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# Occasional Paper

No.3: Mining revenue and GST  
distribution

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## Summary

Over the past decade, mining revenue has been a major determinant of states' GST distributions. The influence of mining has increased with the significant rise in mining production and mineral prices over this period, exacerbated by the uneven distribution of minerals across states.

Mining revenue is volatile, and this has contributed to volatility in GST distributions. This has particularly been the case for Western Australia where mining revenue, especially iron ore, is a significantly larger share of its revenue than for other states.

The new equalisation arrangements will significantly reduce the impact of the volatility of the mining assessment on GST distributions for Western Australia.

## Introduction

The Commission's assessment of each state's ability to raise mining revenue has become increasingly significant in influencing the distribution of the GST. For example, the main influence of changes in GST shares in 2020-21 was the strong growth in the value of mining production in Western Australia, principally due to expanded production and historically high iron ore prices. Volatility in the price of minerals also contributed to significant fluctuations in states' GST shares.

This paper summarises the Commission's approach to assessing mining revenue capacity, the significant impact of the mining assessment on GST distributions, including on volatility, and the effect the new equalisation arrangements will have on reducing that volatility for Western Australia.

## Assessing mining revenue and GST distribution

The Commission provides recommendations to the Commonwealth Treasurer for the distribution of GST revenue among the states based on the objective of equalising the fiscal capacities of the states. This objective seeks to provide all Australians with the potential to access a similar standard of state services, regardless of which state they live in.

In determining fiscal capacities, the Commission assesses each state's capacity to raise revenue, and its costs of providing services, based on the average revenue effort and average spending of all states. The new

equalisation arrangements retain this approach as the first step in calculating how the GST should be distributed (see Box 1).

A state's capacity to raise revenue depends on the tax bases available to it. Revenue capacities are not static, they change as states' circumstances change. As a state's revenue capacity increases, it is able to finance more services from its own revenue and so, other things being equal, its GST share would fall. Given that GST is distributed from a fixed funding pool, as one state's share falls, the amount of GST available to the other states increases.

In assessing state revenue raising capacity, the Commission calculates the amount of revenue each state would collect if it were to apply the average tax rate of all states to the major tax bases. In the case of mining revenue, the tax base assessed by the Commission is the value of mining production, which is a combination of mineral prices and the volume of minerals extracted.

The Commission assesses each of the major minerals<sup>1</sup> individually and groups the minor minerals together. For major minerals, the average tax rate (calculated as the national revenue for the mineral divided by the national value of its production) is applied to each state's value of production to assess its ability to raise revenue from that mineral. Where a state has no mineral resources, it is assessed as having no capacity to raise revenue from that mineral.

For the minor minerals, the Commission combines the production in each state. The average tax rate (calculated as the national revenue for the combined minerals divided by their combined national value of production) is applied to each state's value of production to assess its ability to raise revenue from the combined minerals.

The assessment of each state's capacity to raise mining revenue is the aggregation of these calculations.<sup>2</sup>

## **Mining has had a major influence on GST distributions**

Australia has experienced a series of mining booms that commenced around 2003, when coal and iron ore prices started rising in response to a surge in global demand. Rising prices contributed to a significant expansion in mining production.

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<sup>1</sup> The major minerals are those that generate the largest royalty revenue — iron ore, coal, gold, onshore oil and gas, bauxite and copper. Gold and copper aside, they are the minerals that attract the highest royalty rates from states.

<sup>2</sup> The mining assessment also includes revenue from revenue sharing agreements between the Commonwealth and the states. These revenues are not discussed in this paper.

The unprecedented growth in the value of mining production, combined with the uneven distribution of major minerals across states, resulted in the mining assessment becoming a major driver of the GST distribution. The change in the distribution of GST between the states because of the mining assessment has risen threefold, from \$2.5 billion in 2010-11 to \$7.5 billion in 2021-22.

Over the past decade, total mining royalty revenues have almost doubled, growing from \$8.5 billion in 2010-11 to \$15.4 billion in 2019-20. But that growth has been concentrated in coal and iron ore and therefore, the main beneficiaries are the states where those minerals are produced (mainly Queensland and Western Australia).

While the revenue capacities of the mining states diverged from the non-mining states, they also diverged from one another. In more recent years, while iron ore royalties have continued to grow strongly, coal royalties have fallen. The result has been a significant increase in Western Australia's revenue raising capacity compared with that of states where coal is produced and states with minimal mining resources.

The high concentration of iron ore in Western Australia has meant that changes in its GST requirements largely follow changes in its iron ore royalties. In 2019-20, its royalty revenue (\$3,419 per capita) was more than five times the national average (\$632 per capita), with iron ore accounting for 90 per cent of its total. In 2019-20, Western Australia's royalty revenue was equivalent to 35 per cent of its assessed spending, compared with the average for the other states of less than 7 per cent.

## **Volatility in the mining assessment has led to volatility in GST distributions**

While iron ore royalties have expanded rapidly over the past decade, they have fluctuated due to the volatility of iron ore prices. Iron ore prices peaked at the start of the decade at around A\$186 per metric tonne in 2010-11, before falling to A\$58 in 2015-16, and then rising to reach record levels of A\$234 in 2020-21.

This volatility in the value of iron ore production has resulted in significant volatility in Western Australia's GST distribution. The Commission expresses recommendations for the distribution of GST in terms of state relativities. If all states had the same fiscal capacity, they would have a relativity of 1. Fiscally stronger states have a relativity below 1 and fiscally weaker states have a relativity above 1. As late as 2006-07, Western Australia's GST relativity was above 1. Although the Commission's 3-year moving average approach has moderated some of the fluctuations, Western Australia's GST relativity fell to 0.3 in 2015-16, then rose to 0.5 in 2019-20 before falling

back to 0.3 in 2021-22. The fluctuation in Western Australia's relativity translated into fluctuations in its GST share.

Due to the way GST relativities are determined, fluctuations in Western Australia's GST distribution caused fluctuations in the GST distribution of other states.

## **New equalisation arrangements will reduce volatility in GST distributions**

The new equalisation arrangements are being introduced over a transitional period that commenced in 2021-22 and which ends in 2026-27.<sup>3</sup> The key elements of the new arrangements are set out in Box 1. The new arrangements will particularly reduce the volatility of Western Australia's GST distribution.<sup>4</sup>

The new arrangements introduce a minimum relativity (relativity floor) of 0.7 for 2022-23 and increasing to 0.75 from 2024-25. Currently, only Western Australia's relativity lies below the floor.

The relativity floor means that Western Australia's GST distribution is no longer impacted by strong growth in iron ore prices. Under the previous system, rapidly rising iron ore prices lowered Western Australia's relativity to well below 1, which reduced its GST share. During the transitional period for the new arrangements, Western Australia's share of GST cannot fall below the relativity floor, notwithstanding high iron ore prices.

The new arrangements provide that by the end of the transitional period (in 2026-27) no state's relativity will fall below the lower of New South Wales' and Victoria's relativity. Since the introduction of the GST, the lower of their relativities has fluctuated between 0.855 and 0.940. When the transition to the new arrangements is complete, Western Australia's relativity will be more stable.

The Commonwealth has introduced a 'no worse off' guarantee during the transitional period for the new arrangements. This guarantee ensures that, cumulatively over the transitional period, no state will receive a lower GST share than it would have received under the previous arrangements. This means that the cost of lifting Western Australia to the relativity floor (or eventually to the lower of New South Wales or Victoria) is effectively financed from the GST pool. If required, states will be reimbursed by the Commonwealth over the transitional period through the no worse off guarantee.

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<sup>3</sup> In addition, the Commonwealth financed a relativity floor of 0.7 between 2019-20 and 2021-22.

<sup>4</sup> In its interim response to the Productivity Commission's inquiry, the Commonwealth noted the mining boom created extraordinary volatility in the GST distribution, particularly for Western Australia. *Productivity Commission inquiry into horizontal fiscal equalisation: Government interim response*, Canberra, July 2018, page 2.

## Box 1: New equalisation arrangements

Changes to the GST distribution were enacted in the *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018*. The new arrangements involve:

- Introducing a minimum GST relativity (relativity floor) with an initial floor of 0.7 introduced for 2022-23 and increasing to 0.75 from 2024-25. This is a floor below which a state's GST relativity cannot fall.
- From 2021-22, permanently boosting the GST revenue pool with additional Commonwealth financial assistance.
- Transitioning equalisation from a system based on the fiscal capacity of the strongest state to one based on the fiscal capacity of the stronger of New South Wales or Victoria.
- Until the transitional period ends in 2026-27, the Commonwealth is providing additional financial assistance to states to ensure that each receives total grants at least as much as it would have received had the new legislation not been enacted — a 'no worse off provision'.

## Conclusion

Successive mining booms since 2003 have increased the capacity of the mining states to raise royalties and, other things being equal, led to a fall in their GST share and a rise in the share for the non-mining states. In recent years, historically high iron ore prices have significantly increased the revenue raising capacity of Western Australia which in turn has lowered its GST share.

While commodity prices generally increased over this period, they also fluctuated. These fluctuations have, through the mining assessment, led to volatility in GST distributions. The volatility in the value of iron ore production has resulted in significant volatility in Western Australia's GST distribution. The new equalisation arrangements will reduce the impact of volatility arising from the mining assessment, particularly for Western Australia.