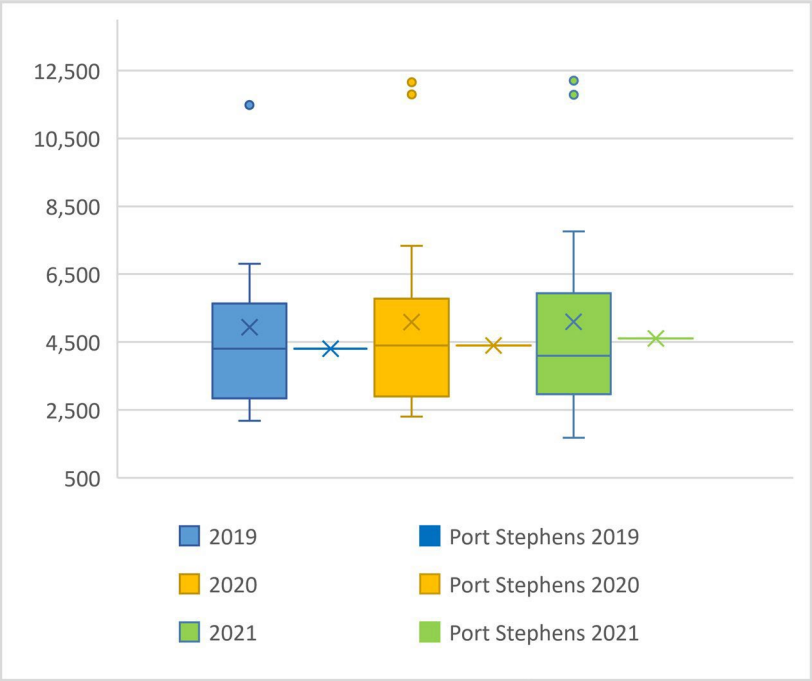
FIGURE 5. FARM RATES PER ASSESSMENT ($)



Moreover, other (non-farm) business rates per assessment generally reside at or above the typical result for the peer group, as represented by the median. It is curious that other businesses have not received the generous discounts on an appropriate tax rate that the farm businesses have received. This preferential treatment for farm businesses is mostly an artefact of the historical development ofAustralian local government and cannot be justified without resorting to either historical precedent or to an erroneous services argument (Grant and Drew, 2017).

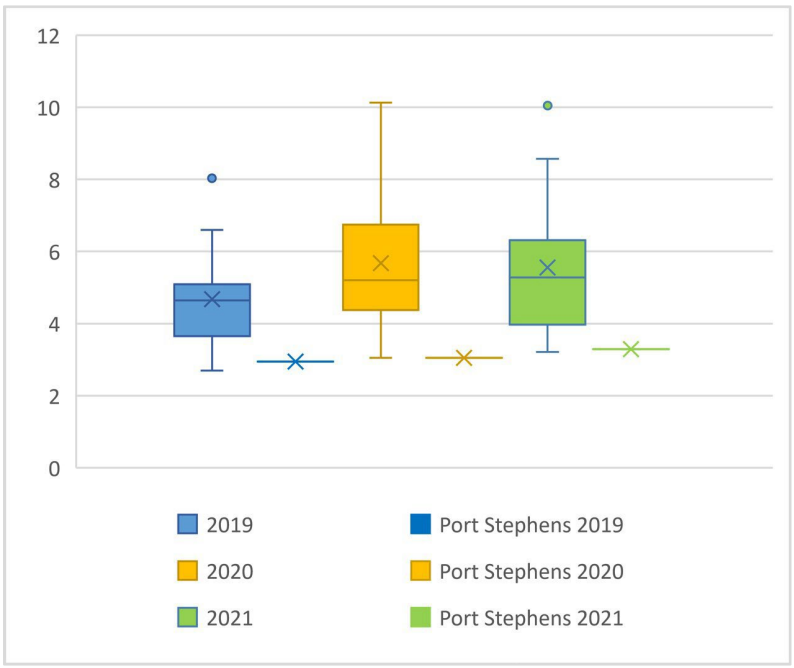
It might be noted that the relatively typical taxes levied on business at Port Stephens Council means that this category is likely to contribute less to the financial sustainability pressure points (not just with respect to revenue, but also broader matters of intergenerational equity and fiscal illusion).

FIGURE 6. BUSINESS RATES PER ASSESSMENT ($)



Rates and charges outstanding provide an excellent indication of the capacity of various categories of ratepayer to meet their extant obligations. Unsurprisingly, Port Stephens Council consistently has the lowest outstanding rates and charges in the entire peer group. This result confirms that ratepayers are able to meet their obligations as matters stand. If an SRV is indeed approved – and if Council takes the opportunity to reform its rate structure – then it will be important to monitor this ratio in a relative sense in future.

FIGURE 7. RATES AND CHARGES OUTSTANDING



We do not think that average rate levels alone represent a sound basis for assessing capacity. The aforementioned data neglect a broad range of socio-demographic

variables that are clearly salient to the capacity of residential ratepayers to make more adequate contributions to revenue. In the next section, we review some of the important available data from the Australian Bureau of Statistics (ABS) that has particular relevance to the capacity of the largest part of the rate base (residential assessments).

3. RESIDENTIAL RATE VARIABLES

Office of Local Government Guidelines (2020) require IPART to pay regard to the Socio-Economic Index for Areas (SEIFA). As readers may be aware, while there are four SEIFA indexes produced by the ABS, the NSW Office of Local Government (OLG) focuses on the Index of Relative Socio-Economic Disadvantage.

Indexes are not useful guides for important decision making because the mathematical techniques required to construct them result in important information being conflated. For instance, the relative contributions of the input variables is dependent on the weighting applied to the index. For this reason, we present data for each of the important variables from Figure 9 onwards.

Port Stephens Council has a SEIFA of 6 on both a national and state-wide basis, which is precisely typical (as measured by the median). When the SEIFA scores a higher number it means that the community is relatively less disadvantaged. The most recent census data available at time of writing was 2016.

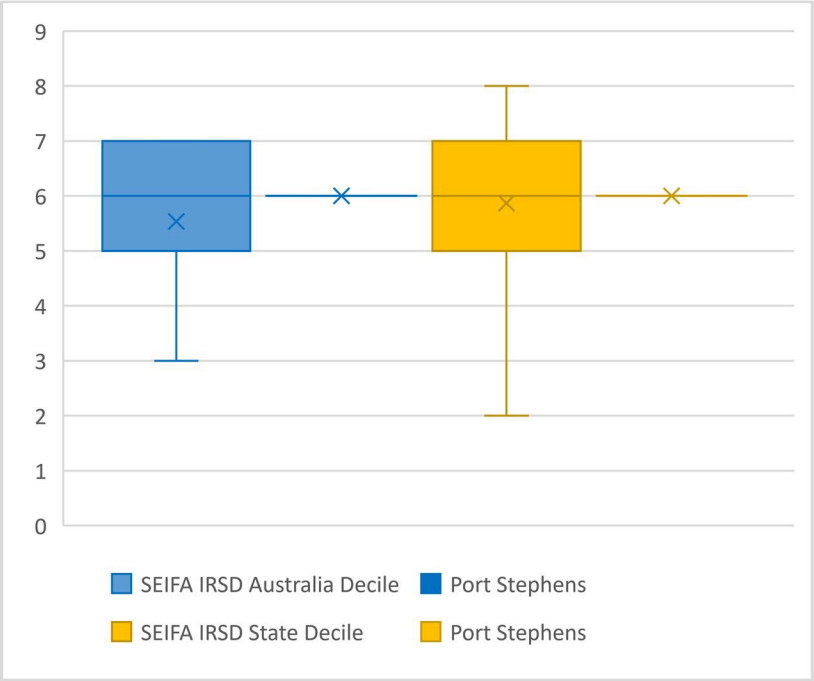
TABLE 3. 2016 CENSUS DATA SOCIO-ECONOMIC INDEXES FOR AREAS (SEIFA)

Council	SEIFAIRSD AustraliaDecile	SEIFAIRSD State Decile
Cessnock	2	3
Coffs Harbour	5	5
Lake Macquarie	8	7
Maitland	7	6
Muswellbrook	3	3
Newcastle	8	7
Port Macquarie	6	6
Port Stephens	6	6
Shellharbour	6	5
Shoalhaven	5	5
Singleton	7	7
Tamworth	5	5
Tweed	6	5
Wagga Wagga	7	7
Wollongong	7	6
Average	5.9	5.5
Standard Deviation	1.6	1.3
Median	6.0	6.0
Quartile 1	5.0	5.0
Quartile 3	7.0	6.5

Interquartile Range	2.0	1.5
Port Stephens	6.0	6.0

In Figure 8, we plot the SEIFA as a visual representation of the data for the peergroup presented in Table 6.

FIGURE 8. SEIFA SCORES, 2016 CENSUS



One of the problems faced by Port Stephens is the high proportion of residents in receipt of an aged pension. As we described in the Financial Sustainability Report, pensioners exert various pressures on financial sustainability. First, the mandated local government tax discount for pensioners is only partly funded by the NSW state government. Second, pensioners are statistically associated with higher levels of local service usage as well as local infrastructure (Drew, 2021). This latter point is reflective of both need (such as footpaths and ramps) and likely fiscal illusion (because pensioners do not pay the full tax price due to their rates discount). In addition, pensioners will almost certainly have a debt bias (a rational preference to fund new infrastructure through debt because they are unlikely to remain taxpayers for the entire term of the outstanding debt), which can erode both financial sustainability and intergenerational equity (Buchanan, 1997).

Moreover, as we explained in the Financial Sustainability Report, matters are likely to deteriorate further in the future due to both internal migration (especially in the wake of COVID-19) and internal demographics (since Port Stephens has a similarly high proportion of persons aged 60-64 and 55-59).

The theory of fiscal federalism deals with financial relations between the different levels of government in a federal system, such as the Australian federation (Oates, 1972; 1999). The decentralisation theorem holds that different governmental functions should be located at different levels of government depending on their characteristics. For example, local governments should provide local public goods

and services, like garbage collection, local roads and local parks, since the optimal provision of this genre of public goods depends on local preferences. By contrast, higher tiers of government, especially the national government, should run those functions of government with a much larger benefit region. For example, income distribution objectives should be pursued by national government given they are based on equity principles that are not spatially constrained.

Under the Australian Constitution, local government falls under state government jurisdictional control. Thus, if state governments oblige local councils to pursue equity objectives, such as offering rate rebates to aged pensioners in NSW local government, then they should pay the full costs involved (Dollery *et al.,* 2006).
However, in practice, NSW Government compensation to NSW local government does not cover the full costs of the pensioner rate rebate scheme (Dollery, Johnsonand Byrnes, 2008). Given its relatively large aged pension cohort, this adversely affects Port Stephens Council.

It should be noted that aged pensions are a relatively reliable income in some contrast to the wages of people in the services industry, casual work or the gig economy. Moreover, aged pensioners were the recipients of multiple stimulus payments as part of the federal government response to COVID. They are thus in aposition better than some to absorb potential increases to local government taxes.

FIGURE 9. AGED PENSION

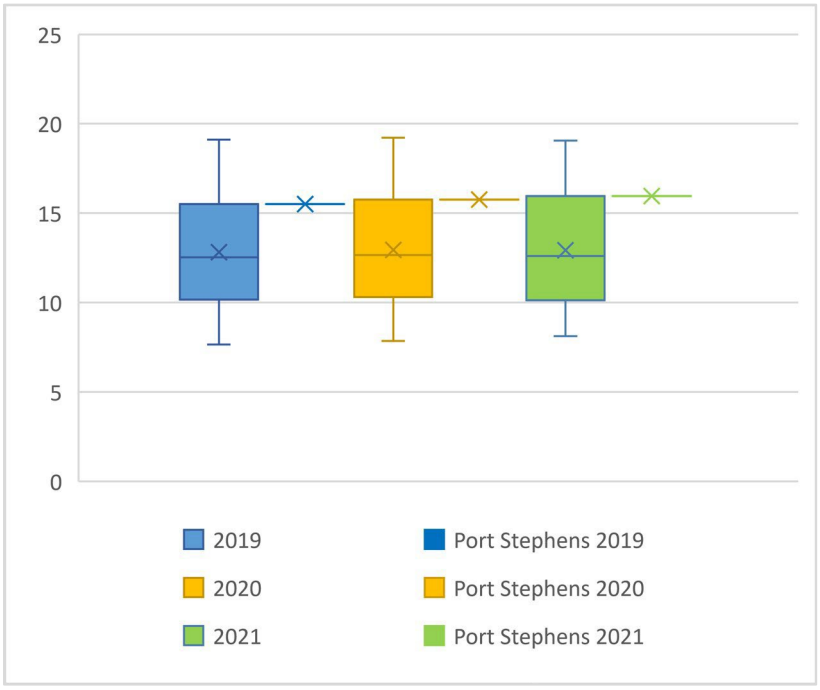


Figure 10 illustrates the number of people on Newstart or Jobseeker in Port Stephens. It is clear that the economic shock arising from COVID-19 public policy responses was particularly acute in Port Stephens. Recent policy commentary fromthe NSW Government suggests that lockdowns may be past and thus that the jobs lost in 2021 may be recovered. However, it is a matter that decision-makers shouldremain mindful of and it warrants a review of extant hardship policies to ensure thatthey meet the

needs of people whose livelihoods have been adversely affected by COVID policies. It should be noted that a one-year lag applies to this data.

FIGURE 10. NEWSTART ALLOWANCE/JOBSEEKER

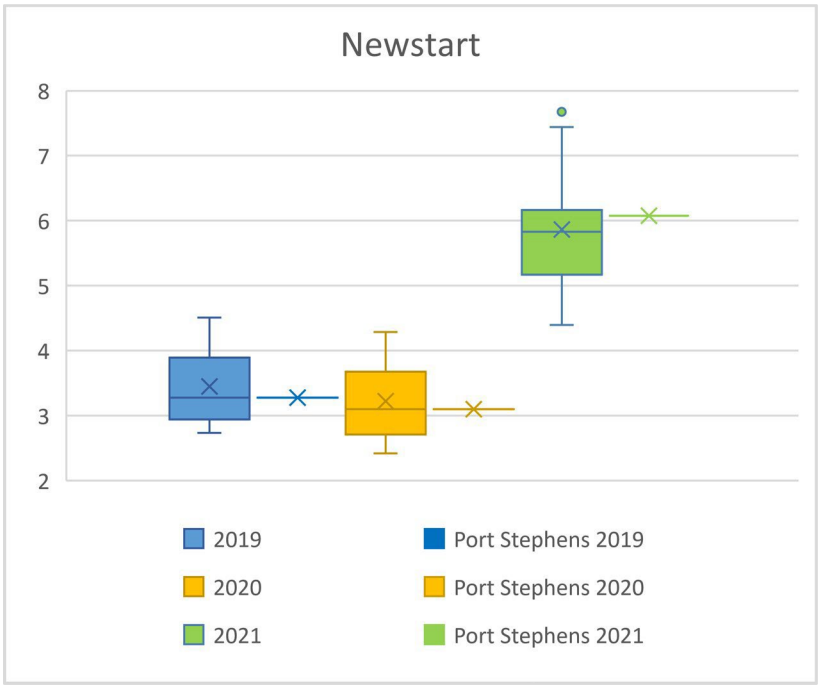


Figure 11 and Figure 12 refer to the proportion of people on disability support and single parent pensions respectively. As can be seen, results for Port Stephens are typical of the peer group and thus do not warrant any particular additional local government policy response.

FIGURE 11. DISABILITY SUPPORT PENSION

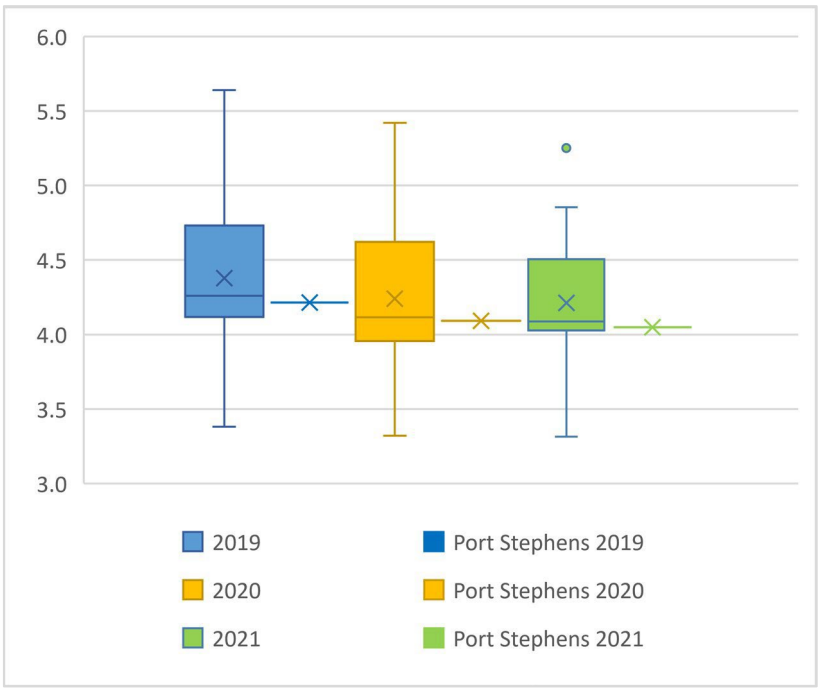
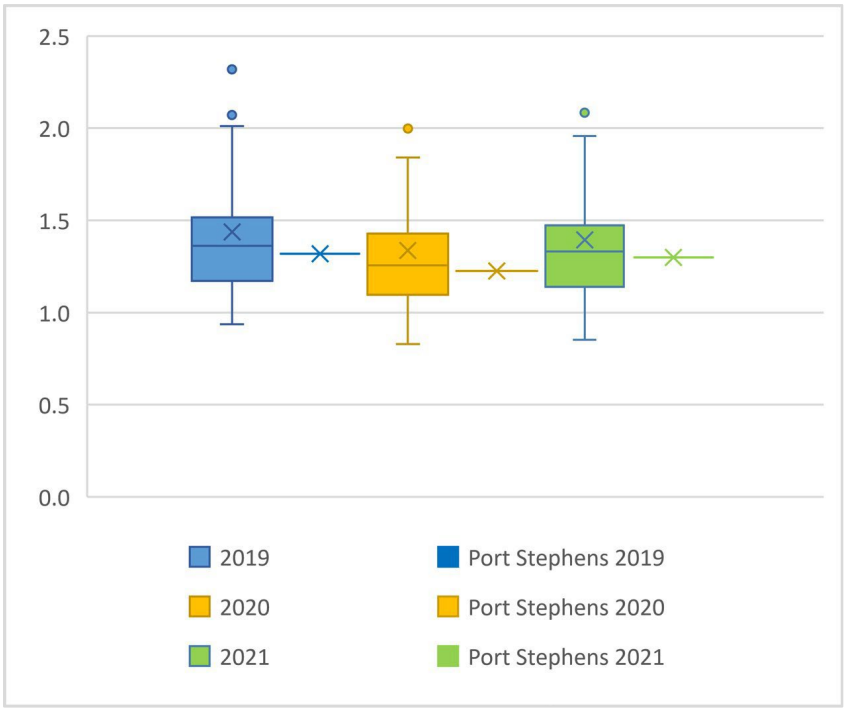
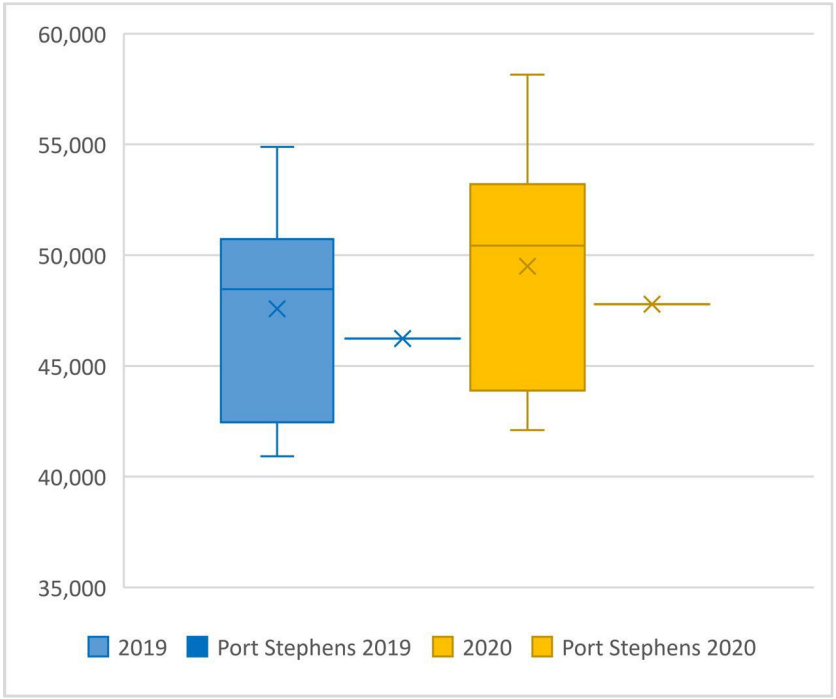


FIGURE 12. SINGLE PARENT PENSION



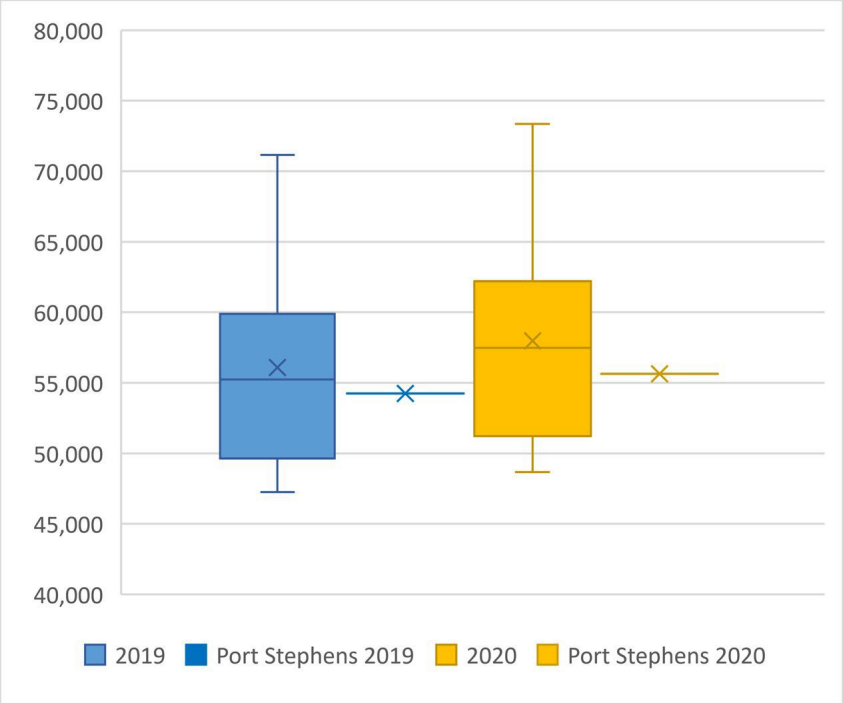
The median wage earned in Port Stephens is relatively low compared to the peer group. This could have implications for capacity to pay, although matters are far from simple (as we will detail in the subsequent four graphs).

FIGURE 13. MEDIAN WAGE-EARNER INCOME



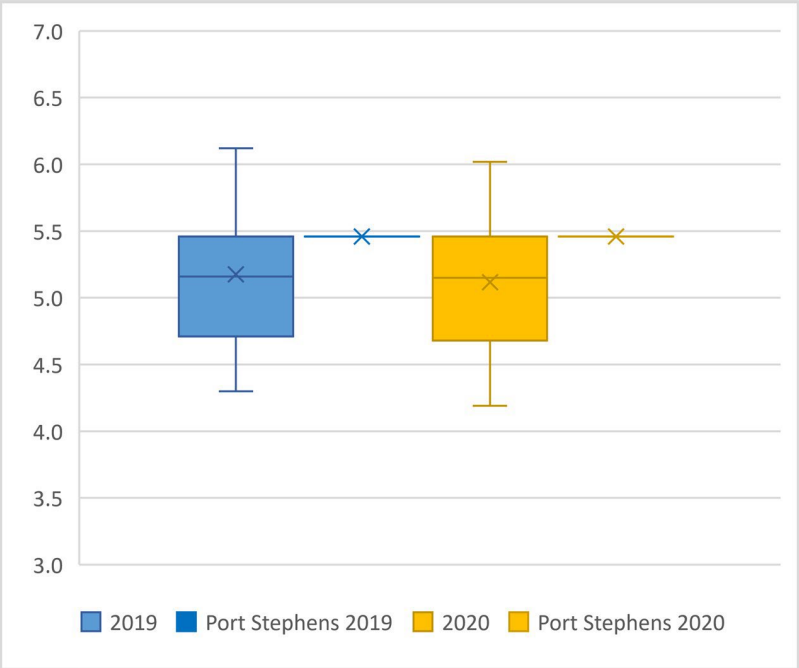
Indeed, when we compare the relative position of mean (average) wage earnings (which improves significantly with respect to the earlier median numbers), it is clear that incomes are skewed to the right. That is, there are clearly a number of high income earners who have pulled the average up.

FIGURE 14. MEAN WAGE-EARNER INCOME



This skewing of income data is reflected in the P80/20 income inequality ratio. This commonly used metric divides the 80th percentile by the 20th percentile and it provides a useful perspective on the spread of incomes in a given local government area. As can be seen in Figure 15, wage inequality is a substantial problem for Port Stephens

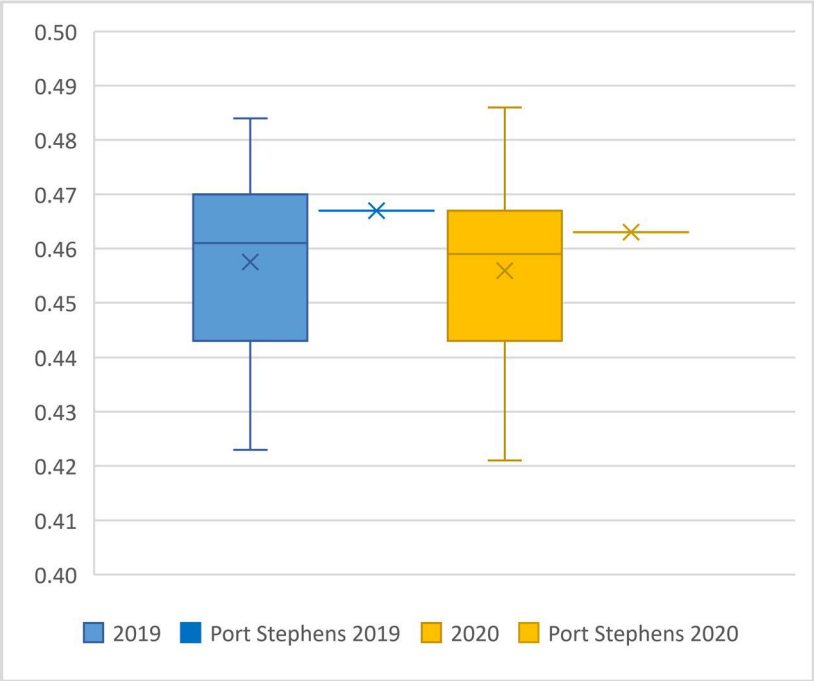
FIGURE 15. P80/20 INCOME INEQUALITY RATIO



Indeed, inequality is further illustrated by Figure 16 that plots the relative results forthe Gini coefficient. Once again, the data clearly indicates high levels of relative income inequality.

In economic analysis, the Gini coefficient is the most common measure of income inequality or wealth inequality within a given spatial area or a defined social group (Baum *et al.,* 2018; Drew and Miyazaki, 2020). The Gini coefficient measures the inequality among values of a frequency distribution, such as levels of income or household wealth. The value of the Gini coefficient thus tells us about the nature of income or wealth distribution. For instance, a Gini coefficient of zero indicates perfect income equality, where everyone has the same income. At the other extreme, a Gini coefficient of one denotes maximum income inequality, where one person accrues all income and the remainder have no income. In practice, Gini coefficients always fall somewhere between zero and one. The higher the absolute value of the Gini coefficient, the greater the degree of income or wealth inequality.

FIGURE 16. GINI COEFFICIENT INCOME INEQUALITY METRIC



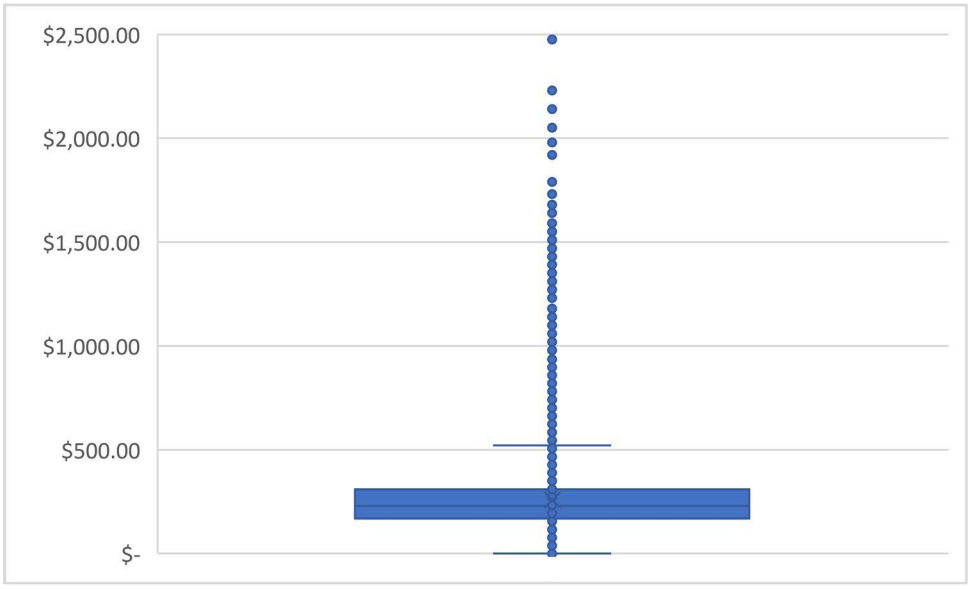
These widely disparate incomes in Port Stephens could be an obstacle to a residential tax increase *if* taxes were distributed evenly. However, under a land taxregime the obligation allocated to each person is instead a reflection of the unimproved land value that they own.

As it turns out, land values in Port Stephens are also extremely skewed (to the right)in distribution. Indeed, to get all of the values onto the same graph we had to truncate land values above $2.5 million. It is reasonable to assume that those who have purchased properties at the higher end of unimproved land values would mostly hail from the high-income cohort (or previously enjoyed high incomes prior toretirement). If this is the case – as seems likely – then the people who will receive the largest local government tax assessments will also generally be the people with the greatest capacity to pay.

Indeed, the high level of skewing in unimproved residential land values provides further argument against the practice of levying a base rate. A base rate in the orderof thirty-five percent reduces the *ad valorem* and hence effectively provides taxationrelief to the people who own the most valuable property in the local government area. Put differently, municipal ratepayers towards the bottom of the distribution in Figure 17 are being asked to pay a higher effective rate of tax (relative to their land value and probably capacity to pay) than those at the top of the distribution (the longtail of dots in Figure 17 in particular).

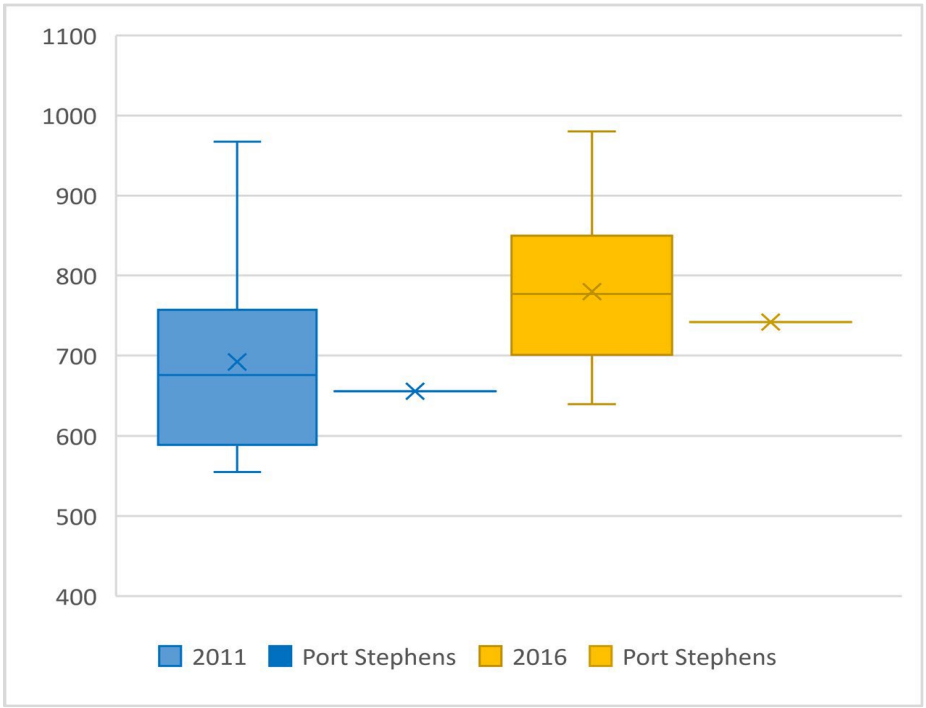
Thus, one way Council could mitigate the effect of a SRV for the lowest capacity to pay residential landowners would be to reduce or eliminate the base rate. This wouldalso better respect principles of distributive justice.

FIGURE 17. DISTRIBUTION OF RESIDENTIAL LAND VALUES (THOUSANDS OF DOLLARS ANDTRUNCATED AT $2,500,000)



A helpful statistic generated by the ABS is the median equivalised household income. This data is adjusted to allow for fair comparisons between households of differing size. Indeed, a comparison with Figure 13 shows a relative convergence on the measures of central tendency, which suggests that there might be more multiple income (including welfare such as aged pensions) households in Port Stephens compared to the peer group. This is important because higher household income is clearly closely associated with improved capacity to pay. It is noteworthy that this data is only provided in census years and the most recent figures have been used inthis Report.

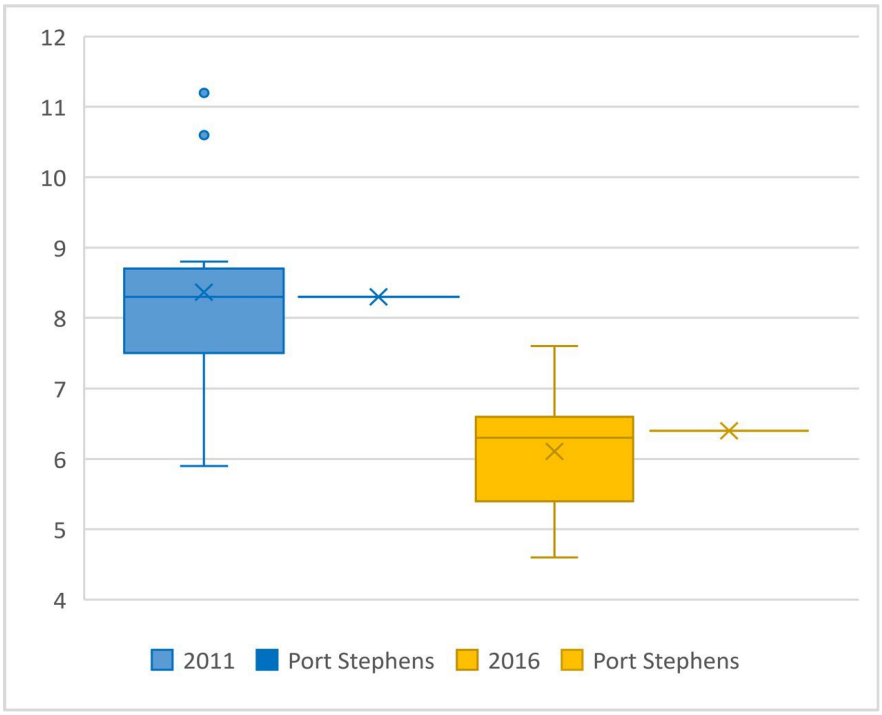
FIGURE 18. MEDIAN EQUIVALISED HOUSEHOLD INCOME



Household stress data is also only available in census years. Households are considered stressed when their mortgage repayments exceed thirty percent of household income.

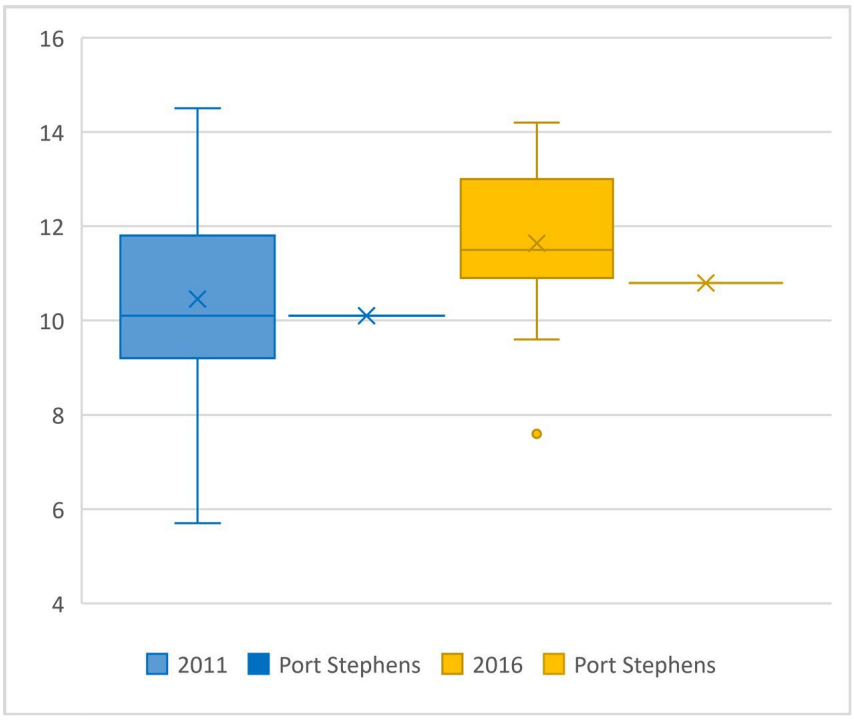
The results for Port Stephens Council are consistent with the stress experienced in the typical peer group council. This suggests that no particular vulnerability exists for people with mortgages in the Port Stephens local government area. Moreover, when interpreting Figure 19 we should be mindful of the relatively low extant local government tax burden, as well as the outstanding rate and fee data (which is the best for the entire peer group).

FIGURE 19. HOUSEHOLD STRESS (MORTGAGE GREATER THAN OR EQUAL TO 30% OFHOUSEHOLD INCOME)



It is also important to consider household stress for those who rent their dwelling. These people do not pay local government taxes directly. However, the rates are likely to be at least partially factored into weekly rental payments by property owners. Household stress for this group was low in a relative sense for the 2016 census and thus does not suggest a need for special arrangements at Port Stephens. Moreover, it should be remembered that a portion of the rate increases for residential rental properties will probably be exported as a deduction on federal taxes. Accordingly, only a portion of the rate increase could be justifiably passed on in new rental agreements.

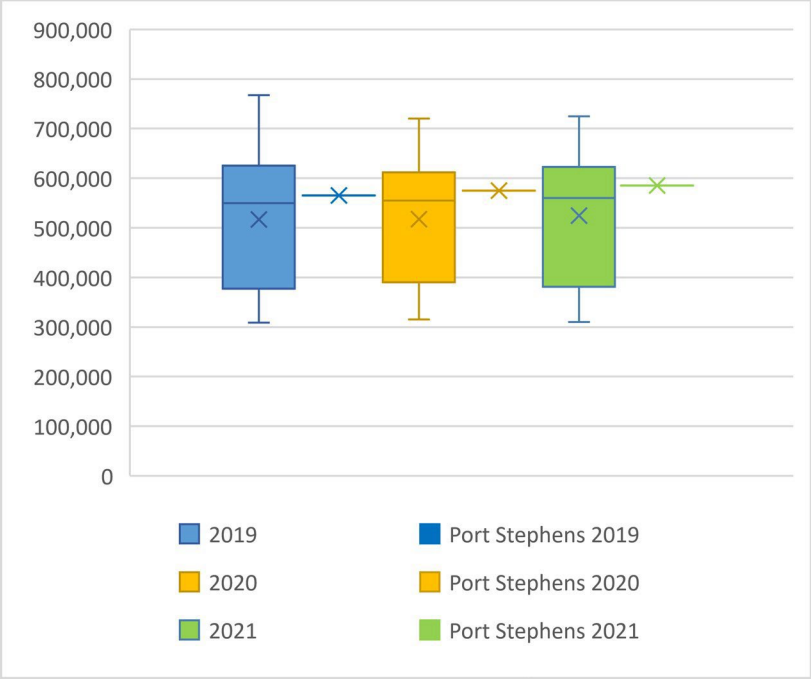
FIGURE 20. HOUSEHOLD STRESS (RENT GREATER THAN OR EQUAL TO 30% OF HOUSEHOLD INCOME)



The underlying determinant of both kinds of household stress is the increase in house prices. In Figure 21, we provide a comparison of the median sales price for Port Stephens relative to the peer group. Prices are slightly elevated compared to the typical council suggesting that stress rates are unlikely to fall in the next census.

Increases to house prices are also a good indication of the size of the unrealised capital gains (or unearned wealth) which the unimproved land tax tries to capture (Drew, 2021). It is clear from Figure 1 that residents are experiencing strong and consistent increases in wealth through the appreciation of their real estate assets (in2018 median house prices increased by $55,000 on previous levels and were followed up by increases of over $10,000 per annum in the next two years). The local government tax regime is designed to claw back a little of this unearned wealth and thus is a particularly morally defensible tax (Drew, 2021). From the figures provided by the ABS, it is clear that only a tiny fraction of unearned wealth is indeed being captured. Indeed, far less is captured than the rate of capital gains tax that applies to non-residential assets.

FIGURE 21. HOUSES (MEDIAN SALES PRICE)



In sum, it is clear that residential ratepayers have the capacity to pay more appropriate levels of taxation. Moreover, capacity to pay could be improved further by reducing the base rate. In Section 5, we will conduct robust modelling to empirically estimate the total tax take that should be expected from a local government that has the demographic and business characteristics of Port StephensCouncil. However, prior to this, we will briefly examine some of the relevant data withrespect to the other major group of local government taxpayers in the area – the non-farm business cohort.

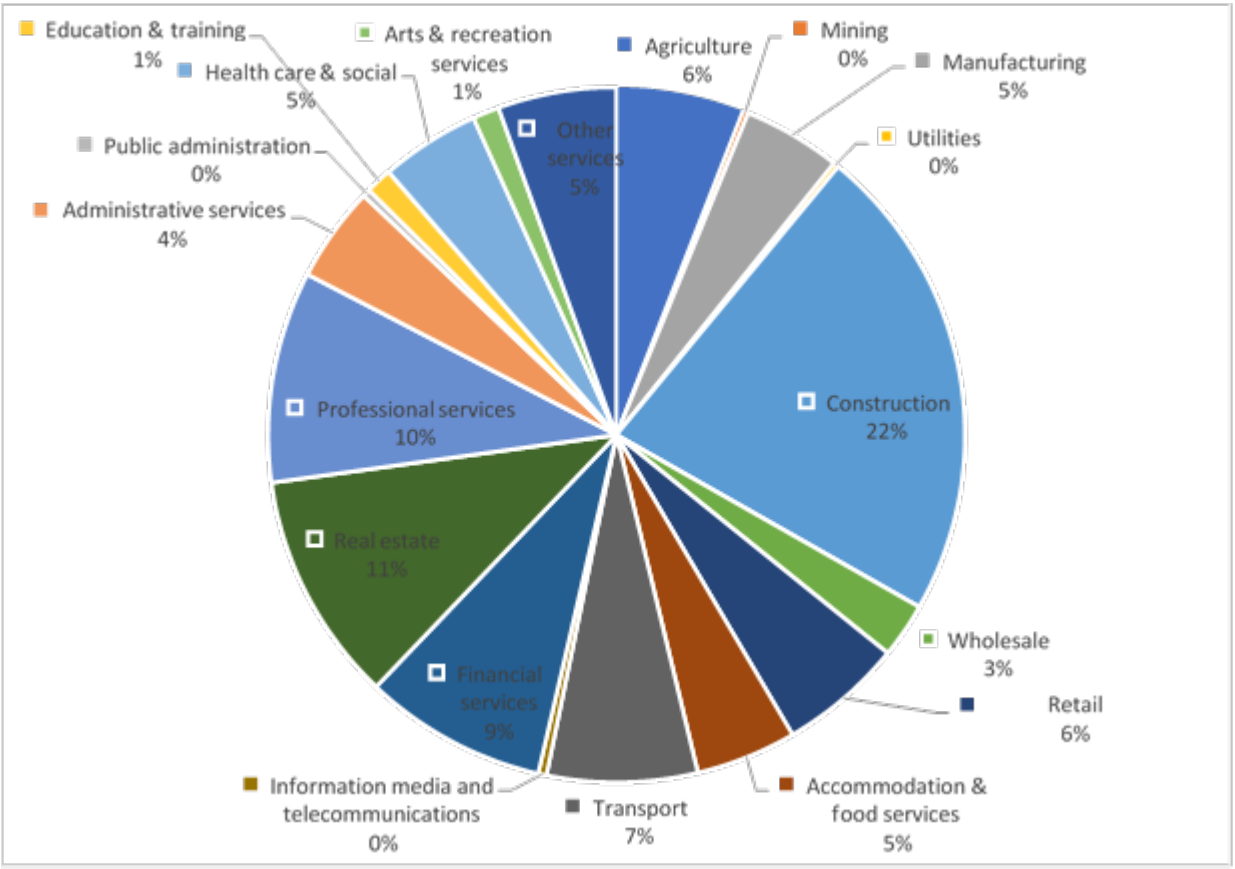
4. BUSINESS INCOME VARIABLES

The public policy response to COVID-19 has placed immense demands on certain kinds of business. Small retailers, food and hospitality, as well as tourist and recreation operators were especially hard hit. However, some other business segments were only marginally affected, including most agriculture except for fruit growing and other labour intensive enterprises. Moreover, some categories of business enterprise even benefitted from COVID policies, such as health and social care.

Figure 22 presents the ABS statistics by business category for 2020. The largest number of enterprises relates to construction (which benefitted from the federal stimulus package), professional services (which probably experienced mixed outcomes depending on the profession) and real estate (that has been the beneficiary of strong demand for non-capital-city assets as well as rental investments). Somewhat surprisingly, accommodation and food services, retail, arts and recreation only represent a relatively small proportion of the Port Stephens business cohort. These businesses experienced significant disruptions and still face further potential obstacles. However, they represent only a small part of the taxpayer category cohort.[9] This suggests that it would be appropriate to develop targeted hardship policies for

the relatively small proportion of affected businesses rather than make concessions to the whole ratepayer category.

FIGURE 22. CATEGORIES OF BUSINESS (2020)

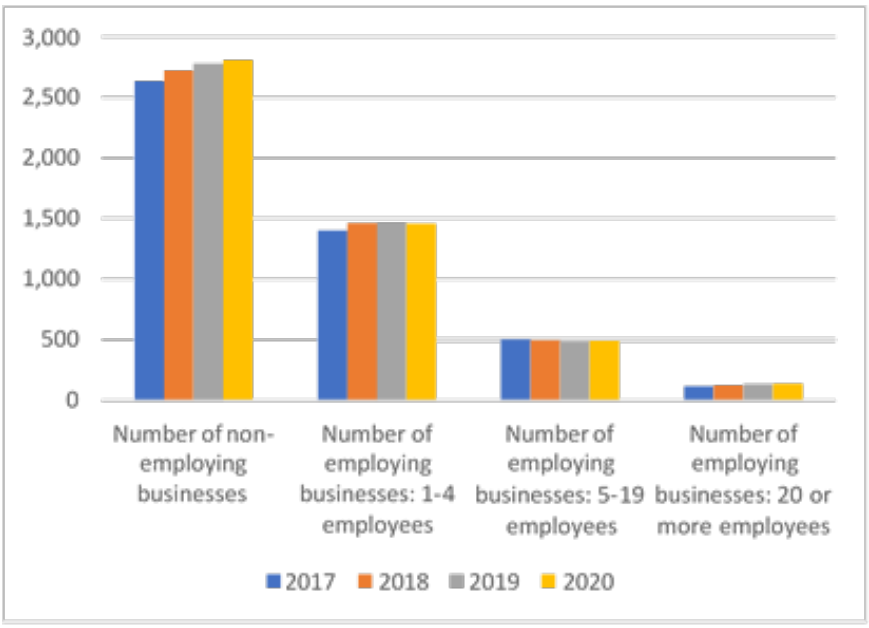


[9] Retail also includes large grocery chains and the like that experienced a boom during the COVID lockdowns.

Indeed, Figure 23 demonstrates that business numbers were largely unaffected bythe

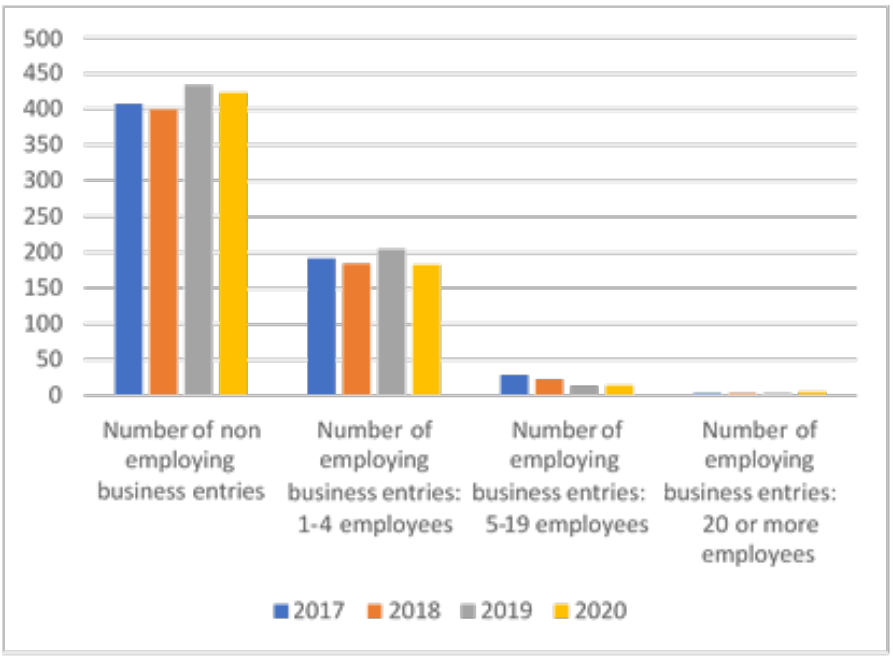
early COVID-19 policy response (although matters might appear to be worse when the 2021 data comes to hand).

FIGURE 23. NUMBER OF BUSINESSES



Moreover, business entries were only marginally reduced in 2020 and were broadly consistent with 2018 numbers.

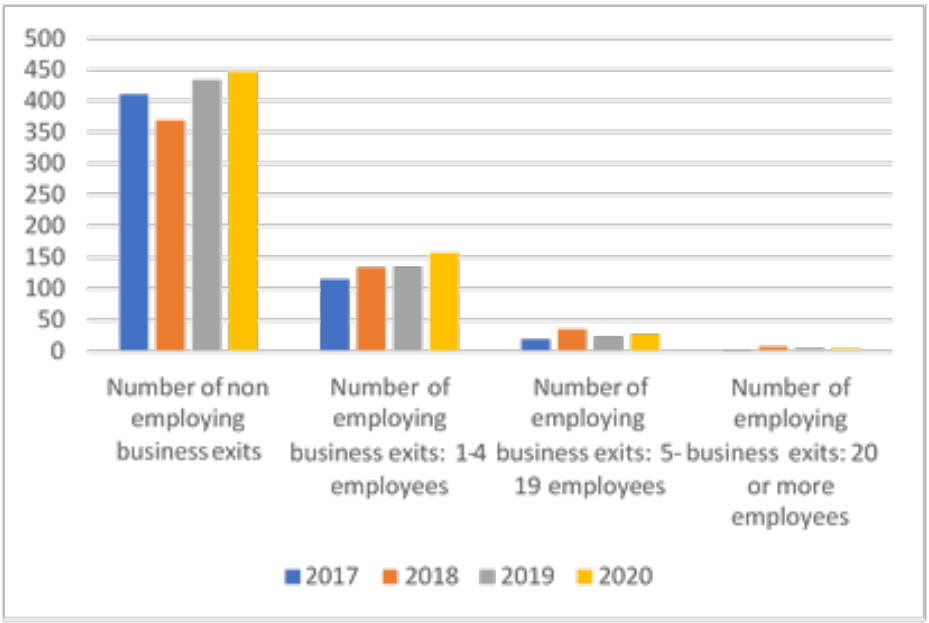
FIGURE 24. BUSINESS ENTRIES



However, business exits were higher in 2020 and were particularly noticeable amongst small businesses (self-employed and those employing fewer than four people). In fact, the bulk of the exits occurred in businesses with a turnover of less than $200,000 (ABS, 2020). Indeed, this data can be used to make an argument

against the extant practice of Port Stephens Council that stipulates a base rate for business. A regime of this kind places a disproportionate burden on small enterprises that are struggling. It would thus be difficult to defend on either moral oreconomic grounds. Moreover, the increase in exits is likely to be located in the industries most exposed to the policy decision-making of the federal and state governments. It would thus be prudent to develop hardship policies to address the specific needs of this category of ratepayer.

FIGURE 25. BUSINESS EXITS



Unfortunately, data are not available for incorporated income associated with large businesses, such as national and multinational enterprises. However, the ABS does provide data on unincorporated business income that can provide us with a sense of relative business conditions. In Table 4, we tabulate the most recent data available (2018). Comparison reveals that Port Stephens' unincorporated business income is typical of the peer group (as measured by the median) and better than average. This further supports arguments against any atypical taxation response for the business category.

TABLE 4. UNINCORPORATED BUSINESS INCOME, 2018

Council	Median Unincorporated Business Income	Mean Unincorporated Business Income
Port Stephens	12165	23008
Coffs Harbour	12188	24483
Lake Macquarie	12849	27614
Maitland	8902	21616
Newcastle	12725	39021
Port Macquarie-Hastings	11630	24414
Shellharbour	12905	22882

Shoalhaven	14064	24180
Tweed	11827	21128
Wollongong	12212	27621
Cessnock	7992	13945
Muswellbrook	1592	6367
Singleton	435	-68
Tamworth	6064	14863
Wagga Wagga	13443	28734
Average	10066.2	21320.53
Standard Deviation	4127.645	9157.521
Median	12165	23008
Quartile 1	8447	17995.5
Quartile 3	12787	26048.5
Interquartile Range	4340	8053
Port Stephens	12165	23008

In sum, we find that the ABS data indicates that business stress is concentrated in a relatively small number of enterprises that have been most exposed to the COVID public policy response. It would thus be appropriate to have tailored hardship provisions designed for this group. Moreover, business conditions appear to be typical in a relative sense and this suggests that typical taxation policies ought to be appropriate. However, we remind readers of the comparatively low rates of taxation paid by residential and farm business landowners in Port Stephens. When considered with respect to the relatively higher than typical (in terms of the median for 2021) local government taxes paid by non-farm businesses, a case could be made to direct most of a potential SRV burden on to the residential and farm
business cohorts. This would reduce the gap somewhat, improve distributive justice and introduce less stress to the local economy. Moreover, we note that a base rate applies to business and strongly urge Council to reconsider this aspect of its tax structure since it effectively requires small businesses, who have mostly struggled under COVID, to subsidise the reasonable tax obligations of national and multinational enterprises. Removing this base rate would ensure that the businesses with the strongest capacity to pay must pay their share and hence meet long- established principles of distributive justice (Messner, 1952; Drew, 2021).

The decision around how the taxation burden should be distributed amongst categories of ratepayer is ultimately a political decision. However, the total tax take expected of a local government area with the general characteristics of Port Stephens can be accurately measured using the empirically sophisticated multiple regression analysis. Multiple regression analysis allows us to control for a much broader array of variables known to affect capacity to pay than any financial ratio. Moreover, by using a panel of data (over multiple years) we are able to produce more accurate estimates that take into account changes over time. Indeed, by employing a special technique called fixed-effects multiple regression, we can evencontrol for important time invariant unobserved effects. These latter factors cover those characteristics of the local government area that do not change over time, such as distance to desirable beaches.

5. ECONOMETRIC ANALYSIS OF TOTAL RATE CAPACITY

Regression analysis is the most sophisticated statistical approach available to understand the required tax take of a given local authority. Specifically, regression analysis allows econometricians to determine the mean response of a dependent variable with respect to changes to multiple independent variables. The authors of this Report are experienced applied econometricians with an extensive publication record of work of this kind in all the leading academic journals on local government. Moreover, the body of scholarly work underpinning the theory and practice of econometrics is voluminous. Interested readers are referred to Kennedy (2003) for a synoptic account.

The final model specification that we employ in our analysis can be expressed as follows:

$$\mathbf{T}_{it} = \alpha\alpha_i + \beta\beta_1 \mathbf{A}_{it} + \beta\beta_2 \mathbf{I}_{it} + \mu\mu_{it} \qquad t = 1..4$$

Where **T** is the total tax take (that is the sum of all categories of taxation) expected of a local government, **A** is the disaggregated assessment data, **I** is a vector of relevant income data for particular local government areas at specific times and μ is an idiosyncratic error term. The subscript *it* refers to the i^{th} council entity and the t^{th} year. Here we included all sixty-seven councils categorised as broadly similar under the extant federal government classification system[10]. Log transformations were employed to counter skewness when econometric diagnostics tests revealed the need to do so. We also conducted and satisfied all other relevant diagnostic tests. Table 5 provides the definition for each variable as well as summary data.

[10] 2021 financial year data was missing for two of the councils hence the disparity in the *n* figure presented in Table 6. We used appropriate regression techniques to mitigate the very small number of missing data points.

TABLE 5. DEFINITIONS AND MEANS OF VARIABLES, 2018-2021

Variable	Definition	Similar Councils
Rates		
Rates (ln)	Total taxation (rate) take, logged	10.736
Assessments		
Residential (ln)	Number of residential assessments, logged	10.278
Farm	Number of farm assessments, divided by 100 Number	6.729
Business (ln)	of business assessments, logged	7.504
Income Controls		
Median employee income	Median employee income (lagged), divided by 1,000 Median	50.363
Median unincorporated business income	unincorporated business income (lagged), divided by 1,000	12.159
Aged (ln)	Proportion of people on an aged pension, logged Proportion	2.275
DSP	of people on a disability support pension	3.286
Newstart (ln)	Proportion of people on a Newstart allowance, logged	0.954
Carer	Proportion of people on a carers' pension	1.198
Single (ln)	Proportion of people on a single parent pension, logged	-0.329

In Table 6, we detail the coefficients and standard errors yielded by our fixed-effects regression. These results were used in subsequent calculations to predict the average total tax expected of a council with Port Stephens' characteristics.

TABLE 6. MULTIPLE REGRESSION RESULTS, 2018-2021 INCLUSIVE

	Extended Cohort
Number of residential assessments (ln)	0.889** (0.164)
Number of farm assessments	0.004 (0.012)
Number of business assessments (ln)	0.0.082* (0.035)
Median employee income	0.016** (0.005)
Median unincorporated income	0.011** (0.004)
Welfare receipts	Yes**
n	278
Coefficient of Determination	0.8574

+p < 0.10, *p < 0.05, **p < 0.01. Standard errors in parentheses

In Table 7, we present the shortfall in total tax take (i.e. the difference between the average tax take predicted by the regression and actual total tax take as stated in the relevant audited financial statements). It is noteworthy that the shortfall over the four financial years analysed exceeded $36 million that explains the acute fiscal stress currently experienced by Port Stephens Council. We also provide details of the percentage increase that would have been required for each particular year to ensure that the property taxes levied at Port Stephens were consistent with expectations relative to the wide cohort of similar NSW local governments. The differences between the predictions of the model and the deficiency (suggested in Figure 2 through to Figure 6 inclusive) are reflective of both the broader and more inclusive cohort used for the regression, as well as an additional year of data. This is why scholars tend to use methods, such as regression analysis, which allow for larger cohorts, longer data panels and more input variables. It also explains why we assert that greater reliance should be placed on this econometric evidence.

TABLE 7 EXPECTED TOTAL TAX TAKE PREDICTED BY THE FIXED-EFFECTS REGRESSION,2018-2021 INCLUSIVE

Council	Year	Total Tax Take Shortfall	Suggested Increase
Port Stephens	2018	$ 7,725.48	19.21%
Port Stephens	2019	$ 8,828.92	21.32%
Port Stephens	2020	$ 9,492.72	22.14%
Port Stephens	2021	$10,325.70	23.25%

If the objective was simply to ensure that a satisfactory level of taxation was levied, then the model would suggest permanent increases of *at least* seven percent per annum (above the rate cap) for each of three years. Making these changes over at least three years is unavoidable, given the size of the deficiency. However, doing so means that we will continue to add to the gross shortfall during the transition phase.In addition, the picture for financial sustainability at Port Stephens Council is grim and there is already some repair work to undertake arising from the chronic deficiency in tax receipts over many years.

Accordingly, it is recommended that council apply for an increase at least equivalent to eight percent (8%) above the cap for each of three (3) years.

It should be noted that community engagement may well result in a change to the timing, size and duration of the annual rate increases.

6. RECOMMENDATIONS FOR ALLOCATING RATE INCREASES

The empirical evidence that we have presented in this Report clearly demonstrates that existing levels of taxation receipts at Port Stephens are inadequate. This has obvious implications for financial sustainability. It also makes it unlikely that future generations of local taxpayers have been treated fairly. Indeed, residential and farm-business ratepayers have been paying a discount rate of taxation on a broad basket of local public goods and services over an extensive time period. This has clearly led to high levels of fiscal illusion, as evidenced by the community response to the last Port Stephens SRV proposal. This must be addressed in order to ensure the financial capacity of Council to meet local resident expectations.

We recommend an increase to taxation that is equivalent to a permanent increase of eight percent above the rate cap for each of at least three years. The cumulative effect of increases of this nature would pull Council up to around the average level of taxation expected of a local government area that exhibits the income characteristics of Port Stephens Council. It would also assist in recouping some of the $36 million intaxation

receipt shortfall experienced in the last four years alone.

In addition, we recommend that any SRV approved is weighted so that it improves distributive justice between rateable categories. In essence, most of the SRV should fall on residential and farm ratepayers. In particular, farm businesses receive an effective discount on the real tax liability actually realised when compared to residential landowners. Farm businesses also receive a much more substantial tax discount relative to non-farm business.

To improve capacity to pay, base rates should either be eliminated or reduced substantially[11]. We understand the reservations about reducing or eliminating the base rate with respect to strata title and high-density dwellings. However, we also believe that it is important to ensure distributive justice for owners of residential land that has relatively low valuations. Furthermore, the matter is important for capacity to pay reasons, as we have already set out. Matters are much simpler for farmland and business assessments where there are far fewer good reasons to cling to a base rate. We acknowledge that changes to the local government taxation system has political risks and requires community engagement and considerable deliberation.
We thus suggest that Port Stephens Council establishes a working group to consider the matter in detail and that this is duly conveyed to IPART in any SRV application.

It is vital that a SRV is approved in the next round of applications (from November 2022). Indeed, in view of the gravity of the situation it is unfortunate that Council was not able to apply for a SRV in the previous round. Failure to secure a SRV in the next round of applications will place Council's finances in grave jeopardy and visit financial problems on both current and future Port Stephens ratepayers.

[11] Indeed if base rates are retained then they must be based on the actual costs of providing a councilstructure as discussed in Drew (2021) and not on an apparently arbitrary number.

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Port Stephens Council Financial Efficiency Report

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EXECUTIVE SUMMARY

This Port Stephens Council Efficiency Report examines various measures of efficiency by which Port Stephens Council is compared with its respective peer group of NSW local councils. Using the standard total expenditure per capita ratio frequently employed by NSW regulatory authorities, we show that Port Stephens compares well with a narrow fourteen-member peer group. However, we argue that this result is misleading due to several problems associated with using the total expenditure per capita ratio as a measure of relative efficiency.

We then employ the operational expenditure per property assessment ratio, which is used in Victorian local government, to assess the relative efficiency of Port Stephens. Port Stephens performs quite well compared to the fourteen-member peer group. However, this ratio is also problematic because it employs a single inputand a single output.

To overcome this problem, we use data envelopment analysis (DEA) since it accommodates multiple inputs and outputs, which can be weighted. Given IPART's concern with 'value for money', in our first DEA we employed tax take as a single input and proxied local government output using five variables. Port Stephens performed close to the median outcome of an expanded sixty-six member peer group.

Given the view by NSW regulatory authorities that efficiency is related to financial sustainability in local government, we conducted an additional DEA using staff and operational expenditure as inputs with the same five outputs over a much longer time period. Compared to its peer group, Port Stephens did not perform well, although its efficiency has improved through time.

We then examine the impact of the various determinants of relative technical efficiency. Population density, the proportion of aged pensioners and increases in unincorporated business income – none of which can be controlled by Council - areall negatively associated with technical efficiency.

The Report concludes by offering five recommendations for improving the relative technical efficiency of Port Stephens Council.

1. INTRODUCTION

The Independent Pricing and Regulatory Tribunal (IPART) requires New South Wales (NSW) local governments to carefully evaluate their efficiency as part of a Special Rate Variation (SRV) application. Moreover, 'efficiency' played a major role in the recent *Fit for the Future* reforms and formed a major justification for its forced amalgamation program. It is thus clear that NSW local government regulators desire local governments to focus on improving this aspect of municipal performance.

In economics, efficiency deals with the relation between inputs (like labour, capital and land) and either intermediate outputs (such as municipal equipment maintenance) or final outcomes (like local roads resurfaced). Economists have defined three main types of efficiency. Firstly, allocative or economic efficiency occurs when resources are allocated between alternative uses so that community wellbeing is maximised. For example, if a given local council produces the quality and mix of local public goods and services desired by its local community, then it achieves allocative efficiency (Ferguson, 1972). In the local government realm, allocative efficiency is determined by the political process and it falls largely outside the direct control of municipal managers.

Secondly, dynamic or intertemporal efficiency can be defined as the achievement of allocative efficiency over time (Ferguson, 1972). In common with allocative efficiency, dynamic efficiency cannot be directly controlled by municipal managers due to exogenous factors, like regulatory burdens and legislative mandates, which are largely determined by state governments.

Thirdly, productive or technical efficiency (sometimes termed x-efficiency) refers to the proficiency by which inputs are converted into outputs (Ferguson, 1972). In local government, inputs include buildings, machinery and staff whereas outputs are specified in terms of proxies due to the extraordinary range of local goods and services produced by local authorities. In this context, a proxy is a variable that attempts to capture the essence of the local service in question. Economists routinely employ proxies because even the most sophisticated modelling cannot include every municipal good and service. Technical efficiency is largely synonymous with value for money. Indeed, in an input orientated[1] consideration of technical efficiency, it is reflective of the reduction in inputs that might be expected for a set level of outputs. Value for money forms the focus of any rate cap regime. It is clear that this is the type of efficiency that IPART ismost concerned about.

It is also probable that efficiency might bear a statistical association with financial sustainability. In this sense, efficiency represents a means through which councils might be expected to improve their financial sustainability (Drew, 2021). Thus, regulatory authorities, such as IPART, will be keen to ensure that municipal operations are as efficient as possible since it is associated with financial sustainability.

[1] There are two orientations that can be used to assess efficiency. An output orientation refers to the additional outputs that might be expected from a given fixed set of inputs. By contrast, an input orientation focusses on the reduction in inputs that might be expected given a fixed set of outputs. Inthe

local government context, scholars have long recognised that the input orientation is the most appropriate because outputs are largely driven by community need and thus fall outside council control.

However, both drivers of the regulatory agency concern for technical efficiency are far from being considered by scholars as apodictic. Indeed, whereas efficiency may be a crude measure of value for money, there is little reason to assume that value for money ought to be the sole consideration in local government decision-making (Drew, Razin and Andrews, 2018). Economists have long argued that competitive markets are the most efficient mechanism for delivering goods and services. However, because most people value public goods and services, which cannot beprovided through markets, democratic governmental entities exist to provide theseservices (Drew, 2021).

Moreover, the proposition that greater technical efficiency might generate superior financial sustainability is only tenuously supported by the empirical literature (Drew, Kortt and Dollery, 2015a). This is not surprising when one contemplates the comparatively marginal differences in relative technical efficiency in a single year against the substantial impact of debt, asset and management decisions over the lifetime of a local government. Accordingly, even radical improvements to technical efficiency are unlikely to materially affect financial sustainability over the short-term.

Not only is the regulatory concern for technical efficiency likely to be over-emphasised relative to its actual importance, but it is also no simple matter to accurately evaluate the association between inputs and outputs. Generally regulatory authorities resort to crude ratios that often mislead end users. As we will show later in this Report, only sophisticated techniques such as intertemporal data envelopment analysis (DEA) can hope to accurately assess relative[2] technical efficiency. Secondly, the absence of a suitable proxy for quality control means that differences in relative technical efficiency can be equally attributed to either (a) lower proficiency with respect to the deployment of inputs or (b) differences in the levels or quality of municipal goods and services.

The remainder of this report is divided into five main parts. In section 2, we present the crude ratio evaluations of efficiency typically used in regulatory contexts. This is done with respect to the fourteen peer local councils of Port Stephens Council used throughout our reports and we explain the problems in relying only on these comparisons. In section 3, we conduct a globally intertemporal data envelopment analysis of tax efficiency; that is, we assess technical efficiency in the way most closely related to value for (tax) money. In section 4, we conduct the standard scholarly local intertemporal analysis of relative technical efficiency. Section 5 focuses on an econometric analysis conducted to identify the determinants of relative technical efficiency and we discuss our results with respect to the particular characteristics of the Port Stephens local government area. We conclude our Report in section 6 with a series of recommendations aimed at improving the matters that form the principal locus of regulatory concern.

[2] Efficiency must be assessed in relative terms – that is, the most defensible approach is to assessefficiency with respect to other similar local governments. Thus we will henceforth refer to relative technical efficiency in this report.

2. RATIO ANALYSIS OF EFFICIENCY

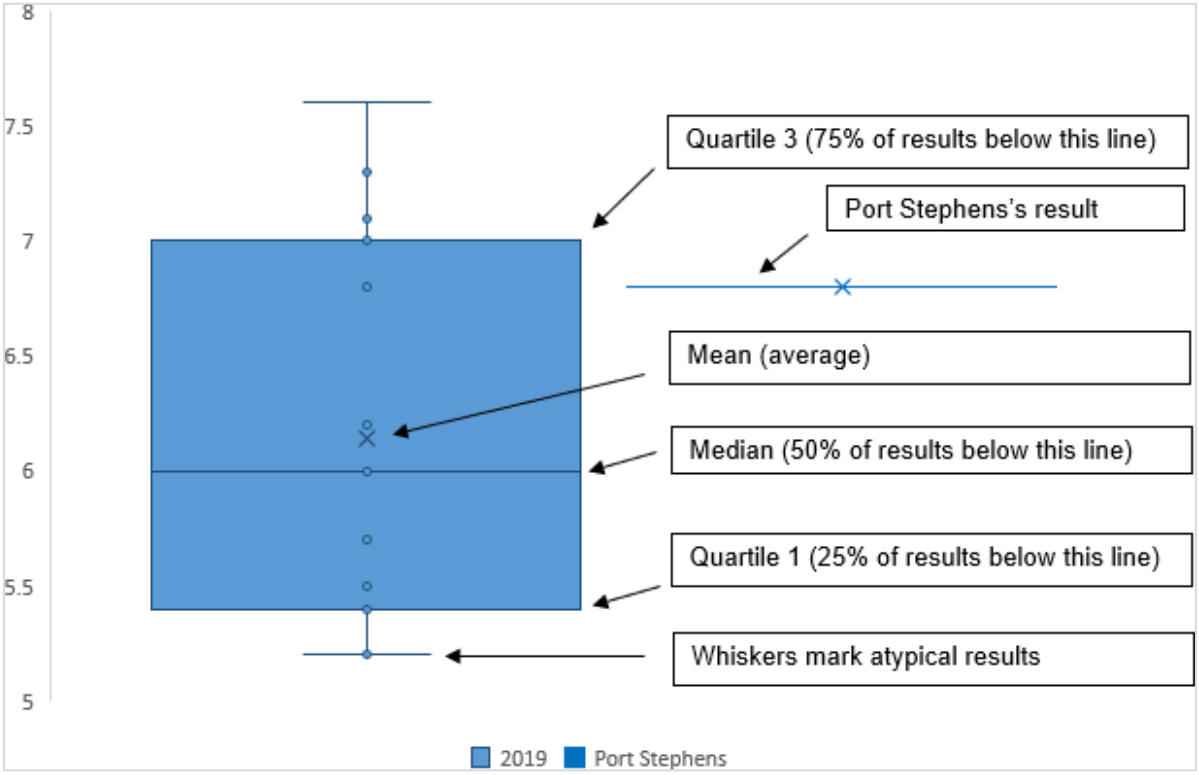
In section 2, we first present comparative data for total expenditure per capita, whichis a ratio that has been used in NSW to evaluate efficiency. Data is presented relative to the fourteen-member council peer group, as used in our other reports andalso detailed in Table 1:

TABLE 1. PEERS USED IN COMPARISONS

OLG 5 Councils	OLG 5 Councils	OLG 4 Councils	OLG 11 Councils
Coffs Harbour	Tweed	Cessnock	Muswellbrook
Newcastle	Maitland	Singleton	
Shoalhaven	Shellharbour	Tamworth	
Lake Macquarie	Wollongong	Wagga Wagga	
Port Macquarie			

The most efficient way of comparing Port Stephens to the peer group is to chart abox and whisker plot. Figure 1 provides details regarding how to interpret these plots:

FIGURE 1. INTERPRETING BOX AND WHISKER PLOTS

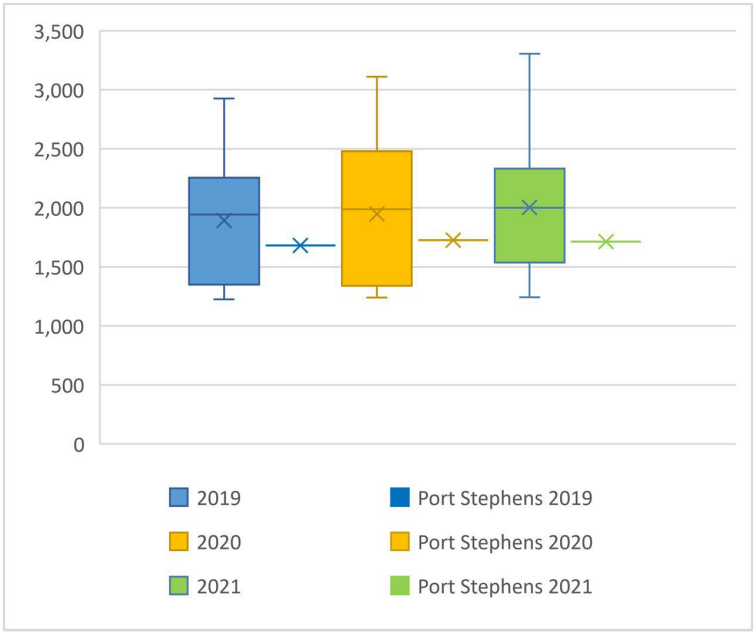


At face value, Figure 2 Operational Expenditure per Capita suggests that the efficiency of Port Stephens relative to the peer group is good; Port Stephens sits at alevel significantly lower than the typical result (as measured by either the mean or the median). In the most recent year it is close to the bottom of the second

quartile.

However, there are a number of problems associated with relying on expenditure per capita data. First, the Australian Bureau of Statistic (ABS) population data is no more than an estimate in intercensal years with expected errors of 2.4 through to 15.6 percent (Drew and Dollery, 2014). Second, the ratio implicitly asks us to accept that most municipal services are delivered to people rather than to properties. Whilst all Australian local government systems have steadily increased 'services to people' relative to 'services to property' over recent decades, this assumption is still not reasonable[3] (Dollery, Wallis and Allan, 2006; Drew, 2021). Indeed, operational expenditure per capita completely ignores outputs associated with the single largest component of Australian local government expenditure (i.e. roads). Moreover, roads are in fact negatively correlated with population size (the relevant Pearson correlation coefficient is negative[4] and equals -0.2531 on a state-wide basis). Third, the ratio implicitly asserts that the cost of providing services to people on farmland is the same as the cost of providing the same services to residential citizens in suburbs[5]. Fourth, operational expenditure per capita ignores the demands of business entirely, which is particularly concerning in local government areas that attract large numbers of tourists (and thus have a relative high number of businessesper capita as in Port Stephens). For all these reasons the operational expenditure per capita data is not a reliablemetric by which to measure relative technical efficiency.

FIGURE 2 OPERATIONAL EXPENDITURE PER CAPITA ($)



[3] In order to defend this assumption it must be demonstrated that the cost of delivering services, such as domestic waste disposal, are closely correlated with the number of occupants in a house. Put differently, it must be shown that the cost of collecting and disposing of solid waste for a household offive is precisely five times more than a household of one person.

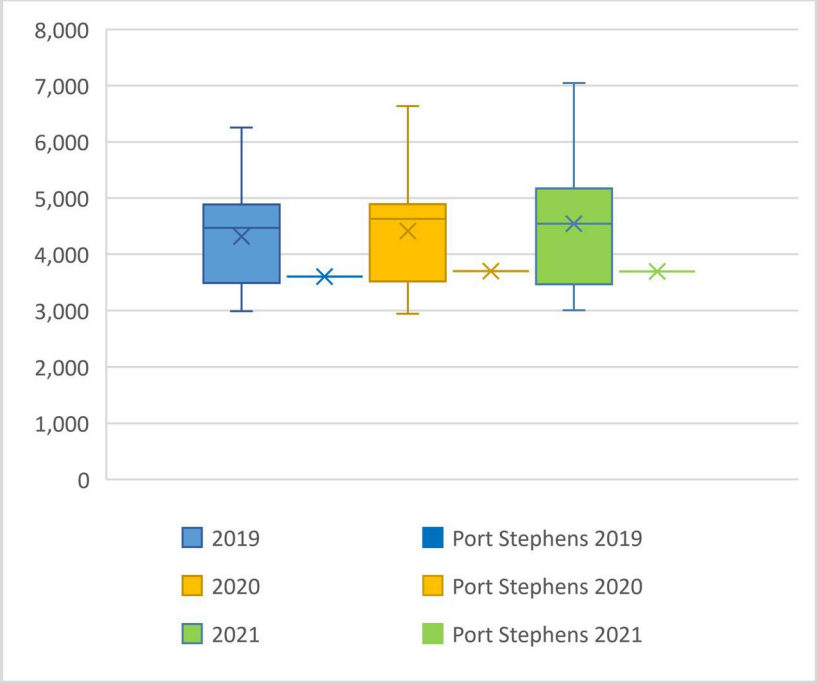
[4] This means that as population increases, road length tends to decrease on an interjurisdictional basis.

[5] It also boldly assumes that these different kinds of people require and receive the same kinds ofservices.

Operational expenditure per property assessment (Figure 3) – as used in jurisdictions such as Victoria – is a much more defensible metric. However, it is stillnot adequate for important decision making because it also (a) neglects outputs associated with the single largest item of local government expenditure (roads) and
(b) implicitly asserts that the cost of servicing residential properties is somehow comparable to the cost of servicing farms or businesses.

It is noteworthy that in a relative sense Port Stephens performs even better with respect to its peer group for the ratio measured on a per assessment basis. The comparative improvement (with respect to the earlier per capita results) is principally driven by the number of persons who inhabit each household, which is lower at Port Stephens than it is for many of the peer councils. In addition, recognising the relatively higher number of generally smaller tourist-orientated businesses at Port Stephens compared to many of its peers also improves its relative performance.

FIGURE 3. OPERATIONAL EXPENDITURE PER PROPERTY ASSESSMENT ($)



The main problem associated with these ratio approaches to measuring relative technical efficiency relates to the limitations implied by using just a single input and single output. The solution to this problem is to employ DEA. DEA is able to accommodate *multiple* inputs *and* outputs and it applies variable weightings to the respective elements to construct an efficient frontier against which the weighted performance of relatively less efficient councils might be compared.

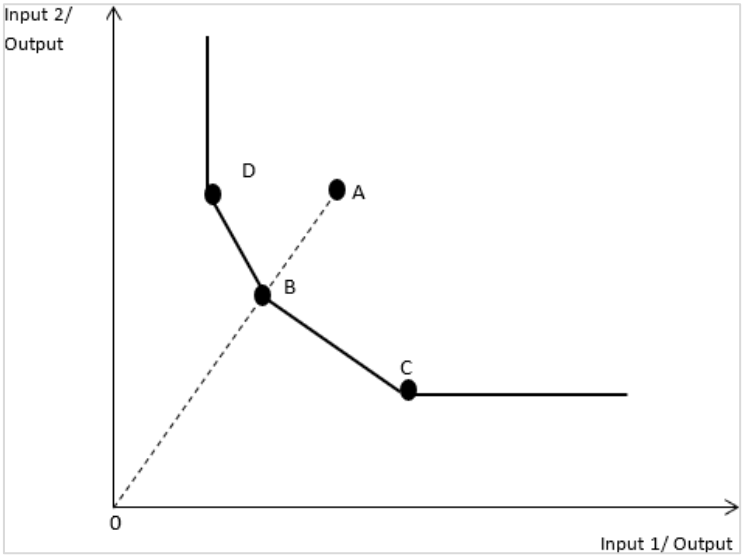
The best way to understand DEA is to consider a graphical illustration. Figure 4 presents a simplified version of an input-orientated DEA where the most efficient councils (D, B and C) envelop the production frontier. Council A is relatively less efficient and lies to the interior of the frontier curve. By measuring the ratio of theradial

distance with respect to the frontier and interior points respectively, it is possible to calculate relative technical efficiency whereby a score of 0 would

represent complete relative inefficiency and 1 perfect efficiency (that is the council would lie on the curve like C, B or D).

Readers requiring further information are referred to the seminal works of Coelli *et al.* (2005) or Cooper, Seiford and Tone (2007).

FIGURE 4. INPUT-ORIENTATED DEA



In section 3, we present a DEA of tax-efficiency. This seems to be the concept that best aligns with IPART's SRV concerns.

3. TAX EFFICIENCY

The value for money proposition that seems to be at the heart of the IPART concern for efficiency is best assessed by a DEA of tax efficiency. In order to undertake this exercise, we used the total tax take as a single input and proxied local government output according to five variables (the number of each type of the three major disaggregated property assessments as well as the length of sealed and unsealed roads respectively[6]). The DEA thus measured the efficiency of the conversion of local property tax funds collected from landowners in Port Stephens with respect to the major outputs of the Port Stephens Council. As we shall see, this specification deals with all of the principal criticisms of the crude ratios that we examined earlier. It also recognises the very different cost structures associated with maintaining sealed and unsealed roads respectively[7]. Consistent with our other work, we consider the broadest classification of NSW local governments, which numbers some sixty-sevencouncils.

6 Because of its underlying ratio conception, DEA allows scholars to combine quantities measured in different units.

7 Nunamaker's rule means that the total number of inputs and outputs considered by a given DEA cannot be allowed to exceed one third of the total number of decision-making units (councils) (see Cooper *et al.,* 2007).

A summary of the DEA specification is:

Total taxation take ($'000) → residential (no.) + farm (no.) + business (no.) + sealed roads (km) + unsealed roads (km).

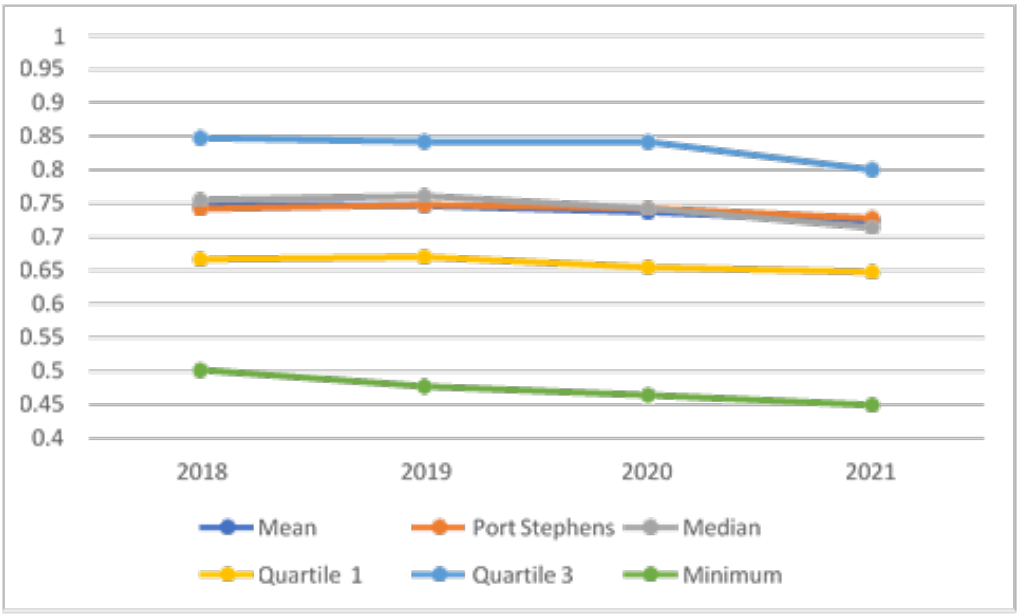
Moreover, it should be noted that the DEA was conducted as a globally intertemporal analysis because we only had four years of data with which to work. Global intertemporal DEAs are suitable for comparisons over time when it can be reasonably assumed that there have been no changes to dynamic efficiency over theperiod of analysis. In addition, it is important for end-users of this Report to understand that we employed a variable returns to scale (VRS) DEA. This means that we controlled for potential size effects on efficiency.

To ensure that our analysis was as robust as possible we bootstrapped results at2,000 replications. Bootstrapping is essentially a probabilistic procedure that provides greater assurance, especially where input data might have gaps.

In Figure 5, we plot the DEA scores for Port Stephens Council for each of the four years, along with suitable measures of central tendency for the sixty-seven councils under analysis. As we shall see, the performance of Port Stephens is close to the typical (both median and mean) result. Moreover, the score attained was consistently at or about 0.75; that is, the efficiency of Port Stephens Council is far closer to perfectly efficient (1) than it is to perfectly inefficient (0).

This robust DEA evidence should provide both the IPART and Port Stephens Council ratepayers with strong assurance that they are indeed getting good value formoney. However, there is always room for improvement and we will discuss some changes that could increase efficiency in the conclusion to this Report. In this regardit should be noted that because there is no consistent state-wide control for quality –such as the citizen satisfaction survey conducted annually for each local council in the Victorian local government system – that it is thus not possible to precisely identify the cause of apparent extant relative inefficiency. One possibility is that what appears to be inefficiency is indeed a reflection of relatively higher service levels at aparticular local government area. This seems to be probable given the entrenched fiscal illusion at Port Stephens that we have considered in our other reports. A second possibility is that the Council is spending more to produce certain goods andservices than its peers, which would be more consistent with a strict understanding of technical efficiency.

FIGURE 5. TAXATION EFFICIENCY, GLOBAL INTERTEMPORAL 2018-2021



This DEA has been useful for the purposes of demonstrating sound value for (property tax) funds at Port Stephens Council. However, as we discussed earlier, regulators are also keen for local governments to attain efficiency because they believe it might be translated into stronger financial sustainability over time. To evaluate this proposition it is necessary to conduct an additional DEA with a more standard input specification.

4. STANDARD RELATIVE TECHNICAL EFFICIENCY

The 'standard' DEA specification replaces the single input (total tax take) with two inputs to reflect the specific elements that a local government combines in the production process; staff and operational expenditure (all of the outputs remained unchanged from our earlier specification). Moreover, to ensure that we recognise differences in experience, capacity and productivity of staff, we followed the scholarly precedent of expressing staff as 'staff expenditure' rather than full-time equivalent numbers (FTE) (Drew, Kortt and Dollery, 2015b).

We were able to re-run our DEA over a much longer panel spanning the period 2009 to 2021 inclusive. Because of the longer time involved – whereby it no longer seemed reasonable to assume no changes to dynamic efficiency – we elected to runa locally intertemporal analysis with a two-year window. Local intertemporal analysis is a particular kind of sequential technique that provides much more accurate resultsfor the non-boundary years[8] (albeit at the cost of considerable additional time from the analyst). It should be noted that we used a variable returns to scale (VRS) DEAmodel to control for the potential effects of size on efficiency.

[8] Because boundary years are only analysed once – rather than twice – relatively less certainty can be placed on the 2009 and 2021 data points.

In Figure 6, we plot the DEA scores for Port Stephens for each of the thirteen years, along with suitable measures of central tendency for the sixty-seven councils under

analysis. As can be seen, for a regular DEA aimed at evaluating relative technical efficiency in the production process, Port Stephens does not perform very well.
Overall, the Council had efficiency slightly lower than the first quartile boundary (that is, its relative performance was in the bottom twenty-five percent of local governments).

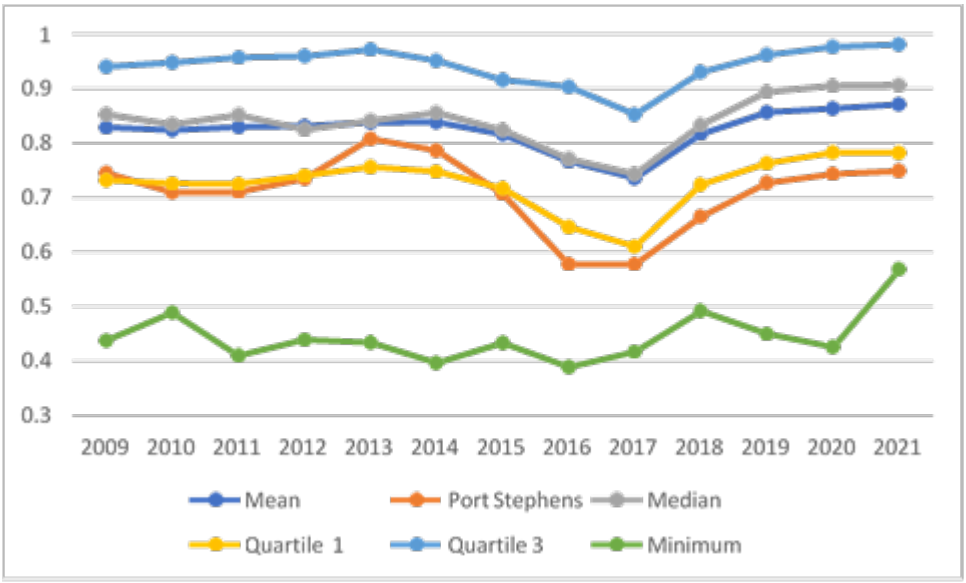
There are several reasons why Port Stephens Council appears to have done worsein a comparative sense for the DEA than it did in the earlier simple ratio analysis.
Firstly, the DEA has a much larger cohort than the earlier ratio analysis (sixty-six peers rather than fourteen). Second, Port Stephens has a relatively low ratio of roadsper assessment compared to the earlier peer group (which means that a proper analysis of outputs, that includes roads, will be relatively disadvantageous for Port Stephens). Third, the ratio of businesses to residential assessments is relatively higher for Port Stephens Council consistent with its status as a tourist destination.
This is also relatively disadvantageous if more money is spent on business assessments than on residential assessments. For all of these reasons, while theDEA results are disappointing, they are not entirely unexpected.

We also note that the standard relative technical efficiency is lower than the previously presented tax efficiency. This is mostly the result of the relatively low taxreceipts that Port Stephens Council receives, although the mix of production factors(i.e. relative combinations of staff and money) is also important.

It should be noted that relative technical efficiency at Port Stephens Council has been improving in recent years reaching a score higher than 0.74 for the past two years. This trend is pleasing and it provides assurance to both the local communityand IPART that Council understands the need to improve its efficiency.

There are two possible explanations for the relative technical efficiency outcomes at Port Stephens; either they represent relatively higher levels of goods or services (see our earlier explanation of the tax efficiency results), or alternatively, it is costingCouncil more to provide services. In the conclusion of this Report, we suggest a number of measures that could improve matters.

FIGURE 6. RELATIVE TECHNICAL EFFICIENCY, LOCAL INTERTEMPORAL, 2009-2021



In section 5, we briefly review the determinants of relative technical efficiency with a view to applying it to the circumstances faced by Port Stephens Council.

5. THE DETERMINANTS OF EFFICIENCY

It is important to understand the determinants of efficiency in order to appreciate how much control a council has over its predicament. To investigate this question, scholars generally conduct a secondary regression, using constant returns DEA scores as the regress and. A constant returns DEA is employed (rather than the variable returns employed for our other exercises) because we wish to also test the effect of size on efficiency (and a variable returns to scale (VRS) DEA would confound matters because it already controls for scale effects).

Regression analysis allows econometricians to determine the mean response in a dependent variable with respect to changes to multiple independent variables. We employed an OLS regression model with year dummies because a fixed effects panel regression was not deemed suitable given the results from diagnostic tests.

The econometric analysis that follows can be specified as:

$\mathbf{T} = \alpha + \beta 1\mathbf{P} + \beta 2\mathbf{X} + \boldsymbol{\mu}.$

In this specification **T** (the dependent variable) is the constant returns to scale technical efficiency score for each council in each year, **P** is a vector of relevant population data and **X** is a vector of socio-demographic and local government characteristics. Mu (**μ**) is an independent identically distributed random error term. Itshould be noted that natural log transformations were executed where required to correct for skewed distributions, as detailed in Table 2. All standard econometric tests were conducted and the residuals were confirmed to be near-normal in distribution (a critical assumption for valid statistical reasoning). The regression includes the sixty-seven councils that comprise the extended category cohort for NSW for the years 2018 to 2021 inclusive.

TABLE 2. DEFINITIONS AND MEANS OF VARIABLES, 2018-2021

Variable	Definition	Similar Councils
Rates		
CRS TE	Relative technical efficiency,constant returns to scale	0.849
Population		
Lnpop	Natural log of the population for each local government area	11.184
Lnpop2	The square of the logged population	125.741
Lndense	Natural log of population densitydata for each local government area	5.081
Controls		
Median employee income	Median employee income(lagged), divided by 1,000	50.363
Median unincorporated business income	Median unincorporated business income (lagged), divided by 1,000	12.159
Aged (ln)	Proportion of people on an agedpension	2.275
Under 15	Proportion of people under theage of 15	18.23
DSP	Proportion of people on a Disability Support pension	3.286
Newstart (ln)	Proportion of people on a Newstart allowance, logged	0.954
Single (ln)	Proportion of people on a SingleParent pension, logged	-0.329
IPPE (ln)	Natural log of the carrying value of infrastructure in ($'000)	14.148
Year	A dummy variable to control forthe effect of different years	
Amalgamation	A dummy variable to control forwhether or not a council was amalgamated in 2016	

In Table 3, we detail the coefficients and standard errors yielded by our regression analysis. We have not listed the results for coefficients that were not statistically significant or included merely as control variables.

TABLE 3. MULTIPLE REGRESSION RESULTS, 2018-2021 INCLUSIVE

	Extended Cohort
Population (ln)	-0.2366
	(0.2415)
Population squared (ln)	0.0125
	(0.0108)
Population density (ln)	-0.0189*
	(0.0077)
Aged (ln)	-0.1229**
	(0.0368)
Median employee income	-0.0013
	(0.0018)
Median unincorporated income	-0.0124**
	(0.0035)
Additional Controls?	Yes
N	263
Coefficient of Determination	0.2384

+p < 0.10, *p < 0.05, **p < 0.01. Standard errors in parentheses

It is noteworthy that population size was not statistically significant which suggests that scale effects are not as important as many regulatory agencies seem to believe. However, population density is important. Our model suggests that a one percent increase in population density results in a reduction to technical efficiency of approximately 0.0002 units (where technical efficiency lies on a scale between zero and one). This suggests that highly built-up areas tend to cost more to service, probably because of well-known congestion effects.

The proportion of people on an aged pension is also statistically significant (this time at the highest level). The model suggests that a one percent increase to the aged variable is associated with a reduction to technical efficiency in the order of 0.0012 units. This is an important finding given the high proportion of aged pensioners in Port Stephens, as well as projections of likely growth to this demographic in future. Itis also important to recall from our Financial Sustainability Report and Capacity to Pay Report that the pensioner demographic is provided with a partially funded discount on their rates which appears to have entrenched fiscal illusion within this cohort.

Increases in unincorporated business income also appear to be detrimental to technical efficiency. Here the model can be interpreted to suggest that a one percent increase in business income is associated with a 0.00012 reduction to relative technical efficiency.

All three variables that are negatively associated with technical efficiency are largely outside of the control of Council in the short term. However, the size of the associations is relatively modest and should thus mean that measures suggested in

section 6 could still exert a positive and material impact on the efficiency of Port Stephens Council in future.

6. RECOMMENDATIONS

There are at least five measures that could be taken to improve relative technical efficiency at Port Stephens Council in response to this Report, which we set out inorder of relative importance:

(1) EXPLICIT MEASURES TO COMBAT FISCAL ILLUSION

A targeted campaign should be implemented to combat entrenched fiscal illusion at Port Stephens Council. Community education is critical, as is the correct pricing of fees and charges, as well as ensuring that adequate taxation is levied in a manner that respects principles of distributive justice and sends appropriate price signals (especially with respect to the level of subsidies provided for merit goods). In addition, reducing informational asymmetries by providing carefully constructed financial sustainability information with rates and charges notices will assist significantly. *Saving Local Government* (Drew, 2021) outlines what is required in considerable detail.

(2) ABOLISH WARD STRUCTURES

The scholarly literature has demonstrated beyond dispute that each additional ward results in significantly lower technical efficiency. Indeed, in a recent study Drew and Dollery (2017) showed that each additional municipal ward was associated with a 3.4% increase in unit expenditure. Moreover, ward structures tend to make planning more complex, complicate the political process and obscure matters with respect to citizen identification with Council. In fact, Place-scores and Place-plans make ward structures rather redundant. We strongly suggest that Council consider removing thisobstacle to future efficiency according to the process outlined in the relevant legislation. Indeed, we recommend that Council establish a working group on this matter and that IPART is duly informed of this initiative as part of the SRV process.

(3) REVIEW OF CORPORATE STRUCTURE

As we noted in our Financial Sustainability Report, Council has done a good job of containing staff costs. However, there may be opportunities for further savings.
Accordingly, the next regular organisational review should place particular emphasis on both the number of lower level managers and also ensuring a sufficient span of control.

(4) SERVICE LEVEL REVIEW

As we have argued, there is good reason to believe that fiscal illusion is a significant problem at Port Stephens. Council thus needs to re-establish a nexus between the price paid in taxation and the level of local services that it funds. We note that Port Stephens documentation refers to the Best Value approach to service level reviews that seeks to match service levels to community willingness to pay. Given the discordance that persists at present, in our view it is important at the next regular service level review to pay even greater attention on conveying to local residents the importance of paying adequate rates, fees and charges for the standard of services

desired. Moreover, the necessity of doing so to ensure intergenerational equity should also be emphasised. Thus, emphasis should be orientated less on what residents would like and more on what they are willing to pay for.

(5) COUNCIL LED INTERNAL EFFICIENCIES

Council management should continue to pursue other efficiencies associated with a range of internal activities. This may include matters such as the deferral of discretionary projects, better procurement practices, a review of community grant schemes, better capture of tourist revenues and more appropriate use of carefully tailored fees and charges. In his *Saving Local Government*, Drew (2021) provides considerable detail as to how to approach these matters.

In conclusion, ratepayers at Port Stephens Council, as well as IPART, can be assured that Council provides good value for money. Moreover, by vigorously pursuing the above recommendations, it should be possible for Council to improve its efficiency even further, notwithstanding the challenges posed by its disadvantageous socio-demographic profile.

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EXECUTIVE SUMMARY

This Debt Capacity Report paints a bleak picture of the financial sustainability challenges facing Port Stephens Council and the concomitant dangers of exposing Council to further debt. Three analyses of Port Stephens Council debt are presented in this Report: the standard debt service ratio, the nett financial liabilities ratio and more sophisticated econometric modelling results.

We show that the debt servicing capacity ratio is flawed in many respects and represents an unsatisfactory metric. The more robust nett financial liabilities ratio calculated over three financial years demonstrates the parlous debt capacity of Port Stephens Council.

Our econometric model embraces a host of factors impinging on financial sustainability and debt capacity covering four financial years for Port Stephens Council and an expanded cohort of peer councils. The model predicts that Port Stephens Council is already perilously close to its debt capacity ceiling.

The Report concludes by offering several recommendations regarding new and existing debt over the current political term of office for elected councillors.

1. INTRODUCTION

Debt is undoubtedly the most misunderstood aspect of local government finance (Dollery, Crase and Johnson, 2006). In the first place, considerable misapprehension relates to the nature of debt; indeed, many think of it as a source of revenue when it is nothing of the kind (Drew, 2020). Debt is simply a way of bringing forward future revenues and this comes at a cost. For instance, establishing the debt facility will cost money, including interest charges. In addition, bringing forward future revenues means that there is a cost of constrained choices for future generations of local taxpayers arising from the fact that some future revenue has already been committed by earlier generations of taxpayers.

Considerable misunderstanding also surrounds how debt might be used to establish intergenerational equity. The central pillar of intergenerational equity is that it is reasonable for future residents to contribute towards the costs of long-lived assets because they will ultimately yield some benefit from these assets. However, it is not essential that debt be employed for this purpose. Moreover, if debt is used for intergenerational equity purposes, then it is imperative that this be done with the utmost of care, as we shall see.

Attitudes to public debt have altered remarkably since the 1960s. Prior to this time it was generally held that to 'spend borrowed funds on ordinary items for public consumption was, quite simply, beyond the pale of acceptable political behaviour' (Buchanan, 1997, p. 119). Testament to this is a local government handbook from the 1940s that holds that overdrafts and other forms of debt must be fully repaid within a single fiscal year (Selby, 1941).

In large part, local politicians of former times practiced strict moral discipline regarding public debt because they recognised the danger that debt could be misused for political capitalisation purposes and thereby distort democracy. In essence, there was an unwritten agreement between politicians that they would not open the debt bottle and hence risk letting the debt genie out.

A second reason why politicians were reluctant to take on public debt was because they applied the same kind of prudence to public finance as what was then commonly employed with respect to personal finance. For example, President Roosevelt famously remarked that 'any family can for a year spend a little more than it earns…but you and I know that a continuation of that habit means the poorhouse' (cited in Borna and Mantriprgada, 1989). Thus, it was an established principle that public debt should be approached in a manner consistent with how a prudent person could be expected to deal with their personal budget.

Indeed, the personal finance metaphor has much to recommend it to contemporary decision-makers. Attitudes to debt have changed over the last half-century and people are often now more willing to take on loans for both items of enduring benefit as well

as consumption purposes. However, when debt is used to finance consumption, such as holidays, people do expect immediate and significant consequences. For instance, we expect to have to make repayments on the loan almost immediately. It is widely understood that this will require sacrifice, such as reduced spending in other areas.

Drew (2021) has employed this personal budget metaphor, as well as natural law concepts, to establish six rules that should be observed for public debt to be considered morally defensible:

1. Debt must be only taken out for capital expenditure and not operational expenditure.
2. The asset financed through debt must have a long and predictable life.
3. The asset must constitute something that future generations are likely to value
4. Debt must be assumed for good moral reasons.
5. Repayments must at least be equal to the rate of consumption of the asset and be quarantined in future budgets.
6. Repayments must involve sacrifice so that a quid pro quo is established.

Even if these rules are observed, a number of problems persist. These problems include: (i) debt capacity must be precisely known; (ii) often there is no access to suitable debt products where the life of the loan is consistent with the expected life of the asset , such as buildings that might be expected to survive a century or more; (iii) all tiers of government are notoriously inaccurate in forecasting the useful lives of public assets (see, for example, Drew and Dollery, 2015).

The present Report focuses squarely on determining the debt capacity of Port Stephens Council, which is essential for it to remain financially sustainable. The Report is divided into three main parts. In section 2, we extend the personal budget metaphor to demonstrate why existing debt ratios are unsuited to the task of establishing debt capacity. In section 3, we conduct sophisticated econometric modelling to establish the capacity of the Port Stephens Council to sustainably service additional debt. We conclude the Report in section 4 with some brief recommendations to guide decision-makers over the current political term of office for elected councillors.

2. DEBT CAPACITY AND DEBT RATIOS

In New South Wales (NSW) local government, as well as other municipal systems, it is common practice for regulatory authorities to stipulate one or more debt ratios that

[1] Political capitalisation is the conversion of hard capital (money) into votes (Drew, 2021).

[1] By definition, operational expenditure comprises items that are expected to be fully consumed within twelve months. It is not morally defensible to obligate future taxpayers to debt for items that are fully consumed well before they are paid for.

[1] Because we are obligating future citizens to pay for the asset, it must be something that they are likely to want. For example, it would not be reasonable to make them pay for some kind of technology that is likely to become rapidly redundant.

[1] Examples of reasons that are not sound include debt bias (i.e. the rational preference of older decision-makers for debt because they are unlikely to be taxpayers long enough to fully pay it off) and fiscal stimulus (a measure best assigned to central governments that have the requisite tax capacity).

[1] That is, repayments should at least equal the annual accrual of depreciation.

must be reported by local governments. The ratios are usually accompanied by an (apparently) arbitrary benchmark and decision-makers are given to believe that achievement of the benchmark confers some sort of assurance regarding financial sustainability.

Unfortunately, the ratios employed are often not fit for purpose and thus present a real risk of misleading both decision-makers and the local communities they serve. Indeed, the ratios have failed to predict past instances of local government financial failure.

The debt service ratio employed in NSW is an especially poor choice of metric. It has been transplanted from the world of corporate finance with little thought given to its consistency with respect to how local government services public debt. The benchmark is entirely arbitrary and has also been grafted from the corporate world where debt bears a nexus to income generation. For instance, a commercial company might invest in factory equipment that produces goods that sell at a price determined by the market. However, for most local government, the price paid by residents is not associated with market forces and it is constrained by political considerations such as rate caps in NSW. Indeed, if the revenue is not set at an appropriate level – such as when a Special Rate Variation is warranted – then the numerator is invalid and the ratio is near to useless.

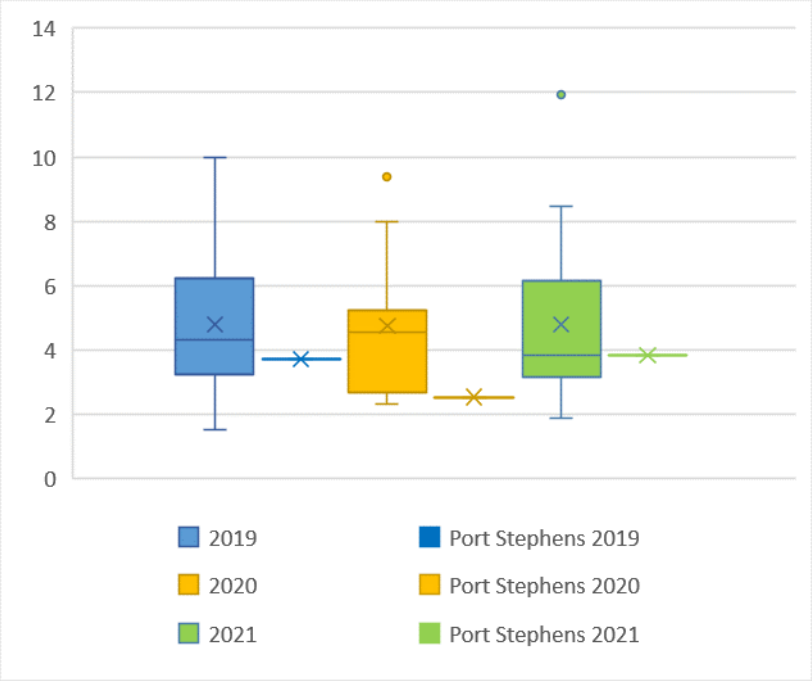
In addition, the debt service ratio is negatively correlated to the making of additional repayments that is both counterintuitive and often counterproductive. Furthermore, the debt service ratio is constrained to just one input and two outputs. Moreover, it is

also exclusively rearward looking and based on just a single year of data (that might be atypical) and thus can only provide shaky guidance at best on what could have occurred over the previous financial year. This is also of little relevance to decision making directed to the future.

In Figure 1, we plot the debt service ratio for Port Stephens Council and its fourteen peer councils (detailed in our earlier reports). As we can see, Port Stephens Council usually performs at a level lower than the typical council in its cohort (but well above the benchmark in most years). However, given our serious concerns regarding the deficiencies in this metric, it would be unwise to place any reliance on Figure 1.

[7] The absence of a suitable debt vehicle means that a local government may be exposed to rate risk at regular intervals when a new loan needs to be negotiated.

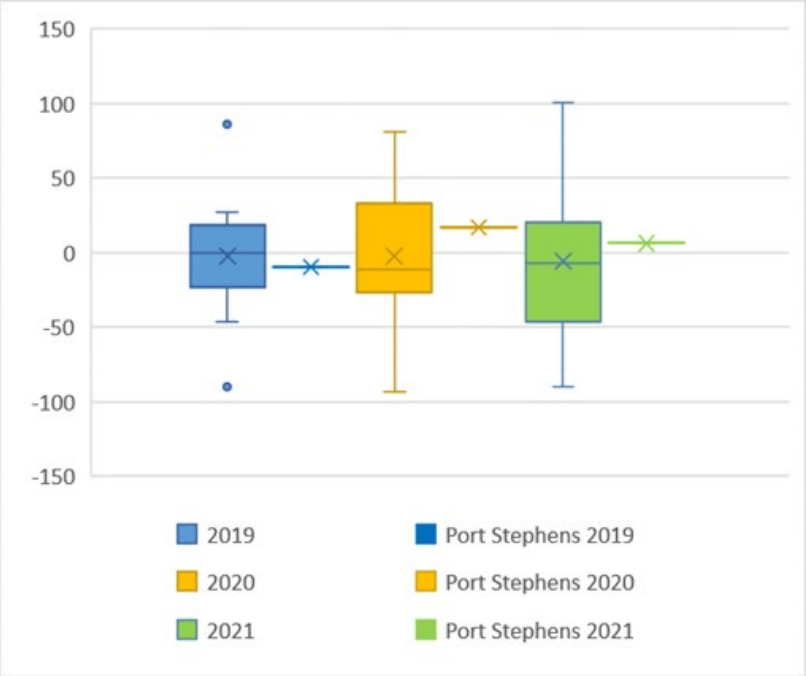
FIGURE 1: DEBT SERVICE RATIO



The nett financial liabilities ratio is a far superior metric. It is widely employed in other local government systems, including in Queensland, South Australia and Western Australia. The nett financial liabilities ratio is better because it includes additional data (total liabilities offset by current assets). However, it is still rearward facing and only reports on a single year of data (that might have been atypical and hence a poor guide to future decision-making).

In Figure 2, we plot Port Stephens Council against its peer group for the last three financial years. For the nett financial liabilities ratio a negative result is the preferred (and typical) outcome. There is thus much reason for concern regarding whether Port Stephens Council has any further capacity for debt (or indeed whether it can comfortably service extant debt) according to its nett financial liabilities ratio.

FIGURE 2: NETT FINANCIAL LIABILITIES



The personal finance metaphor discussed earlier provides a useful guide to the kind of alternative approach that should be adopted to perform a more satisfactory evaluation of debt capacity. If one applies for a loan, two types of information will form the focus of bank deliberations: (i) the number of parties to the loan and (ii) the incomes of the various parties. It follows that similar considerations should also form the focus of a robust empirical investigation of debt capacity. Moreover, to ensure that decision-making is not distorted by data from a single potentially atypical year, it is essential to employ a panel of multi-year data on a broad cohort of local governments.

Accordingly, in section 3 we conduct a random effects econometric analysis of sixty-seven local governments that form the most accommodative relevant category currently in use by regulatory authorities.

3. DEBT CAPACITY MODELLING

Regression analysis is the most sophisticated statistical approach available to understand the debt capacity of a given council (Levine et al., 2013; Ramsay et al., 1988). Specifically, regression analysis allows econometricians to determine the mean response of a dependent variable with respect to changes to multiple independent variables. For the regression that follows, we employed the random effects panel technique (this is the most efficient estimator and it is thus ideal when diagnostic tests allow its use).

The final model specification that we employ in our analysis can be expressed as follows:

$$\mathbf{B}_{it} = \alpha_i + \beta_1 \mathbf{A}_{it} + \beta_2 \mathbf{X}_{it} + \mu_{it} \qquad t = 1..4$$

Where **B** is the total explicit borrowings, **A** is the disaggregated assessment data, **X** is a vector of relevant economic and demographic data for particular local government areas at specific times and **μ** is an idiosyncratic error term. The subscript *it* refers to the i^{th} council entity and the t^{th} year. Here we included all sixty-seven councils categorised as broadly similar under the current Commonwealth Government classification system. Log transformations were employed to counter skewness when econometric diagnostics tests revealed the need to do so. We also conducted and satisfied all other relevant diagnostic tests. Table 1 provides the definition for each variable as well as summary data.

TABLE 1: DEFINITIONS AND MEANS OF VARIABLES, 2018-2021

Variable	Definition	Similar Councils
Debt		
Borrowings	Total explicit borrowings ($'000)	40,785.12
Assessments		
Residential (ln)	Number of residential assessments, logged	10.278
Farm	Number of farm assessments, divided by 100	6.729
Business (ln)	Number of business assessments, logged	7.504
Controls		
Median employee income	Median employee income (lagged), divided by 1,000	50.363
Median unincorporated business income	Median unincorporated business income (lagged), divided by 1,000	12.159
Aged (ln)	Proportion of people on an aged pension, logged	2.275
DSP	Proportion of people on a disability support pension	3.286
Newstart (ln)	Proportion of people on a Newstart allowance, logged	0.954
Carer	Proportion of people on a carers' pension	1.198
Single (ln)	Proportion of people on a single parent pension, logged	-0.329
Total Grants (ln)	The total value of grants, logged	15.521

In Table 2, we present the results of our econometric analysis for the main variables of interest. It is important to remember when interpreting coefficients that the *ceteris paribus* claim is implicit; that is, the variables refer to the mean response holding all other factors constant. As anticipated, the numbers of assessments are key determinants of debt capacity and two of the disaggregated assessment variables were statistically significant at the highest level. This confirms our earlier assertion that a failure to account for the number of borrowers party to a loan is a critical oversight in existing ratio methods.

TABLE 2: MULTIPLE REGRESSION RESULTS, 2018-2021 INCLUSIVE.

	Cohort
Number of residential assessments (ln)	43,541.15** (16,092.22)
Number of farm assessments	2,188.51** (631.97)
Number of business assessments (ln)	-9,566.89 (10,764.16)
Income variables	Yes**
Welfare receipts	Yes**
N	275
Coefficient of determination	0.4535

Standard errors in parentheses.

+ p<0.10, * p<0.05, ** p<0.01

Indeed, we can see that holding all other variables constant, a one percent increase to the number of residential assessments[1] is expected to result in an increase of $435,000 in borrowing capacity. The response predicted by increasing the number of farm assessments is potentially larger, although it must be remembered that the coefficient here has had significant power imputed to it because of the relatively small number of farm assessments typically found in this urban category of local government.

The results from our econometric analysis show that the number of business assessments is negatively associated with debt capacity, ceteris paribus. In this regard, it is important to be mindful of several factors. Firstly, the association between business assessments and debt capacity is not statistically significant. Secondly, the relative size of the effect is small: a one percent increase in business

[1] It should be noted that the typical size of the residential cohort is large. Hence, a one percent increase to residential numbers would generally represent a sizable change.

assessments is associated with just a $96,000 reduction to debt capacity. Thirdly, the ceteris paribus assumption is essential to making sense of the prima facie contrariwise effect; that is, if we hold all other factors constant but increase the number of business assessments significantly, then it is not surprising that there might be a small negative response, because the ratio of businesses to residential assessments will have increased. This is suggestive of a local government area with tourist characteristics. In our other reports on Port Stephens Council, we have already shown that this has important deleterious effects on financial sustainability.

It should also be noted that a number of the control variables were also highly statistically significant. This effect also confirms the importance of taking cognisance of the incomes of the parties to the loan (as detailed in section 2 of this Report).

The main reason for conducting our econometric estimation was to use the coefficients thus determined from four years of panel data to predict the expected capacity to service the debt of a council exhibiting the relevant characteristics of the Port Stephens local government area. It should be noted that the validity of the prediction is based, in part, on the assumption that no major changes occur with respect to important determinants, such as the relative socio-demographic profile of the area. In our Financial Sustainability Report, we have shown that the relative socio-demographic profile of Port Stephens Council may well deteriorate. Should this change, then the predicted capacity of our model would need to be altered (downwards) accordingly.

As it stands, the model predicts that Port Stephens Council is already close to its debt capacity ceiling. Indeed, if we were to rely entirely on the model, then this would suggest that only $5.3 million of additional borrowings could be prudently contemplated. However, there are special considerations that arise from the airport business that warrant further exploration.

In section 4, we explore these considerations further and set out our recommendations in relation to debt for Port Stephens Council over the next councillor term of office.

4. CONCLUSION AND RECOMMENDATIONS

Both the nett financial liabilities ratio and the much more sophisticated econometric analysis suggest that Port Stephens Council has very little additional debt capacity. Because the econometric model considers a broader peer group over a longer panel, as well as including all of the important variables associated with capacity to service debt, greater emphasis should be placed on this latter result. Prima facie this suggests that only an additional $5.3 million of debt could be prudently contemplated. However, debt associated with the Newcastle airport partnership could be considered a special case. If we adopted the special case view, then it suggests debt capacity of just over $20 million.

Given the current COVID-19 situation, future risks (such as increased inflation) and Council's already concerning financial sustainability position, it would be safest to take out no more debt at all, at least until an SRV has been approved. However, we understand that the Port Stephens Council has already adopted resolutions for proposed borrowings of $10 million (for depot and administration building refurbishment) and $5 million (for Nelson Bay) respectively. In view of the special

circumstances associated with the airport partnership – and the apparent imperative to progress with these projects – Council may feel that it is reasonable to proceed according to resolutions already adopted. Nevertheless, we urge extreme caution. Moreover, it is essential to secure a SRV in the order of the magnitude proposed in our Capacity to Pay Report as part of the means for servicing the debt, ensuring intergenerational equity, and also combatting fiscal illusion.

We note that tapping into existing reserves – as a means of avoiding further debt – is not a reasonable option for Port Stephens. Reserves are already at dangerously low levels.

Matters regarding debt capacity should be reassessed shortly after January 2025 . We note that commercial banks may well lend even larger sums of money to Port Stephens Council irrespective of its problematic situation. However, this would be an example of soft budget constraints in action that have often preceded other financial sustainability crises (Drew and Campbell, 2016; Drew, 2021). We thus strongly advise Port Stephens Council to resist commercial bank accommodation of excessive debt and instead adhere to the recommendations laid out above. We also make note of Council's prudent financial management exemplified by recent action to fix outstanding debts at present historically low rates. This is further evidence of the professionalism of the finance team that has allowed Council to survive given its very challenging conditions. We note further that several additional loans have been identified for conversion to fixed rates. We urge Council management to progress these matters as rapidly as practicable. In addition, it may be prudent to consider whether longer fixed terms – if available – are a better long- term proposition, given empirical evidence that inflation tends to be sticky downwards[10].

In our review of existing debt, we noted that much of the debt finance was associated with projects of a discretionary nature. Funding discretionary projects through debt exacerbates fiscal illusion because the local community receives municipal services that they do not fully pay for (Drew, 2021). Moreover, funding discretionary projects through debt also poses particular risks for intergenerational equity because there can be no certainty that the preferences of existing ratepayers will be the same as the preferences of the future ratepayers asked to service the debt in question. Indeed, in the absence of a SRV – or alternatively cuts to

[9] However, even after this passage of time – and assuming that the SRV has been approved and risks mitigated – accumulating greater debt would still involve risk because it reinforces extant problematic levels of fiscal illusion amongst the local community, as established in the Financial Sustainability Report.

[10] There is a small risk that a longer term fixed rate might prove regrettable in the outer years (if rates were to drop again). However, the benefit of making servicing costs more predictable over the near-term – when financial sustainability is being challenged – seems worth the small risk. However, Council is still urged to seriously consider the wider evidence about future likely interest rate movements as part of its decision-making process.

discretionary expenditure elsewhere – it is hard to see how a quid pro quo has been achieved.

As we have noted in our other reports on Port Stephens Council, there is already solid evidence of fiscal illusion, which is a sound reason for applying for a SRV. Secondly, it is imperative to address the declining financial position of Council. We thus urge Council to defer further discretionary projects (especially where debt is contemplated) until an SRV application has been approved and some of the imposing outstanding risks have been mitigated.

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