4. Characteristics which support competition

Key findings on market competition

- The water market is characterised by a reasonably large number of entities (irrigators and others) holding water access entitlements or able to enter the market and, potentially at least, act as buyers or sellers.

- There are fewer structural impediments to competition in the water sector than in some other markets, principally due to the absence of any significant vertical integration between storage and transmission, and downstream use. There is no obvious need for major structural reform to support competition.

- One structural characteristic of the market which is relevant to competition is the form of the irrigation companies, trusts and cooperatives which exist in various States.

- The collective ownership and management of irrigation scheme assets by irrigation companies and trusts has little bearing on the workability of competition in the water sector. What is important, rather, are those impediments to trade in water access entitlements and allocations held by these irrigation companies on behalf of their shareholders or members.

- The preferred structure would be to devolve entitlements down to the level of individual irrigators. Irrigators could continue to hold shares in the infrastructure entity, and would have a commercial supply agreement with this entity for the water delivery services provided, but would have statutory water entitlements equivalent to other entitlement holders.

- Moving to this preferred market structure is not, however, without costs. Costs relating to the existing ‘collective’ ownership of water access entitlements are predominantly borne by the members of these companies, either directly or indirectly through their ownership of the irrigation company. They would also carry most of the costs of any changes.

- For this reason, and to respect the legitimate interests of the irrigation companies and their members, Governments should encourage, but not mandate, that ownership of water access entitlements be structurally separated from ownership of infrastructure assets.

- However, it is critical that where collective ownership of water access entitlements/infrastructure facilities is to remain, that this not be applied in a way which restricts water trading opportunities for members of the irrigation company.

- At a minimum there needs to be a clear and as-of-right pathway for irrigators within irrigation company areas to transfer their share of the bulk entitlement out of the body corporate, into a form which is readily transferable within the market more broadly.

- This path should be free of any arbitrary restrictions on transfers and rules which would otherwise not be permitted for trade between two ‘river’ irrigators.

4.1. Competition in the water market

4.1.1. Do the market's structural characteristics support competition?

Some functional components of the water sector exhibit monopoly-like characteristics. These include bulk supply in some areas and transmission/distribution services. The conventional response to such characteristics has been apply some form of independent regulation, the objective of which is to preclude, or at least limit, the scope for the monopoly entity to exercise its market power.

In some industries, such as electricity supply, industry structure was a significant impediment to competition. Vertical separation was introduced as a means of separating potentially competitive functions (generation and retail) from monopoly transmission and distribution functions.

Although there are examples of vertical integration across the sector – water supply authorities owning both storage and conveyance assets, for instance – generally suppliers of those services with monopoly characteristics do not also compete in downstream markets. Hence, there is little incentive for them to discriminate in the way that they provide access to or price their services.

Competition in this sense is not being pursued at the level of water supply or delivery, but rather between different users and alternative competing uses to which water may be applied. In the rural water sector, where water trading is most prevalent, there are fewer structural sector characteristics which impact on competition.

Defined as a market in water access entitlements (and allocations, at the temporary level), generally there are a large number of (prospective) buyers – despite some continuing limitations on whom may participate in the market - and a large number of (prospective) sellers. Structurally, this should provide the platform for workable competition in the water sector.

According to the Australian Bureau of Statistics (2005), in 2002-03 there were a total of 26,175 irrigators holding volumetric water entitlements across New South Wales, Victoria, Queensland and South Australia. This represents around 70 per cent of the total number of irrigated agribusiness entities in those four States.

Of the irrigated entities holding volumetric entitlements, around one fifth indicated they had bought water in the temporary market in 2002-03 while around one sixth had sold water allocations. A smaller proportion still (around two per cent) had bought water access entitlements on the permanent market.

The conveyance constraints of constructed and natural assets can limit the geographic reach of any given water market. Outside of the southern MDB, for instance, there are fewer opportunities for large-scale reallocation of water between irrigation schemes. The economics of water supply mean that it is most unlikely that the widely dispersed irrigation schemes across Queensland, for example, will ever be connected in a fashion similar to the national electricity grid. Although the physical market may be constrained by the extent of system interconnectivity and capacity constraints, financial products (such as options and derivatives) that relate to products in the physical market are not limited by such constraints.

Where such conveyance constraints apply, they narrow the potential number of market participants in these sub-markets. A water market with fewer participants would, all other things being equal, have a higher likelihood of any one participant (whether a buyer or seller) having some degree of market power. The scope to exercise this market power would, of course, be limited by the jurisdiction of existing competition law which applies to the water market no differently than any other form of commerce.

The interaction and substitutability between permanent and temporary trade is also relevant and important. There is significant correlation between observed prices for temporary and permanent transfers, suggesting that the market power of any participant in one market is constrained, at least to a degree, by the potential for substitution from the other market.

An example may serve to illustrate this point. Were there significant barriers to permanent trade in water access entitlements between certain areas, this may support some degree of market power to one or more participants in one of the separate (sub-) markets. However, should temporary trade in water allocations be comparatively less restricted, and given a level of substitutability between the markets in water allocations and water access entitlements, then the scope for any one participant to acquire and exercise market power is lessened.

Even though these markets are populated essentially by the same participants, there are different incentives which influence whether or not an entity may be prepared to trade permanently or temporarily. An irrigator with a partially under-utilised water access entitlement – perhaps because the full level of planned farm development has not yet been reached - may be quite willing to trade any surplus water allocation over the short term. However, the same irrigator may not be prepared to consider the sale of the water access entitlement itself.

This does not mean that all aspects of the water market are uncompromisingly competitive. At any point in time there may be other factors which impact on competition, and there may be circumstances from which a particular market participant is able to gather sufficient market power and exercise this to unduly influence the market.

The Australian Competition and Consumer Commission (ACCC) administer the *Trade Practices Act*, Part IV of which provides for the regulation of anti-competitive conduct.

Generally we would see no reason why any anticompetitive conduct – were it to occur – could not be remedied via application of the *Trade Practices Act* in its current form. The Act would apply to conduct occurring within the water market, whether by individuals, private companies, government-owned entities or other parties, and there would seem to be no reason why anti-competitive conduct is more likely, or less able to be regulated through existing competition law, in the water sector as compared to other markets.

4.1.2. Form of irrigation companies and trusts

A particular characteristic of the water sector is the structural form of the irrigation companies, cooperatives and trusts which exist in New South Wales and South Australia, and some limited instances in other States.

Within these entities irrigators generally have a share of ownership in the body corporate, which holds the bulk entitlement, but varying degrees of individual 'rights' over their share of this bulk entitlement. It is the irrigation entity's bulk entitlement which is recorded on the relevant State's water access entitlements register.

In New South Wales, irrigators within districts managed by irrigation companies do not have a statutory claim over their 'entitlement'.[7] This means that a substantial proportion of water entitlements in New South Wales are not held directly by irrigators. For example, Murray Irrigation alone holds nearly three quarters of the New South Wales River Murray general reliability water access entitlements. Individual irrigators within each district contract with the infrastructure supplier to receive a volume or share of the available water delivered in any one year.

In comparison, in Victoria irrigators have a statutory water entitlement. In Victorian irrigation districts, water delivery is managed by Government-owned Rural Water Authorities declared under the *Water Act 1989* (Vic). Rural Water Authorities are issued a bulk entitlement under the Act. Individual entitlements to water within irrigation districts are listed in a schedule to the bulk entitlement.[8]

A similar situation exists in Queensland, where most irrigation areas (including those owned and operated by SunWater) service irrigators with individual, statutory entitlements held under the *Water Act 2000 (Qld)*.

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[7] In the remainder of this report we use the term 'irrigation company' to refer generically to any entity which manages an irrigation district, though the legal form of that entity may not be a company.

[8] Section 222(1)(b) of the *Water Act 1989* (Vic) states that where an Authority has an irrigation district, it must "make available for supply, to the owner or occupier of each holding in its irrigation district, the owner of water for irrigation that is specified in the register in relation to that holding."

From a market design perspective, the ideal structure would be to devolve entitlements down to the level of individual irrigators, allowing them to manage these consistent with their individual risk tolerance and other requirements. Irrigators would continue to hold shares in the infrastructure entity, and would have a commercial supply agreement with this entity for the water delivery services provided, but would have a statutory water entitlement recorded on the relevant water entitlements register.

This proposed entitlement structure would allow individual irrigators to trade in the market more broadly, without the need for an individual entitlement to first be separated from an irrigation company's bulk entitlement. It would allow for transparency and separability between the decisions, actions and contracts which govern the use and ownership of infrastructure assets, distinct from the water access entitlement. It would also allow for individual irrigators' entitlements to be recorded in the usual form of register in that jurisdiction, and would confer on the irrigator all of the statutory rights (agreed risk sharing principles for attenuation of entitlements, for instance) of other irrigators.

An important benefit, to irrigators, would be the enhanced security of a statutory water access entitlement. Financiers typically regard shares in an irrigation company as a lesser security than the underlying water access entitlement. This is because the value of the shares, and the extent to which this value can be realised to support a default by the borrower, is affected by the rules regarding the transfer of shares and other company-specific factors.

Maintaining the existing entitlement structure within irrigation companies results in a number of costs, including:

- the costs of administering within the irrigation company systems to record a separate water 'share', to proxy the functions of the statutory water entitlements register in that State. This cost is likely to increase in the future, as irrigators demand more rigorous accounting and recording systems, with the capability, for instance, to record encumbrances against the water 'share' for borrowing purposes;

- costs to irrigators through holding a lesser-asset from the perspective of security for borrowings; and

- costs of a diminished value of the water access entitlement, as a result of it being more difficult to trade this entitlement outside of the irrigation company's area. Even a perception of trade being more difficult might impact on the entitlement's value.

These costs predominantly accrue to the shareholders or members of the irrigation company. To be sure, there would also be some costs to the market and economy more broadly were water access entitlements within irrigation companies to be effectively excised from trade. These costs, while not unimportant, can however be addressed by other strategies to free-up trade, and do not necessarily require the devolution of entitlements to irrigators.

Governments have varying ability to influence the structure of ‘entitlements’ within these areas, largely depending on the ownership structure of the irrigation company. For instance in New South Wales, where irrigation areas are owned and managed by private companies, any change in the structure of ‘entitlements’ within these schemes would require the agreement of shareholders.

The merits of such a change would need to be considered from a perspective wider than just water market design. Other factors would include the rights, obligations and preferences of irrigators as shareholders or members of the irrigation system, and the arrangements entered into as part of the transition to local ownership and management.

Relevant too are the costs and effort that would be required to effect such a significant reorganisation to the legal or shareholding structures of the irrigation companies. Again, it would be the irrigation companies and their members who would have to absorb these costs.

For this reason, and respecting the legitimate interests of the irrigation companies and their members, Governments should not mandate that ownership of water access entitlements be structurally separated from ownership of infrastructure assets. Governments should though seek to encourage such a change, and emphasise to irrigation companies and to their members the merits of so doing.

However, it is critical that where collective ownership of water access entitlements and infrastructure facilities is to remain, that this structure not be applied in a way which restricts water trading opportunities for members of the irrigation company. Some of the types of restrictions which are currently applied include:

- exit fees applied to the volume of water permanently traded out of the irrigation area;
- differences in the closing dates for trades (as compared to the external market);
- notification requirements of ‘intention to trade’, and penalties for not complying with this notice;
- differences in the fees applied to trade, *vis* internal or external trades; and
- different approaches to treating distribution losses, which may create disincentives to trading outside of the irrigation area as opposed to within it.

From a trading viewpoint, a practicable and minimum acceptable approach is to provide a clear pathway for irrigators to transfer their share of the bulk entitlement out of the body corporate, into a form which is readily transferable within the market more broadly.

This process would see the irrigator's share in the body corporate separated into a continuing share of the company and its infrastructure assets, and a water entitlement denominated at the point of extraction from the river. The irrigation company's bulk entitlement would correspondingly be adjusted downwards.

This process should be free of any arbitrary restrictions and rules which would otherwise not be permitted for trade between two in-river irrigators. There should be no right of veto for the irrigation entity to preclude or limit any transfer (except as specifically acknowledged under the NWI Agreement), and nor should this entity be able to impose unreasonable transactions costs or other limitations on the transfer.

A decision to transfer water out of the irrigation area (whether permanently or temporarily) also should not affect any of the irrigator's other privileges or rights, including the ability to share in company dividends, or to otherwise access the company's services on the same terms as provided to other irrigators.

Recommended actions

'Entitlements' to water within irrigation districts desirably should have common statutory basis and be issued at the 'irrigator' or 'user' level.

Governments should encourage irrigation companies and trusts, and their shareholders/members to adopt such a structure, but should not mandate it. Governments should monitor this situation, to ensure that opportunities for structural reform within irrigation companies and trusts are not impeded.

Regardless of whether 'entitlements' are devolved in irrigation areas, there should at a minimum be a clear path for trade out of and into irrigation areas:

- the 'entitlement', in whatever form, must be clearly specified;
- it must be able to be traded out of and into the scheme at low cost, and with no difference in fees and other processes than would apply to intra-scheme trades;
- the process for trade must be administratively simple, and be able to be processed in a timeframe consistent with those trades in the 'external' market;
- there should be no requirement to be a land-holder or shareholder in the scheme to own an entitlement;

- the trading process should be known in advance and predictable in its outcomes – buyers as well as sellers need certainty that the transaction is feasible;
- there must be some mechanism for the external review of these processes periodically to ensure their continued appropriateness; and
- any restrictions on trade into and out of irrigation districts should be removed where they are not consistent with the principles outlined in Schedule G of the NWI.