Where next for Australia’s tax system?

How GST reform can help reboot prosperity for Australia

July 2020
Key findings

The economic impact of COVID-19 and the steps taken to support businesses and individuals through the pandemic have resulted in ballooning government expenditure and shrinking government revenue. Even prior to this, Australia’s tax system was ill-equipped to support a growing economy due to a number of structural factors including an over-reliance on personal and corporate taxes. Efficient revenue collection will be necessary for economic recovery and budget repair in this environment, and reform to consumption tax is a clear option for investigation.

In the wake of COVID-19, reform of the goods and services tax (GST) in the medium term could help address fiscal issues and structural challenges and inequities in Australia’s tax mix. This report investigates various scenarios including a broadened GST base and an increased GST rate.

Any change to Australia’s GST system requires the cooperation of the Commonwealth, states and territories. The COVID-19 economic recovery necessitates this coordination and cooperation.

The GST is Australia’s value-added or consumption tax that levies 10 per cent taxation on the domestic purchase of most goods and services. As a consumption tax, it is comparatively efficient to collect but can be regressive, as lower-income households spend a greater proportion of their income to meet everyday needs.

However, the GST does not cover all forms of consumption. Exemptions were introduced – food, education, childcare, financial services – which aim to address equity concerns but also add to complexity.

GST is collected by the Commonwealth for distribution to the state and territory governments. In 2018-19, the GST represented more than 30 per cent of total state, territory and local government revenues (excluding transfers). By comparison, payroll tax, the largest state and territory-levied tax, represented around 13 per cent of total state, territory and local government revenues in the same year.1
Following the 2008 global financial crisis (GFC), the steady but moderate growth of GST receipts has not always kept pace with broader activity. As a proportion of state, territory and local revenues, GST collections have still not regained pre-GFC levels. In part, this is because people are spending a higher proportion of their income on GST-exempt goods and services, such as housing, healthcare and education, as well as adopting stronger saving rates.

PwC modelling shows that broadening the base and/or increasing the main rate to 12.5 per cent can increase GST collections by between $14 billion and $40 billion (on a base of GST collected in 2018-19). This is the scale of all state, territory and local tax collections on payroll ($26 billion in 2018-19) or stamp duties on conveyances ($19 billion in 2018-19).

The different reform options identified above have different equity impacts, as measured by the proportion of collections that come from low and high-income households and the immediate impacts on their household budgets. Broadly however, all reform options would cause all households to pay more GST. While this means that there may be no significant increase in the equity of GST collections from these reforms, PwC analysis demonstrates that the reforms do not make the existing equity issue worse. Accordingly, equity concerns should not preclude reform, especially when paired with appropriate compensation.

It is well recognised that, as is the case with current GST collections, broadening the GST base and/or increasing the rate of GST will affect low-income households the most, in that more of their income would be required to pay the increased GST. The critical issue for implementation of any reform of Australia’s GST will be an accurate understanding of the impact on low-income earners and designing robust compensation for that.

Some compensation will occur automatically, in that welfare and transfer payments are indexed, but appropriate compensation of at least the bottom two income quintiles of households will require further mechanisms. These will be complicated to design, but must be confirmed and safeguarded before reform occurs to maintain community confidence in the equity of reforms.
## Contents

**Introduction**  
1. A brief overview of the GST  
   1.1 Current GST arrangements  
   1.2 Why GST is a good candidate for reform  
2. Changing the GST  
   2.1 Rate changes  
   2.2 Base changes  
3. Potential effects of broadening the GST base and rate  
   3.1 Increasing revenues  
   3.2 Efficiency  
   3.3 Impact on low-income households  
4. Other reform options  
   4.1 Different GST rates for luxury items  
   4.2 Differentiating types of education  
   4.3 Inclusion of financial services  
   4.4 Administration changes  
5. The need for equity  
   5.1 Designing compensation arrangements for equity  
   5.2 What could compensation look like?  

Sources  
Endnotes  
Contacts
Introduction

This report considers whether changes to the nation’s consumption tax, the GST, can help address the current challenges for the tax system, as set out in PwC’s initial publication: Where next for Australia’s tax system? How our tax system can help reboot prosperity for Australia, including:

- an over-reliance on personal and corporate taxes
- inequities, particularly intergenerational
- a reliance on distortionary and inefficient taxes
- high compliance costs
- an inability to keep up with global business
- tax avoidance throughout the cash economy.

PwC has chosen GST as the first focus area in this series for a number of reasons. GST is a significant component of current tax collections, and offers an opportunity for substantial reform. It offers benefits in that it is efficient to collect and relatively non-distortionary. Increased use of GST is an obvious option to consider to make the overall tax mix more efficient.

PwC acknowledges that GST reform has been examined previously and any extension of the GST is contentious. The following points have also been well established:

- Although GST reform would increase taxation collections, not all (or maybe any) new revenue would be retained.
- Some of the increased collections would be automatically returned to households (through indexing of welfare payments) and some of the new collections would likely be returned to taxpayers via other forms of compensation in order to address equity concerns. To maintain public confidence, these compensation arrangements should be guaranteed before any reform can occur.
- GST reform will increase the revenue that accrues to states and territories, while the increased costs will accrue to the Commonwealth.
- GST reform will likely require coordination and agreement between the Commonwealth and the states and territories. This will bring political challenges for implementation.

With these conditions, design of any GST reforms would have to carefully consider how to ensure:

- that the benefits of GST reform (e.g. economic efficiency and growth goals) outweigh any impost
- community confidence in the various compensation mechanisms (such that there is public confidence that the compensation mechanisms will be as permanent as the increased tax collections).

In this context, this report examines the scale of revenue opportunities and equity changes associated with different GST reform options. This analysis shows both the potential magnitude of the change in tax mix, which can drive economic efficiency, and the scale of compensation that may be required.

This report should be read in conjunction with the summary of PwC’s current economic and fiscal situation and the associated challenges set out in Where next for Australia’s tax system? How our tax system can help reboot prosperity for Australia.

This report will shortly be followed by a report exploring intergenerational issues within Australia’s revenue system.
1.1 Current GST arrangements

The GST is a value-added or consumption tax that collects 10 per cent taxation revenue on the domestic supply of most goods and services.

The GST is collected by the Commonwealth for distribution to the state and territory governments. This revenue is provided as a payment to the states and territories as general revenue assistance that can be directed to any part of that state or territory’s budget. This involvement of both the Commonwealth and the states and territories makes changing the GST complex (see Figure 1.1).

**FIGURE 1.1**
The challenge of changing the GST

The GST has a Jekyll and Hyde character – it is levied by the Commonwealth, but the revenue from the GST is distributed to the states and territories; and to the lay person it is a Commonwealth tax, but economically it is levied for state and territory revenue.

This duality makes changes to the GST particularly complex because of the Commonwealth-state arrangements that underpin it. Specifically, the GST arrangements are spelt out in the *Intergovernmental Agreement (IGA) on Federal Financial Relations*, where:

- clause A4(c)(i) provides that the Standing Council on Federal Financial Relations – chaired by the Commonwealth Treasurer – must approve ‘changes to the GST base and rate’
- clause A6 requires that any agreement to change the base and rate must be unanimously agreed.

Hence, a key obstacle to changing the GST is the need to gain the unanimous support of the Commonwealth, states and territories. The challenge of finding agreement is compounded by different views on the appropriateness of the distribution of the GST to the states and territories.

However, it is possible that, if it wished to act alone, the Commonwealth would be legally free to disregard the IGA and amend the GST legislation unilaterally as the IGA is not legally binding, but merely a political agreement. Clearly, such an abandonment of a major Commonwealth–state agreement would have broader negative implications for Commonwealth–state relations.

Both approaches to reform are challenging in their own way.
The exact amount of GST revenue distributed to each state and territory is determined on the advice of the Commonwealth Grants Commission. The GST revenue was originally distributed on the basis of horizontal fiscal equalisation (HFE) – each state or territory has the fiscal capacity to provide services and the associated infrastructure at the same standard, if each state or territory made the same effort to raise revenue from its own sources and operated at the same level of efficiency. However, following a review by the Productivity Commission, amendments to the Commonwealth Grants Commission Act 1973 and the Federal Financial Relations Act 2009 gave effect to the Commonwealth’s policy of:

- introducing a minimum GST revenue sharing relativity (relativity floor)
- permanently boosting the GST revenue pool with additional Commonwealth financial assistance
- transitioning the HFE system from full equalisation (so-called equalising to the strongest state) to ‘reasonable’ equalisation, based upon the fiscal capacity of the stronger of New South Wales and Victoria.

The new policy includes a transition to the new arrangements which will end in 2026-27.

The GST is the major source of untied revenue to states and territories. In 2018-19, it represented more than 30 per cent of total state, territory and local government revenues (excluding transfers). By comparison, payroll tax (the largest state and territory-levied tax) represented approximately 13 per cent of total state, territory and local government revenues in the same year, shown in Figure 1.2.7

**FIGURE 1.2:**
Proportion of total state, territory and local government revenues (excluding transfers), year ending June

![GST vs Payroll taxes](chart.png)

Although GST receipts recovered from the shock of the GFC better than some revenue streams, such as company tax, the steady growth of GST receipts has not always kept pace with broader activity. As a proportion of state, territory and local revenues, GST collections have not regained their pre-GFC levels, as shown in Figure 1.2 above. In part this is because people are spending a higher proportion of their income on GST-exempt goods and services, such as housing, health care and education. It also reflects a reduction in the proportion of income being consumed by households. This recovery in the savings rate may be a good thing from a broader economic management perspective, but it has contributed to declining growth in GST revenue.
In 2018-19, GST collections as a proportion of all Commonwealth collection taxes were the lowest they had been since the first year of its introduction (shown in Figure 1.3).

**FIGURE 1.3**
GST receipts as a proportion of all Commonwealth collected taxes and nominal GDP (year ending June)

<table>
<thead>
<tr>
<th>Year</th>
<th>GST as % Commonwealth collections</th>
<th>GST as % of nominal GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>2002</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>2003</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>2004</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>2005</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>2006</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2007</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>2008</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>2009</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>2010</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>2011</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2012</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2013</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2014</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2015</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2016</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2017</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2018</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>2019</td>
<td>10%</td>
<td>12%</td>
</tr>
</tbody>
</table>

---

### 1.2 Why GST is a good candidate for reform

The change in consumption patterns has meant that the GST is underperforming. This problem will become more acute in a post-COVID-19 environment, where tax reform will be required to:

- support economic growth
- generate revenue to support ongoing government expenditure
- improve equity (particularly intergenerational equity given that the costs of the Great Lockdown will be borne disproportionately by younger Australians).

GST is one important part of that potential program of reform for several reasons:

- Australia’s GST is low compared to advanced economies, both in rate and contribution to total revenue:
  - Australia’s GST rate is currently low by international standards, well below the OECD average of 19.3 per cent (see Figure 1.4)
  - Australia currently has a relatively low reliance on consumption taxes as a proportion of the nation’s taxation revenue collection compared to other advanced economies.

- GST offers a comparatively reliable revenue stream:
  - Although exemptions have made Australia’s GST receipts grow slowly, consumption taxes are still relatively stable compared to company tax revenues. This relative volatility reflects the fact that consumption will always be ‘positive’, whereas companies can suffer tax losses and can carry such losses forward for recoupment.
  - Tax planning, which often arises from available choices in the system, can reduce taxable income for individuals and companies in a manner that cannot be readily replicated for personal consumption.

- Increased reliance on the GST offers the potential to address some of the structural challenges in Australia’s tax mix:
  - It could reduce Australia’s reliance on distortionary and relatively inefficient revenue streams such as transaction taxes, including stamp duties and insurance levies.
  - It could reduce the reliance on income taxes, which is currently more than twice the OECD average.
  - It can be relatively efficient to collect, especially if compliance cost-increasing exemptions are removed.
The combined impact of GST reform should be higher economic growth. Studies are aligned in suggesting that a revenue-neutral switch from less efficient taxes (principally income taxes) to consumption taxes can increase GDP; a 1 per cent tax switch can generate somewhere in the order of 0.25 per cent to 1 per cent in extra GDP in the long term. However, it is important to note that the economic growth outcome will depend significantly on how GST reform is incorporated as part of a broader package of reform measures. For example, previous Treasury modelling that increased GST in conjunction with a reduction in personal income tax showed only marginal increases to GDP (although the detail of the personal income tax change and compensation mechanism were not included in the analysis). Maximising economic growth benefits will require design of a reform package that reduces the incidence of more inefficient revenue collections.

The potential for economic growth benefits makes it attractive to consider the value of higher consumption taxes, particularly given Australia’s relatively low reliance on consumption taxes. This also shows that GST reform should be considered, even if additional revenue is redistributed in compensation.

However, these benefits of increased revenue from GST will need to be balanced with the fact that it could contribute to an increased misalignment between government revenues and responsibilities and vertical fiscal imbalance, and there may be concerns about the regressive nature of consumption taxes.

Compensation arrangements for lower-income individuals and households are likely to be required to address concerns about the regressive nature of the increased collections. Investigation on what form these arrangements could take is included in Chapter 5.
Changing the GST

There are two main ways the GST can be changed:

- A change to the rate (i.e. change the current 10 per cent tax to a different percentage while keeping exemptions the same)
- A change to the base (i.e. change the goods and services that are taxed and those that are exempt while keeping the current rate).

These changes are not necessarily mutually exclusive and could be combined in a package of broader tax changes.

2.1 Rate changes

As highlighted in the previous chapter (see Figure 1.4), Australia’s GST rate is one of the lowest in the OECD.

Increasing Australia’s GST rate could be done through a general increase, or by increasing the rate on a selection of goods and services (related to changes in the base, as set out below). It is broadly acknowledged that a single rate applied to all goods and services is both the simplest method to administer and the most efficient. Inefficiencies and complexities arise as departures are taken from a single rate.

This report considers both single rate increases and multi-tiered rates. These are examined as potential options because:

- Tiered rates are common overseas. For example, OECD analysis showed that in 2018, only two OECD countries did not have at least one reduced rate (noting that Australia’s current exemptions would be included as one reduced rate of zero in the OECD analysis).\(^{16}\) The European Union sets a minimum standard rate (15 per cent) and allows for two reduced rates (of not less than 5 per cent) for a restricted list.\(^{17}\) Figure 2.1 shows that most countries with VAT arrangements have some goods and services that are exempt or attract zero VAT (although varied in how wide those exemptions are) but that two thirds of the countries examined had at least two non-zero rates.

- Tiered rates using the current exemptions should not substantially impact administrative complexity as businesses currently have to consider exempt and taxable goods and services separately, and the definitional distinction between these two types would remain.

### FIGURE 2.1
Structure of VAT arrangements across regions\(^{18}\)

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries with exemptions or zero rates</th>
<th>Countries by number of non-zero rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>3 of 4</td>
<td>1 2 1</td>
</tr>
<tr>
<td>South America</td>
<td>7 of 7</td>
<td>4 1 1 1</td>
</tr>
<tr>
<td>Europe</td>
<td>37 of 38</td>
<td>2 12 18 6</td>
</tr>
<tr>
<td>Africa</td>
<td>11 of 14</td>
<td>9 5</td>
</tr>
<tr>
<td>Asia</td>
<td>14 of 15</td>
<td>8 4 1 1 1</td>
</tr>
<tr>
<td>Oceania (including Australia)</td>
<td>3 of 4</td>
<td>2 2</td>
</tr>
</tbody>
</table>
2.2 Base changes

Changing the base of the GST would require removing some or all of the current exemptions. Currently there is a relatively long list of GST exemptions. However, there are only six categories of exemptions that are considered by Treasury in its Tax Benchmarks and Variations report as ‘large’ in terms of forgone revenue, as follows:\textsuperscript{19}

- **Food**
- **Education**
- **Health** (including drugs and medicinal preparations, medical aids and appliances, medical and health services, residential care, community care and other care services, private health insurance)
- **Childcare services**
- **Water, sewerage and drainage**
- **Financial supplies** (including financial acquisitions threshold (input tax credits), input taxed treatment, reduced input tax credits)

The remaining exemptions include: higher registration threshold and some GST-free treatments for charities and non-profits; diplomats, diplomatic missions and approved international organisations; boats for export; tourism (global roaming by visitors to Australia, tourist refund scheme for goods taken out of Australia, domestic travel as part of an international arrangement, travel agents arranging overseas travel); religious services, supplies of farmland; general registration thresholds; simplified accounting methods; precious metals and cross-border transport supplies.

In this report we examine just the large exemptions (where there is the best available data and the most potential for revenue gains), except financial supplies. This is in acknowledgement that financial supplies are very complex, data to quantitatively examine them is limited, there is significant regulatory change expected in the industry and there are other mechanisms to tax related activity, including the major bank levy. Tax mechanisms for financial supplies have also been proposed by the states in the past, such as the bank tax proposed by the South Australian government in 2017.\textsuperscript{20}

When considering removing exemptions, it is important to acknowledge that there are reasons that they were originally established. Original reasons include:

- practicality concerns (i.e. financial supplies are too complex to apply the GST on, or registration thresholds for charities and small businesses are applied to reduce their administration)
- equity concerns (i.e. to not tax goods that make up a large proportion of low-income consumption, such as fresh food)
- acknowledgment of positive externalities (i.e. household investment in education, childcare and healthcare will increase the productive capacity of the economy and promote growth).

These are important considerations and are examined in the following sections. They will also be crucial when considering a GST reform within the broader tax system including compensation arrangements or adjustments to other taxes.

It’s important to note that the original reasons for exemptions have not always shown to be true in practice. For example, analysis of 70 countries shows that increasing consumption taxes – while reducing income taxes – can promote long-term growth.\textsuperscript{21} Additionally, OECD analysis also demonstrates that exemptions and reduced rates are not effective ways of promoting equity or stimulating consumption of ‘merit goods’.\textsuperscript{22} This sets the basis for re-examining the usefulness of Australia’s current exemptions.
Potential effects of broadening the GST base and rate

This chapter considers four reform scenarios:

- Broadening the GST base to cover five currently GST-exempt categories – water and sewerage, childcare, health, education and GST-free food
- Increasing the rate to 12.5 per cent, without broadening the base
- Broadening the GST base and increasing the rate to 12.5 per cent
- A tiered system to base current exemption items at a rate of 5 per cent, and increasing the rate on the current base to 12.5 per cent.

While these scenarios are not exhaustive, they provide an indication of the magnitude of the increased GST collections and associated impacts that could arise from changes to the current GST regime.

The analysis provided below is based on the following assumptions:

- Tax changes are examined on a 2018-19 revenue base. This is done using the last full year of collections to be agnostic in regard to an introduction date.
- Any increase in the price of goods and services (through increased tax) will cause a corresponding marginal decrease in consumption, in line with Treasury analysis.
- No change to fundamental consumption profiles (either due to COVID-19 or other reason).
- Any consideration of how the increased GST collections would be spent or would be offset by associated reductions in other taxes is excluded.
- Where collections are shown by state and territory, the current population profiles in each jurisdiction are not altered.

In each scenario, PwC has examined the potential increased GST collections generated by the hypothetical change. It is acknowledged that each scenario would be part of a broader reform package considering how these changes impact individuals and the states’ fiscal balance. This has not been considered here. This report does not address the nature or design of any compensation measures that would accompany any change to the GST and any such measures would reduce the net revenue gain.

As a result, the increased collections estimates presented should be regarded as an illustration of the potential effects rather than a comprehensive account of net revenues available to the government from any GST change.
3.1 Increasing revenues

The increased GST collections and distributional impacts of these scenarios vary significantly, as shown in Figure 3.1. The greatest increase in collections would be achieved by broadening the base and increasing the rate for all taxable goods and services to 12.5 per cent, but with correspondingly larger household impacts. The results have been shown in several ways, including in absolute terms and as proportions of current household GST payments and current household gross income.

**FIGURE 3.1**  
Impact of proposed GST measures

<table>
<thead>
<tr>
<th>Broaden base by removing main exemptions</th>
<th>Increase rate to 12.5% on current base</th>
<th>Broaden base and increase rate to 12.5%</th>
<th>Tiered system (5% and 12.5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in GST collections ($ billion in 2018-19 terms)</td>
<td>20.7</td>
<td>14.5</td>
<td>40.0</td>
</tr>
<tr>
<td>Increase in GST paid by households</td>
<td>31.7%</td>
<td>22.2%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Increase in GST paid as proportion of gross income of households</td>
<td>1.3%</td>
<td>0.9%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Figure 3.2 shows the impact of these reforms by the state in which they would be collected. This reflects where the taxable expenditure is occurring, not which state or territory government the revenue would be redistributed to (noting the redistribution methods outlined above). This shows that broadly all scenarios have similar proportional impacts across states, with some differences between states showing relative distribution of household income and therefore different consumption patterns (e.g. Tasmania has relatively fewer households at the higher-income levels, compared to the Australian Capital Territory which has relatively more).

**FIGURE 3.2**  
Impact of proposed GST measures by state or territory of collection (on 2018-19 collections, $ billion)
Figure 3.3 shows these impacts by the type of expenditure being taxed, demonstrating the relativities of closing the five main exemptions examined. Significant amounts can be raised by imposing GST (at current or increased rates) on the largest exempt categories, such as food, health and education. However, the largest gains can be achieved by increasing the rate levied on the current base, as it still represents the majority of consumption (on current consumption profiles).

**FIGURE 3.3**
Impact of proposed GST measures by item of expenditure (on 2018-19 collections, $ billion)^26

<table>
<thead>
<tr>
<th>Exemption</th>
<th>Broaden base</th>
<th>Increase rate to 12.5% on current base</th>
<th>Broaden base and increase rate to 12.5%</th>
<th>Tiered system (5% and 12.5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td></td>
<td>7.6</td>
<td>0</td>
<td>9.5</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td>6.1</td>
<td>0</td>
<td>7.6</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>4.4</td>
<td>0</td>
<td>5.4</td>
</tr>
<tr>
<td>Water and sewerage</td>
<td></td>
<td>1.1</td>
<td>0</td>
<td>1.4</td>
</tr>
<tr>
<td>Childcare</td>
<td></td>
<td>1.4</td>
<td>0</td>
<td>1.7</td>
</tr>
<tr>
<td>Current base</td>
<td></td>
<td>0</td>
<td>14.5</td>
<td>14.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>20.7</strong></td>
<td><strong>14.5</strong></td>
<td><strong>40.0</strong></td>
</tr>
</tbody>
</table>

### 3.2 Efficiency

As broad consumption taxes have a relatively minor distortionary impact on the behaviour of individuals and businesses, they do not impact economic growth to the same extent as other taxes such as corporate and (progressive) personal income taxes.\(^27\)

This has been supported by OECD analysis, which estimates that a 1 per cent shift in tax revenues from income to consumption tax would increase GDP per capita by three-quarters of a percentage point in the long term, based on the structure of existing personal income tax arrangements.\(^28\) However, this economic growth benefit will depend on the design of the overall reform package in reducing inefficient or distortionary taxes. For example, previous Treasury modelling that increased GST in conjunction with a reduction in personal income tax showed only marginal increases to GDP (although the detail of the personal income tax change and compensation mechanism were not included in the analysis).\(^29\) Structuring a GST increase to reduce the reliance on the revenue collections from more inefficient taxes revenue collections can increase the economic growth benefit.

Broadening Australia’s GST would reduce the impact of the ageing population on GST revenues, and address one component of intergenerational inequity, as older individuals spend more on health and related services which are not subject to GST (see Figure 3.4). It would also reduce the administration cost of the GST, as exemptions increase complexity and create additional costs to both businesses and the Australian Tax Office (ATO).\(^30\)
3.3 Impact on low-income households

GST is a regressive tax because low-income households spend a higher proportion of their income on consumption. Changes to either the breadth or rate of the GST will have a bigger impact on these households (as a proportion of their incomes) compared to higher-income households. The extent of these impacts is linked to a person’s income and how they spend that income.

Figure 3.5 compares income groups, referred to as quintiles, in terms of income levels and consumption patterns. It shows that:

- average income per week of a household in the highest income quintile is seven times higher than the lowest quintile
- a household in the lowest income quintile derives the majority of its gross income from government pensions and allowances, compared to the average (noting that these figures vary depending on the source and whether examining mean or median income)
- a household in the lowest income quintile spends close to 10 per cent of gross income on GST-exempt food, while a household in the highest income quintile spends around 6 per cent of its gross income on GST-exempt food.

**FIGURE 3.5**
Income and consumption across household income quintiles, 2017-18

<table>
<thead>
<tr>
<th>Mean gross income per household ($)</th>
<th>Lowest</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Highest</th>
<th>All households</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,247</td>
<td>50,247</td>
<td>89,159</td>
<td>132,168</td>
<td>181,848</td>
<td>351,903</td>
<td>159,446</td>
</tr>
<tr>
<td>Proportion of mean gross income from government pensions and allowances</td>
<td>65.0%</td>
<td>31.0%</td>
<td>10.0%</td>
<td>3.0%</td>
<td>1.0%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Proportion of mean gross income spent on five main GST exemptions</td>
<td>25.2%</td>
<td>19.9%</td>
<td>17.4%</td>
<td>16.2%</td>
<td>13.7%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Food</td>
<td>9.6%</td>
<td>7.3%</td>
<td>6.7%</td>
<td>6.1%</td>
<td>4.3%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Health</td>
<td>7.6%</td>
<td>6.1%</td>
<td>5.1%</td>
<td>4.7%</td>
<td>3.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Education</td>
<td>4.7%</td>
<td>4.2%</td>
<td>3.5%</td>
<td>3.4%</td>
<td>3.8%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Water and sewerage</td>
<td>1.8%</td>
<td>1.2%</td>
<td>1.0%</td>
<td>0.9%</td>
<td>0.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Childcare</td>
<td>1.5%</td>
<td>1.3%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Note: Numbers may not sum due to rounding
While high-income households currently pay more GST in absolute terms, the impact of GST as a proportion of gross household income is greatest on the lowest income quintile (Figure 3.6).

**FIGURE 3.6**
GST paid weekly across income quintiles, current arrangements, 2017-18$^{35}$

When GST paid is expressed as a percentage of total disposable income (after income tax has been paid), the disparity of GST impacts between the lowest income quintile and highest income quintile is reduced to some extent, but the same broad trend still applies. This reflects the nature of Australia’s progressive income tax system.

Even so, any change to GST will affect low-income households (as a proportion of income) more than higher-income households (Figure 3.7).

The impact on low-income households is greatest where the GST base is broadened in conjunction with a rate increase, compared to simply raising the rate or broadening the base in isolation.

While all households would be affected by changes to GST, not only is the impact on low-income households relatively larger, they may also have less capacity to absorb the additional GST costs given their low savings and disposable incomes.

**FIGURE 3.7**
Impact of scenarios, increased GST payments as a proportion of mean gross income by quintile$^{36}$
While maintaining exemptions would benefit low-income earners, in absolute terms high income earners tend to gain most. Figure 3.8 shows that by addressing these exemptions, more than half of the new GST collections is contributed by the two highest income household groups and only about a quarter comes from the two lowest income household groups. This reinforces that GST exemptions are an ineffective mechanism for supporting equity objectives, as they cannot be targeted to specific segments within the community.

FIGURE 3.8
Impact of scenarios, increased GST payments as revenue by quintile

Understanding which groups the majority of new collections comes from is also important for the design of compensation and the likely net revenue increase. For example, Figure 3.8 shows that in the tiered system (even if the bottom three quintiles of households by income are fully compensated through automatic and specific compensation) 57 per cent of the increased collections could still be retained (34 per cent from the highest and 23 per cent from the second highest). In that scenario, if the net revenue increase was only the collections from the top two household income quintiles, this would be a net increase in collections of more than $14 million.
It is inevitable that any changes to the GST, either broadening the base and/or increasing the rate, would need to be accompanied by measures to compensate for the impact of the changes on low-income households. It would be necessary to consider the appropriate scale of compensation measures, the mechanism by which they are delivered, and how they can be kept in place over the long term.

However, it is also important to acknowledge these scenarios in the context of not just the change, or incremental new revenue collected, but also how each scenario changes the total GST collections. Figure 3.9 shows that while at a household level, the change is disproportionately felt by lower-income households, the majority of new collections come from high-income households and marginally increases the equity of the overall GST collection. For example, currently the lowest-income households pay 6.7 per cent of gross mean income in GST, while the highest-income households pay 2.8 per cent (i.e. the lowest-income households have to pay more than twice, actually 2.36 times, the proportion of their income in GST than the highest-income households).

Under all reform scenarios, both the lowest and highest quintile households pay more GST, but the relativity is, at least marginally, reduced. For example, under the tiered system this becomes 9.4 per cent and 4.1 per cent respectively, meaning that the lowest-income households pay a slightly smaller multiple (2.30) as a proportion of their income than the highest-income households.

**FIGURE 3.9**
Total GST collections mix after reform

<table>
<thead>
<tr>
<th>Total GST collections ($ billion on a 2018-19 base)</th>
<th>Current revenue</th>
<th>Current revenue + Increase rate broadened base</th>
<th>Current revenue + Increase rate broadened base and increase rate</th>
<th>Current revenue + Tiered system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of revenue from lowest quintile households</td>
<td>12.2%</td>
<td>12.0%</td>
<td>12.0%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Proportion of revenue from highest quintile households</td>
<td>34.2%</td>
<td>34.0%</td>
<td>34.3%</td>
<td>34.0%</td>
</tr>
<tr>
<td>Proportion of mean gross income to GST in lowest quintile households</td>
<td>6.7%</td>
<td>8.9%</td>
<td>8.2%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Proportion of mean gross income to GST in highest quintile households</td>
<td>2.8%</td>
<td>3.8%</td>
<td>3.6%</td>
<td>4.8%</td>
</tr>
<tr>
<td>‘Equity quotient’ of relative proportion from highest income compared to lowest income</td>
<td>2.36</td>
<td>2.33</td>
<td>2.30</td>
<td>2.30</td>
</tr>
</tbody>
</table>

While this does not show any significant increase in the equity of GST collections from these reforms, PwC’s analysis demonstrates that the reforms do not make the existing equity issue worse. This outcome may suggest that equity concerns should not preclude reform, especially when paired with appropriate and targeted compensation. Mechanisms to ensure equity in reform are discussed in Chapter 5.
Other reform options

Four scenarios to change the base and rate of the GST are presented in this report. These are not intended to be exhaustive, but rather show the potential for reform. Additional options for reform that have not been quantified in this report (due to data availability) include:

- setting a tiered system of rates that aim for higher application of GST on ‘luxury’ goods
- differentiating types of education
- removing the exemption on financial services
- administration changes to the GST outside of base and rate changes.

These are explored below.

4.1 Different GST rates for luxury items

Setting a differential GST rate for luxury items could both raise additional efficient revenue while avoiding some of the regressionary issues associated with the other scenarios raised above.

This is often one of the rationales raised for the current exemptions – that the exemption is placed on the ‘basic’ or essential goods that people of all incomes will purchase, with GST collected on others.

However, this is not necessarily how the current exemptions are shown in consumption patterns. Figure 4.1 shows that not only do higher-income households spend a higher proportion of their food budget on GST-free food, but they spend less in actual dollar terms on food that attracts GST.

<table>
<thead>
<tr>
<th>Household income quintile</th>
<th>Weekly expenditure on food that attracts GST (including the GST) per household</th>
<th>Weekly expenditure on GST-free food per household</th>
<th>Proportion of food expenditure on GST-free items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>$69</td>
<td>$82</td>
<td>54%</td>
</tr>
<tr>
<td>Second</td>
<td>$62</td>
<td>$108</td>
<td>64%</td>
</tr>
<tr>
<td>Third</td>
<td>$64</td>
<td>$139</td>
<td>69%</td>
</tr>
<tr>
<td>Fourth</td>
<td>$42</td>
<td>$168</td>
<td>80%</td>
</tr>
<tr>
<td>Highest</td>
<td>$37</td>
<td>$212</td>
<td>85%</td>
</tr>
<tr>
<td>All households</td>
<td>$55</td>
<td>$141</td>
<td>72%</td>
</tr>
</tbody>
</table>

These estimates demonstrate that the current exemption does not reflect what the most ‘basic’ consumption patterns are. In fact, the current exemption is benefitting higher-income households more in both proportion and true dollar terms.

This indicates that for a separate rate to be structured for true luxury items, it would need to be carefully constructed and based on detailed consumption data. It may be better targeted within consumption categories that are less ‘everyday’ than food, such as luxury cars or high-end electronics, or on items that are taxed to influence consumption, such as tobacco. This is a potential option to make the GST less regressive, depending on how it is structured.
4.2 Differentiating types of education

Without questioning the overall public and private good of education and its ability to underpin economic growth and social mobility, it is important to note that education expenditure is one of the current key GST exemptions and is the third-highest component of potentially forgone GST (after food and health expenses). However, this broad expenditure category comprises several types of expenditure that are incurred for different reasons.

Examining these expenditure types is especially important when an economy is undergoing structural change or an economic downturn, when the importance of education as a way to reskill and deploy Australia’s workforce will be critical. Although this report does not suggest GST reform in the short term, any change to the GST exemption for education should consider the different roles of early years, school, university, vocational education and ongoing education in the economy and the implications of increasing the costs associated with each, as well as the distribution of the population across these types of education and how the distribution might change over time.

Figure 4.2 shows a detailed breakdown of education expenditure by household income. This shows that, on average, the households in the highest income quintile significantly outspend other households in almost every education category.

**FIGURE 4.2**
Average annual estimated expenditure on education across household income quintiles, 2015-16

Note: HECS-HELP refers to payments to the Higher Education Contribution Scheme – Higher Education Loan Program and is time delayed from when the education occurs, and is contingent on the income of the individual making the payment.
In contrast, when considering this expenditure as a proportion of income, these profiles look very different. Figure 4.3 shows that although lower-income households spend comparatively low dollar amounts on education, this expenditure comprises a larger portion of their income.

**FIGURE 4.3**
Expenditure on education across household income quintiles as proportion of mean gross income, 2015-16

This data shows that an education exemption could be differentiated to prioritise the ‘public good’ of quality school education, or target particular disciplines across vocational, higher education and other forms of post-secondary education required for upskilling or reskilling, while still delivering a majority of the increase in potential collections by removing exemptions of other types of education. In contemplating a change such as this, careful analysis and consideration would need to be given to the balance of public / private good across different types of educational outcomes, potential impacts on providers and how any change might interplay with funding and regulatory regimes.

The conclusion on whether and how GST should be applied to education is one that warrants further consideration and work.

### 4.3 Inclusion of financial services

Financial services are currently subject to input taxation through exemption from GST.

Removing the exemption on financial services is a potential large revenue generator (based on the Treasury estimates of tax benchmarks and variations, although with a medium-to-low degree of reliability). A number of possible approaches to taxing consumption of financial services have been proposed globally, all designed to mimic the economic impact of a GST, including the ‘supplementary financial tax’ on margin income proposed by the South Australian Government in 2015.
However, while unconventional approaches, in theory, can substitute for traditional value-added taxes, ‘understanding of [those unconventional taxes] remains relatively new, however, and such approaches are untried in practice’. Input taxation through exemption of financial services exists in all global consumption taxes, although with significant variation in scope and design. As a result, there is no proven effective model to replicate in implementation. There would also be substantial operational and compliance implications for financial institutions.

Separately, the economic impact of taxing the consumption of financial services is uncertain. It is unlikely that additional GST revenue will be collected from financial institutions as it is likely that the increase in cost will be passed on to customers. Individual demand for financial services is not only affected by income, but also by age (life cycle stage), income volatility and assets. If these non-income factors are dominant, the proposed tax would violate horizontal equity. Households earning the same income would effectively be taxed at different rates. Detailed modelling would need to be undertaken to fully assess the relative incidence of the taxation of financial services. The impact on availability of credit would also need further investigation. Given these challenges, PwC has not further considered the taxation of financial services as part of this report.

4.4 Administration changes

In addition to reforms to the base and rate of the GST, consideration could also be given to the administration of the GST and other taxes to increase both collections and efficiency, and reduce red tape and the cost of compliance to businesses.

Potential reforms to the administration of a variety of taxes could be considered further outside of just the GST in three broad themes:

• Centralisation. Electronic return lodgment and integrating tax payments with already centralised systems (such as electronic invoicing and automated bank transfers) could remove existing manual processing for both government and business, making revenue collections easier, cheaper, and more robust while removing significant cost from business processing functions.
• Simplification. Simpler tax rules, with less exemptions and rate variations, would not just increase collections in the direct ways explored above (i.e. removing an exemption means more collections on previously exempt items) but also make compliance easier and less costly which can increase revenue while decreasing required costs to comply and audit.
• Harmonisation. Although not directly applicable to GST, the harmonisation of state and territory tax regimes (including collection, making tax rules the same across borders, industries or situations) can also make them easier to apply and get right the first time, increasing revenue and decreasing costs.
The need for equity

It is generally acknowledged that the main purpose of Australia’s tax system is to provide our governments with the means to deliver a level of service commensurate with the expectations of their citizens. However, as set out in PwC’s first Where next for Australia’s tax system? report, while revenue adequacy is one of the key features of a good tax system, so too are efficiency and equity.

On a practical level, these principles often compete, but as a general proposition broad-based consumption taxes represent a highly efficient revenue source for governments. However, with a uniform tax rate applying equally to consumption of all households regardless of income, consumption taxes are regressive in nature.

Equity has a significant impact on confidence in the tax system. Indeed, if confidence is eroded by perceptions that individuals or businesses are not paying their ‘fair share’ (such as apparent tax avoidance activities or concessions that are seen as benefiting the few) this can undermine attempts at reform. Equally, perceptions of injustice about the incidence of any tax reform will damage or prevent any attempt to introduce that reform.

5.1 Designing compensation arrangements for equity

Compensating lower-income earners for GST changes can be affordable and consistent with long-established policy practice in this country.

Tax reform imposes costs on different parts of the community. If the reforms promise sufficient economic and social gains, governments have previously been prepared to compensate those who are adversely affected. For example:

- the Hawke-Keating tariff cut package provided transitional support for affected workers in vulnerable industries
- the Howard-Costello GST package included substantial compensation for welfare recipients and low-income earners
- the Gillard government’s 2013 fixed price on carbon dioxide emissions introduced generous compensation for the impact on the less well-off.

While views will differ on how generous compensation should be, the principle behind compensation is not contested.

Tax reform cannot be undertaken on the basis that ‘no-one will be worse off’ in regard to any specific tax change or the totality of tax and welfare changes; this is an impractical standard. However, it is important to ensure that the burden of any tax change does not fall excessively on low-income households and that those most in need are protected. In the context of the GST, this is likely to mean that at least the bottom two quintiles of households and perhaps even the third quintile should receive full compensation for their increased GST payments.
Some of this compensation will occur automatically, as welfare and transfer payments are indexed and will capture the increased costs of goods and services. However, compensation on top of this automatic change will also likely be required to ensure low-income Australians are not worse off. There are two key considerations in how to design compensation arrangements:

- Designing compensation arrangements is complicated and may require more than one mechanism. For example, personal income tax may not be the only – or best – way to compensate, as the tax-free threshold and tax offsets mean that a large proportion of the people in the two lowest income quintile households may already pay zero net personal income tax.
- Guaranteeing such compensation arrangements before reform occurs will be important for community confidence in the equity of reforms. Although Australia has historically targeted compensation and welfare comparatively well, many participants in the tax debate raise reasonable concerns about the effectiveness or durability of compensation for changes to the GST. Safeguards will be necessary to prevent the erosion of compensation measures over time. This offers an argument for changes in GST as part of a broader change to the tax mix, rather than compensation through a simpler transfer measure that is more likely to erode or be removed. Ensuring these concerns are addressed will be important to introduce any successful reform.

The cost of this compensation will have to be taken into account when assessing the net revenue gained from any GST changes. However, to achieve the economic benefits of a GST reform within a broader package, there should be some increase in GST revenues to allow for reduced reliance on less efficient taxes. This net increase in revenue should only come from the highest-income households. This is in contrast to the original introduction of the GST, where households were actually overcompensated for the change. This would require a budget capacity that Australia is unlikely to have in the medium term.

In administering any compensation, the interaction between different levels of government must be considered. Revenue increases associated with changes to the GST will accrue to state and territory governments, while changes to either welfare payments or personal income taxes will come at a cost to the Commonwealth.

5.2 What could compensation look like?

Compensation measures can take various forms but should be targeted at those most affected by any specific changes. This could include, for example:

- the elderly, if health is included
- families, if childcare is included
- families and younger adults, if education is included.

Existing support mechanisms for lower-income groups may already exist (e.g. Family Tax Benefits, age pension, NewStart, etc), which are already generally means-tested, and could be supplemented with GST reform compensation.

In the case of policy measures to deal with the equity considerations from a tax change (such as broadening the base or increasing the GST rate) this could include one-off adjustments to account for the inflationary effects.

Alternatively, changes to the GST could be offset by adjusting personal income tax arrangements, either through the design of brackets or offsets. However, any compensation mechanism will need to ensure that changes to the interaction between the tax and welfare system do not affect incentives to work or earn extra income.

Transitional arrangements can also support distributional objectives, by allowing individuals time to adjust to changing tax requirements.

In determining the mechanism by which compensation will be provided, care should be taken to minimise the administrative cost of its delivery. This suggests supporting welfare based mechanisms rather than the tax system (given that most people in need are unlikely to pay income tax after the tax-free threshold and low-income offsets).
Endnotes

1 ABS (2020a)
2 ABS (2020a)
3 PwC (2020a)
5 Wong (2013)
6 PC (2018)
7 ABS (2020a)
8 PwC analysis of ABS (2020a) and ABS (2020b)
9 PwC analysis of ABS (2020a) and ABS (2020b)
10 OECD (2018)
11 As shown in PwC (2020), Australia’s proportion of taxation revenue from value-added tax is an estimated 12.2 per cent compared to an OECD average of 20.2 per cent, OECD (2019).
12 OECD (2019)
13 OECD (2018)
15 Treasury (2016)
16 OECD (2018)
17 OECD (2018)
18 PwC (2020b)
19 Treasury (2020)
20 South Australian Government (2017)
21 Acosta-Ormaechea (2018)
22 OECD (2018)
23 Treasury (2020)
27 In theory, broad-based GST, payroll tax (without exemptions) and personal income tax (flat-rate) have similar effects on work and leisure decisions. However, flat-rate personal income taxes (while arguably efficient) may not achieve distributional outcomes. Indeed, most countries apply a progressive personal income tax regime which (while deemed to be more equitable) gives rise to economic distortions.
28 Johansson (2008)
29 Treasury (2016)
30 Past estimates suggest that, on average, it costs the ATO $1.36 to collect every $100 of revenue raised by the GST, compared with only 94 cents on average for other taxes. This largely stems from ‘boundary issues’ related to determining whether or not the GST applies to a specific good or service (this is particularly true for food items, for which there are a number of exemptions), see Eslake (2011).
31 ABS (2017) Note that age of reference person is not a perfect proxy for the age of all people in the household, but can show broad distributional patterns.
32 Gross income excludes the impact of income tax and includes imputed rent.
33 An income quintile divides the population into five groups (from lowest income to highest income), such that 20 per cent of the population is in each group. Income quintiles provide a useful mechanism for assessing distributional outcome.
34 PwC analysis of ABS (2019a), ABS (2019b). Note that proportions of income and expenditure will depend on source and collection mechanism (including different ABS collections) so are presented as indicative only.
36 PwC analysis using Treasury (2020), ABS (2020a), ABS (2020b)
37 PwC analysis using Treasury (2020), ABS (2020a), ABS (2020b)
38 PwC analysis. Equity is measured by the proportion of total revenue that is collected from the highest-income households over the proportion of total revenue that is collected from the lowest-income households. For example, in the estimate of the current state, 12.2 per cent of GST receipts are from the lowest-income quintile households, and 34.2 per cent from the highest-income quintile households – an ‘equity quotient’ of 2.81. Under the ‘broaden and increase’ scenario this is 11.8 per cent and 34.0 per cent respectively, or an ‘equity quotient’ of 2.87.
39 PwC analysis of ABS (2020a), ABS (2019b). Note that proportions of income and expenditure will depend on source and collection method (even between ABS publications) so are presented as indicative only. This analysis uses the definition of food as per national accounts consumption data and has not been broken down further.
40 PwC analysis of ABS (2017). Note that as HECS-HELP payments are contingent on income, it is natural for this expense to be higher in higher-income quintiles. However, this is also likely to reflect that the proportion of households with a HECS-HELP debt is higher in higher-income quintiles. Also note that these dollar amounts are mean averages and therefore may reflect many households in that quintile with zero expenditure in that category, making the average much lower than any individual household with actual expenditure in that category.
41 PwC analysis of ABS (2017)
42 J Weatherill MP (2015)
43 IMF (2010)
44 See Australian Council of Social Service (2013)
45 Grattan Institute (2015)
Sources


International Monetary Fund (IMF) (2010), A Fair and Substantial Contribution by the Financial Sector, Final Report for the G20, IMF staff paper, page 65


PwC (2020b) Global VAT Online, available at https://globalvatonline.pwc.com/


Contacts
For more information

Paul Abbey  
Partner  
+61 (3) 8603 6733  
paul.abbey@pwc.com

Jeremy Thorpe  
Chief Economist  
+61 (2) 8266 4611  
jeremy.thorpe@pwc.com

Michelle Tremain  
Indirect Tax Leader  
+61 (8) 9238 3403  
michelle.tremain@pwc.com

Pete Calleja  
Financial Advisory Leader  
+61 (2) 8266 8837  
pete.calleja@pwc.com

Jonathan Malone  
Partner  
+61 (2) 8266 4770

Ellen Thomas  
Partner  
+61 (2) 8266 3550  
ellen.thomas@pwc.com

Nicola Neilsen  
Senior Manager  
+61 (2) 6271 3227  
nicola.neilsen@pwc.com

© 2020 PricewaterhouseCoopers. All rights reserved.
PwC refers to the Australia member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.
This content is for general information purposes only, and should not be used as a substitute for consultation with professional advisors.
Liability limited by a scheme approved under Professional Standards Legislation.
At PwC Australia our purpose is to build trust in society and solve important problems. We’re a network of firms in 157 countries with more than 276,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com.au

12/07/21