



HSRC Research Output submission template

Please complete this template and attach it along with the print or electronic copy of the research output concerned.

Submit to **Hanlie Rossinger** (hrossinger@hsrc.ac.za)

It will be added to the research output database for publication on the Internet, Intranet and in the HSRC Annual Report.

Project number: MFAFVA

Title:

Administered Prices Study on Economic Inputs: Executive Summary

Authors: Goode, R., Altman, M.

Journal title:

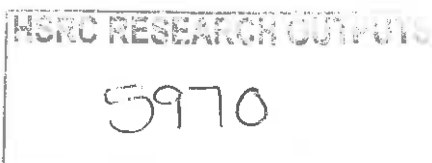
Peer reviewed

Non-peer reviewed

Suggested keywords: administered pricing, rail sector, price, investment, state-owned monopoly, ports, productivity, global competitors, market forces, track and rolling stock, replacement cost, infrastructure cost, full distributed cost (FDC), fixed cost, mark-up, price sensitivity, consumer demand, volume-maximising Ramsey price structure, overhead cost, Orex, CoalLink, Luxrail, Shosholozza Meyl, Spoornet, employee, road, delivery time, Australia, Brazil, Mexico, international benchmark, market power, unregulated rail sector, competition authority, vertical integration, price setting, economic efficiency, domestic efficiency, export competitiveness, growth, employment, indirect taxation

Select output type from the list below: (delete inappropriate options)

- Monograph
- Chapter in Monograph
- Journal Article
- Newspaper Article
- Review in Journal
- Review in Newspaper
- Research Report- Client
- Research Report- Other
- Conference or Seminar Papers
- Questionnaires
- Training Manuals
- Video
- Database on a CD-ROM (containing only the database)
- Database on a CD-ROM (containing other documents/databases)
- Database on a File Server
- Website
- Report on an HSRC trip
- Education Assessment Instruments
- Psychological Assessment Instruments
- Pamphlet (published)
- Pamphlet (unpublished)



Confidential: No

Website URL: <http://www.hsrc.ac.za/EGDI.phtml>

Abstract (add a descriptive paragraph of Output):

This report examines the prices of goods and services provided by entities owned by the South African government in water, rail and ports. Prices in these three sectors are referred to as 'administered' due to the public ownership of the entities providing them. Furthermore, each sector provides important economic inputs for firms and consumers in the rest of the economy. Their pricing conduct and behaviour therefore has a major influence on the competitiveness of the economy as a whole and of the alignment between the productive side of the economy under public ownership and government economic policy.

A study of administered prices originated as one of the tasks agreed to by all parties in commitments made at the 2002 Jobs Summit. The matter was, however, dormant until it was placed on the 2006 Programme of Action for attention by the National Treasury. In accordance with the commitments made at the Jobs Summit a study of administered prices was adopted as a project for execution through Nedlac and funded by the Fund for Research into Industrial Development, Growth and Equity (FRIDGE).

The motivation for undertaking this study on administered prices was to understand the impact of administered pricing on South Africa's competitiveness.



TRADE AND INDUSTRY CHAMBER

**FUND FOR RESEARCH INTO INDUSTRIAL DEVELOPMENT,
GROWTH AND EQUITY (FRIDGE)**

Administered Prices Study on Economic Inputs

Executive Summary

**PORTS
RAIL
WATER**

March 2008

1. Rationale for a study of administered prices

This report examines the prices of goods and services provided by entities owned by the South African government in water, rail and ports. Prices in these three sectors are referred to as 'administered' due to the public ownership of the entities providing them. Furthermore, each sector provides important economic inputs for firms and consumers in the rest of the economy. Their pricing conduct and behaviour therefore has a major influence on the competitiveness of the economy as a whole and of the alignment between the productive side of the economy under public ownership and government economic policy.

A study of administered prices originated as one of the tasks agreed to by all parties in commitments made at the 2002 Jobs Summit. The matter was, however, dormant until it was placed on the 2006 Programme of Action for attention by the National Treasury. In accordance with the commitments made at the Jobs Summit a study of administered prices was adopted as a project for execution through Nedlac and funded by the Fund for Research into Industrial Development, Growth and Equity (FRIDGE).

The motivation for undertaking this study on administered prices was to understand the impact of administered pricing on South Africa's competitiveness.

The principle objectives of the study were to:

- Understand the impact of administered prices on South Africa's competitiveness and by extension on opportunities for investment (and employment in particular);
- Generate a base of reliable data and analysis of the economic structure of administered price formation;
- Place Government and its Nedlac partners in a position to generate strategic recommendations on administered prices.

1.1. Methodology

In September 2006, a team of consultants convened by Dr. Miriam Altman of the Human Science Research Council, Employment Growth and Development Initiative and Genesis Analytics, together with Mr Richard Goode and Dr. Mike Muller started research. A FRIDGE Counter Part Group oversaw the project. Draft sector papers were presented in April and May 2007. The project findings were presented at a workshop attended by interested parties in Government, Organised Business and Labour in June 2007. The views of international sector specialists were canvassed and their critiques of the papers together with comments from the workshop considered in drafting the final report.

To assess pricing in the water sector hitherto uncollated tariff data for water boards and major municipalities was compiled into a time series for this study. For the ports and rail studies common ownership of the operating entities by Transnet dictated that a single approach be followed. Transnet initially did not co-operate and declined to grant access to information or company officers on the grounds that the company was preparing for imminent regulation in the ports and pipeline sectors. Transnet cooperation only occurred post the June 2007 circulation of draft reports, and consequently, the bulk of the study of the ports and rail sector relied upon public

tariff information, pricing and performance information supplied by customers consulted. An account of the methodology followed for ports, rail and water is elaborated upon in the chapter devoted to each sector.

In order to compare administered prices in port, rail and water services with charges in similar countries, comparisons were made with three or more comparator countries each. Country selection for each sector took into account economic characteristics as well as fit for the sector features important for South Africa. The results compare and contrast South African performance and show where, as a country, we are in line and out of line with comparator countries regarding the respective sectors.

1.2. Organisation of the report

This executive summary offers the condensed findings for the ports, rail and water sectors, together with final conclusions from the study of administered prices.

Each sector is comprehensively analysed in turn. Each is arranged as a stand alone chapter for readers who wish to examine the specifics of the sector that addresses pricing theory, history, institutional structure, policy, price changes for the preceding years and comparisons of prices and quality of service with selected comparator countries. Data are contained in appendices.

2. Findings

2.1. Ports sector

Improvements to the competitiveness of commercial transport systems in South Africa will significantly boost economic and employment growth, (see Davies and van Seventer, 2006). The performance of the transport sector directly feeds through to the rest of the economy due to the high concentration of economic activity on the inland plateau, the freight cost sensitivity of foreign trade and the distance to market of South Africa's major trading partners. Transport is a sector that is shaped to a considerable extent by government with respect to both policy and operations in those sub-sectors where State Owned Enterprises are active. This report examines administered prices in the ports sector. It benchmarks the competitiveness of the ports and reviews the approach to setting prices to assess their alignment to achieving the socio-economic goals as laid out in *Asgisa*. In the study of ports the focus is on the port infrastructure and services provided by the National Ports Authority and port operations provided by South African Port Operations, both divisions of Transnet (Pty) Ltd.

A port is the interface between sea and land transport systems that forms an essential link in the services chain between producer and final user. Total logistics costs in South Africa are high, representing some 15.2% of GDP. Port costs make up some 13% of transport costs along the value chain. Port services are a small but important part of costs of moving freight. Crucially the performance of ports regarding prices, reliability and speed of cargo handling can be materially influenced to improve their cost effectiveness. This underpins the rationale for this study, that is to examine factors that can assist in lowering the costs of doing business.

The scope of the study involves an examination of the National Port Authority light dues, vessel traffic service, pilotage, marine services, port charges (port dues and berth dues) and cargo dues. Port operations rendered by SAPO in container, bulk, break-

bulk and car terminals have been studied. Attention was given to container services, car terminals and bulk cargo.

Data gathering was frustrated by the refusal by Transnet to cooperate as the enterprise was preparing for imminent regulation in the ports and pipeline sectors. Consequently the methodology was adapted and information was gathered from users where possible, however the study was limited as a result. First, collection of quantitative pricing and performance indicators for South African ports services and operations has been constrained. Secondly, company officers were not consulted on pricing methods and mandates informing their practices. Thirdly comprehensive benchmarking of services and performance levels was not possible. Fourthly, company officers in the port authority or operations division were neither consulted nor able to alert the consultants to erroneous conclusions drawn in the absence of evidence from the Transnet group.

In principle pricing for port calls and services within ports should be proportional to the costs of a ship making the call that covers the four principle cost items, namely time spent in port, general marine and land infrastructure (not attributable to a single user) use of a berth (attributable to a user) and the costs of handling the goods. Price setting should be based on long run marginal costs. Practice in South Africa violates this principle. This report shows that pricing practices in South Africa are strategic with their defining characteristic being the inclusion of non-port financing objectives in the setting of port pricing.

South African port prices are affected by the nature of the country's marine trade with limited scale economies and multiple port calls which serve to increase port costs.

Port pricing is influenced by the history of ports development over time. In South Africa port pricing is profoundly affected by the institutional arrangement that grouped ports and rail into a single administrative entity. The pricing power South Africa port authorities have on inelastic demand for port services established the practice of raising wharfage charges on cargo to fund non-port activities. This practice has continued into the current era in the form of Cargo dues. Cargo dues constitute some 70% of the income to the port authority.

The body of the report examines in detail the pricing levels for marine services, port and marine infrastructure, container operations, break bulk and bulk operations. It finds that over the period of 2000 to 2007 the following main changes in the level and rates of increase in prices occurred:

1. Tariff reform reduced the level of charges collected via wharfage when converted to cargo dues.
2. Marine services prices were increased significantly to make them more cost reflective.
3. Cargo handling charges from SAPO increased significantly during the 2001 to 2003 period to raise margins on that category of port charges that historically had been kept low.
4. Transnet has followed a price adjustment programme set by compact with the Government. Price increases have since 2005 been set at rates which converge with the CPIX.

Port users summing up the aggregate changes in South African port costs over a decade believe that South Africa has moved up the cost curve from the second quartile into the third quartile from the bottom in terms of total costs.

Performance measurements show South African port operations are operating at levels below those achieved on equivalent facilities elsewhere. The conclusions drawn from the performance assessment of container terminal crane moves, albeit not a full benchmarking study, suggest that productivity is not constrained by equipment shortages. Instead workflow is uneven (possibly due to deficiencies in on-quay transport) and there are defects in operations planning. These results, however, do suggest there are grounds for optimism since these deficiencies can be overcome by business improvement strategies. Transnet is engaged in a turn-around strategy.

Comparison made with Australia, Brazil and European ports indicates that South African prices for port services and operations places South Africa in the middle of a range of comparator countries with respect to port call costs for vessels and terminal handling charges on cargo. When cargo dues are included in the calculation of total waterfront costs, Durban is on par with Northern European ports and Sydney, Australia: these are the most costly ports on a per TEU basis in the pool of comparator ports.

South African port authorities practice a form of pricing determined by factors external to the operating costs and financing requirements of ports. The pricing principles underlying the largest component of port charges are revenue targets set by the holding entity Transnet. Data gathered in this study confirms earlier studies that arrived at these conclusions. The pricing principles are classified as strategic pricing. Strategic port pricing is opaque, distortionary, harmful to trade, contrary to the stated objectives of broader transport and specifically ports policy. It is recommended that strategic port pricing should be phased out completely.

This study indicates how the institutional framework of the state owned transport system that determines port prices is almost impervious to change in spite of explicit tariff reform between 2001 and 2003 designed to balance over and under recovery on the pricing of a range of port services.

Waterfront performance plays a small role in national welfare. However, administered prices in ports and performance are subject to influence. The establishment of a port regulator will be a significant step in the institutional arrangements for South African ports. Port users are understandably expectant that the port regulator will improve pricing efficiency within South African ports. However, the basic structure of the market will remain unaltered. Moreover the control of the port authority and a substantial share of the port operations activity by Transnet, a freight transport company, implacably negates the market structure principles of a landlord port architecture.

Ports that are leaders in pricing and performance measures around the world are located in regions characterised by a high degree of port competition.

Limited access to information was a major problem for this study. The response of industry participants to divulging information are symptoms of low trust and frustration between the players in the port system. Such conditions create major challenges for the Ports Regulator and for the success of efficiency improvement efforts by any stakeholders. It is recommended that price and performance indicators be collected and made public by the Department of Transport for the purposes of establishing an information basis for monitoring the South African waterfront.

2.2. Rail sector

There has been little change to the operational structure of the South African rail industry over the past century. Now, as then, it remains a state-owned monopoly, run as a division of the same entity that houses the South African ports. Despite attempts to introduce greater commercial discipline in the 1980s, the rail industry is still only intermittently profitable and seems to be cross-subsidised via the high returns achieved in Transnet's ports division. The research investigates the current approach to pricing of the South African rail sector, its impact on the productivity and competitiveness of the broader economy and benchmarks rail prices to global competitors.

The South African land freight market shipped 329bn ton-km in 2004, with almost two-thirds of this volume shipped by road, rather than rail. The Spoornet¹ ore lines, which account for 48.8% of freight volume by ton-km, are highly profitable, even though they contribute only 31% of total Spoornet revenue. In contrast, the general freight business (GFB) is probably only profitable on the Durban-Gauteng line.

The ore export lines and the general freight business exhibit very different operational characteristics and thus very different economies of scale. A key operational difference is that the ore lines are heavy haul, running very long, heavy trains. They are also dedicated point-to-point trains – time does not need to be spent building trains and only one kind of wagon is needed on the train. Finally, the ore lines run at close to capacity and thus are able to reap density economies.

For a number of reasons, including wagon customisation, low capacity utilisation rates and the time needed to build trains comprised of a number of small loads, efficiency in GFB is much lower than in the rest of the network. Net ton-km per employee in GFB is almost 17 times lower than in Orex and net ton-km per wagon is almost 15 times lower.

The ore export lines ship what Spoornet refers to as 'rail-friendly' freight. In fact, the freight moved by the ore lines is so 'road-unfriendly' that it would be extremely difficult for road to pose a real inter-modal challenge on these lines. The bulk of inter-modal competition is thus centred on the GFB network.

Despite much higher levels of competition in GFB, the available data suggests that prices are set with reference to the cost of service provision, rather than consumer demand characteristics. The provision of rail services requires a high fixed investment in track and rolling stock, with proportionally lower operating costs. Once the initial systems investment has been made, a wide range of services can be offered. Because the initial investment is substantial, it is crucial to maximise the volume of sales in order to minimise the per-unit cost of services. The best pricing technique to maximise sales volume is Ramsey pricing (where the price of each service is set inversely proportional to demand elasticity). However, it seems that in the recent past, Spoornet has set prices in line with the fully distributed cost (FDC) pricing technique, which fails to deal with consumer demand characteristics, does not acknowledge inter-modal competition dynamics, and will tend to decrease volume sold. At present, Transnet contends that a form of Ramsey pricing is in fact being used by the freight

¹ *Spoornet and Transnet Freight Rail are used interchangeably in the research report, as the name of the division was changed during the research process.*

rail division. Given the conflicting evidence, it seems likely that the implementation of Ramsey-type pricing in freight rail is far from universal.

South African rail performance was evaluated against international market structure and regulatory norms. Three comparison countries were selected, namely Australia, Brazil and Mexico. Performance across twelve performance metrics in five performance areas was then evaluated. On most of the metrics, local performance is in line with the comparison group, but three results in particular stand out. The first two, namely high accident mortality rates and very low levels of on-time behaviour, may be caused by similar issues around operational efficiency and the backlog in rail equipment and infrastructure investment. The third significant result is on average price levels, where South African prices do not perform particularly well. Once purchasing power parity adjustments are made, it is clear that South Africa has the least affordable rail freight of the comparison group. When coupled with very low service levels, these price levels may be sufficient to drive significant shifts to other modes of freight transportation. In addition, average price levels may mask issues as regards the relative structure of prices, and thus the inter-modal competitiveness of rail freight may be further eroded.

Low on-time rates seem to reflect wider issues with rail service levels, particularly in the GFB business. Poor service increases the indirect cost of rail to customers and erodes the competitive position of rail as compared to other modes of transport.

The international experience of rail reform contains a number of lessons for South Africa:

- All three of the comparison countries have private participation in above-track operations – the *SOE model in rail, where the state monopolises the provision of services, is largely defunct* in the international arena.
- Despite the introduction of some competition in their rail sectors, all three countries have also introduced *some price regulation*.
- A key driver of the need for price regulation seems to have been the recognition that there is *potential for abuse of market power in an unregulated rail sector*. It is thus *important to involve competition authorities* in the restructuring process.
- In the comparison countries, there seems to be a slight *bias towards vertical integration of track and above-track operations*.
- All three of the comparison countries *directly subsidised rail operations* in the pre-restructuring period. None of them made use of cross-subsidies from non-rail operations to rail operations. The cross-subsidisation of rail by ports within the Transnet group is thus not best practice internationally.

South African rail may thus perform similarly to its international peers on a benchmark study, but in terms of regulatory and market structure, the local industry is out of line with best practice. The issue of the cross-subsidy between ports and rail is particularly problematic. Transnet's maritime division has sustained a profit margin that in both absolute and percentage terms is many times higher than that in its rail division, for many years. The kind of profit margins seen in maritime, which usually fluctuate between 30% and 45% of revenue, would be unusually high in the private sector.

Such cross-subsidisation has a negative impact on economic efficiency. Firstly, it removes the profit motive as discipline on Spoornet management. Secondly, by increasing ports services prices above optimal levels, it reduces the amount of ports services that will ultimately be supplied, which decreases allocative efficiency.

Ultimately, high prices in ports services act as a form of indirect taxation. Taxes set by the central government are open to public scrutiny, but the Transnet 'ports levy' is set at the discretion of Transnet management. It is not necessarily in accordance with wider policy objectives. Sustained economic growth in South Africa is dependent on a number of factors, including export growth, and export growth is itself dependent on the ability of local producers to compete with the efficiency of international firms. A ports levy threatens these underpinnings of macroeconomic growth. Cross subsidisation from ports to rail probably lowers domestic efficiency, increases domestic prices, reduces export competitiveness and reduces investment – all of these effects are inconsistent with the program of higher growth and employment envisaged by ASGI-SA.

A number of recommendations flow from this analysis.

- The high fixed cost nature of maintaining a rail network makes it crucial to maximise the volume of services sold, in order to spread the costs of the network as widely as possible. Additional attention is needed on freight rail prices, in order to *ensure that demand-based (Ramsey) pricing techniques are being adequately implemented..*
- The cross subsidisation from ports to rail within Transnet decreases technical efficiency incentives, increases the cost of importing and exporting and impacts on the ability of the economy to reach ASGI-SA goals. The 'ports levy' is in effect a *poorly designed piece of indirect taxation, which urgently needs to be lifted*. If Spoornet requires subsidisation, such subsidies should flow directly from the National Treasury.
- Very little has been done to date to fine-tune the market structure of the domestic rail industry. *Structural alternatives should be considered further in the rail market.*
- The competition authorities should be involved in the formulation of market structure policy in rail.

A key complication of this research process was the paucity of data on the sector. Transnet's participation in the research process was voluntary – despite early requests for cooperation from several government departments, including the Department of Public Enterprises (acting as the sole shareholder of Transnet), the company delayed cooperation for almost a full year, only participating after a final draft had been circulated. Access to basic information in respect of rail pricing is extremely opaque, and it does not seem that information on the sector is regularly and reliably available, even to government.

Many industries are characterised by information asymmetry – owners and/or regulators struggle to understand a business as thoroughly as does its management team, and thus also struggle to interpret and guide the performance of that management team. Good data is of particular importance if major initiatives are being contemplated. It is thus essential that more data on the operation of the sector be made available to the shareholder and regulator of Transnet at the very least – particular areas of focus should include the relative structure of prices, the basis on which line profitability is calculated, and customer service metrics. A good initial step would be to reintroduce a publicly available annual divisional report for Spoornet, which was discontinued in 2004.

The lack of information available to government, as well as clients and other stakeholders, inhibits the ability to ensure that rail services are run in the public interest and has significantly reduced government's ability to ensure that Transnet is

an effective policy instrument. Transnet's current pro-active management may seem to make this a less pressing concern, but for long-run success a proper institutional, market and regulatory framework needs to be established for this critical part of the country's infrastructure.

2.3. Water sector

The water services and distribution sector study covered municipal supplies of water to domestic, commercial and industrial consumers as well as utility supplies to large industrial consumers by the trading units of the DWAF as well as water boards and related entities. It did not include waste-water collection, treatment and disposal, except insofar as the pricing of these services is directly linked to water supply, stormwater drainage water for irrigation and only addresses briefly incidental water use charges such as the water research levy and water resource management charge.

Data for a five year period was collected for all metropolitan municipalities and for a sample of a further six urban municipalities where there is a significant manufacturing industry. Data was also collected for all Water Boards over the period, based on their audited financial statements. Tariff data for the schemes of the Department of Water Affairs and Forestry was taken from published tariff schedules. Tariff data from comparator countries was taken from a variety of sources including national ministries and regulators, the utilities themselves while the World Bank's IBNET water utility database was also consulted.

The study found that prices for water supplied to industry in South Africa have generally risen faster than inflation over the period 2001/2 to 2006/7. Municipal water prices to industry have risen by an estimated 62% in the period 2001/2 to 2005/6. Domestic prices rose 60% in the same period, compared to PPIX and CPIX rises of 30% and 32%, respectively. Prices for bulk supplies from water boards rose by an average of 42% over the same period. Prices for bulk water supplied by DWAF varied widely as the new pricing strategy was implemented but rose by an average of 21% over the period 2002/3 to 2005/6 compared to a CPIX rise of 16% over the same period.

An understanding of these price changes is complicated by the relatively complex structure of the water industry and the limited information that is easily available about it. Prices vary according to source, supplier and location. Water may be supplied to industry directly by the national Department of Water Affairs and Forestry, by regional water boards or by municipalities, while some companies in isolated areas supply their own needs.

The formal processes through which South African water prices are determined are regulated by statute and are well documented, although it is not clear that the processes are always followed. While there is no independent regulator, price-setting involves systemic engagement with users and there is provision for Central Government to intervene where unreasonable decisions are taken.

Prices from all suppliers vary significantly from one location to another. These prices reflect:

- The water source and specific system requirements;
- Administrative decisions regarding tariff structures;
- Operating efficiencies; and
- Levels of investment in system maintenance and expansion.

The ratio of the domestic tariffs levied by municipalities to their industrial tariffs is a useful indicator of the extent to which there is cross-subsidisation from industry to other users. This indicator varies significantly for reasons explored in the report. In some municipalities, industrial charges are set at the top domestic rate, while in others charges are set at or below the average domestic rate. Since the unit cost of industrial supplies should be less than that for small volume users, this indicates that there is a degree of cross-subsidisation. However, particularly in the inland cities, this may be justified by the high long run marginal cost of augmenting supplies in situations of scarcity.

The international review shows that the South African situation is comparable to that in other countries, many of which share South Africa's institutional complexity as well as its limited information availability. It indicates, however, that despite the fact that the real price of water is rising in most countries, water is still often under-priced, which impacts on the reliability and sustainability of supplies in the longer term.

The cost of water supply to industry in South Africa is found not to be substantially different to that in comparator countries, although there are variations in the nature and quality of the services provided. Countries such as Malaysia and India that have lower costs also have a much lower quality of service. Independent comparison with OECD countries places South Africa's costs as the fourth lowest of 11 countries, although the rate of increase over the past five years, expressed in local currency, is amongst the highest.

There is limited evidence about the levels of investment in some key areas of the sector of relevance to industrial water users. Thus, while price levels may currently compare reasonably to those in other countries, the extent to which these prices reflect adequate maintenance and expansion of the underlying supply infrastructure is an important uncertainty which may have long-term repercussions. Similar challenges are reported from OECD countries where tariff differentials are ascribed, in part, to different levels of ongoing infrastructure investment.

One deviation from what some consider to be international best practice is that there is no independent economic regulator of water supply in South Africa. However, the comparative evidence does not demonstrate any major negative impact as a result of this and there is no evidence that South Africa's water sector performance is worse than that of sectors such as electricity and telecommunications, both of which have independent regulators. It is also notable that, in the majority of OECD countries, water supply is still in the public domain and regulated by government, not by an independent regulator.

Together with South Africa's positive comparative pricing performance, this suggests that the present institutional framework provides an element of systemic regulation, with different actors able to use the mechanisms that have been provided to promote their own interests and address their concerns.

While the establishment of an independent regulator may not be a priority at the current stage, the evidence from both South Africa and the international review is that systemic regulation works better if there is greater transparency and that information dissemination and formal benchmarking may be an effective tool in maintaining equitable, efficient and sustainable water prices.

An issue that has not been addressed by this study is the cost of wastewater disposal and the management of other impacts on water resource quality. Wastewater constitutes a significant (but usually separate) proportion of the overall water services charges in most municipalities. Wastewater management also represents a rapidly

increasing component of cost in most of the comparator countries. These and other environmental management costs will be more important in the future and may become higher than the cost of water supply itself.

Overall, South Africa's water pricing performance is reasonably good, considering that its water is relatively scarce. It does not (yet) face the problems of supply reliability that confront some of its developing country peers. The evidence does not present a strong case for independent regulation although existing "systemic regulation" could usefully be strengthened by greater transparency. However, the country will face growing challenges, particularly inland where absolute scarcity rather than price is becoming a limiting factor for industry in some areas. In this context, water may be under- rather than over-priced.

3. Final Conclusions

This report examines the prices of goods and services provided by entities owned by the South African government in water, rail and ports. Prices in these three sectors are referred to as 'administered' due to the public ownership of the entities providing them. Furthermore each sector provides important economic inputs for firms and consumers in the rest of the economy. Their pricing conduct and behaviour is therefore a major influence on the competitiveness of the economy as a whole, and on the alignment between the productive side of the economy under public ownership, and government economic policy.

The reports limit themselves to examining pricing and the context in which prices are determined. However, the brief did not extend to reviewing regulation and competition. Clearly, this matters a great deal to pricing and competitiveness. However, this was not the subject of our investigation and so the papers purposefully do not comment on it. Alongside this study, the National Treasury and World Bank did implement a project to review regulation in rail and ports, as well as telecommunications and energy. In addition, a process led by the Presidency was undertaken to review Government's approach to regulation. It is without doubt that much more work is required on pricing, competition and regulation, especially in sectors where there are state-owned monopolies that provide essential services to consumers and industry. These sectors underpin SA's global competitiveness, and are one of the most important 'binding constraints' already identified by ASGISA.

There are a number of central overarching recommendations emerging from this set of studies:

- Government urgently needs to establish rules and norms around information disclosure. These should not pose an unnecessarily onerous burden on the SOEs. The state and the regulators need much better information on price and operational trends. However, it should also be possible for private researchers to have ready access to information that is in the public interest. This will be the only way to enable more and varied studies on these questions.
- Government urgently needs to review the key performance indicators for the SOEs. In particular, "ASGISA targets" are not reflected in the KPIs. Transnet must deliver to the ASGISA targets of expanding international trade in non-traditional goods. This means its primary targets need to focus on competitive price and service quality. Instead, the targets emphasize a high EBITDA margin. Transnet faces a **double mandate**, of making profits and

meeting social goals. Although the difficulties of reconciling these goals are acknowledged in policy, the approach to reconciling them is inadequate.

- Government needs to review its approach to funding the strategic SOEs that provide essential services, especially in the current period, where very substantial investments are being planned. Self-financing may be possible, but only if prices are increased. These price increases may well constrain the ability to reach ASGISA objectives in expanding non-traditional trade. The SOEs are faced with competing objectives. The historical context has led to a situation where there has been under-investment in strategic infrastructure and insufficient pressure for innovation and efficiency improvements. Certainly in sectors like transport and energy, very large infrastructure spending is planned over relatively short periods of time. Subsidising these investments should be considered in order to assist Transnet to support ASGISA objectives in the shortest possible time frames. Such a subsidy might be made contingent on performance and very strict operational KPIs. It is also worth investigating the extent that comparator operations are subsidised to ascertain what Transnet is competing with.
- An approach to pricing that reflects both entity and social costs is needed. This is a common finding that the studies on water, rail and ports all share. For example, there was some debate with Transnet about how to price, so as to reflect long run marginal cost. From the perspective of the firm, Transnet, this needs to cover its own costs, including planned investments. From the perspective of society, the costs include externalities such as the impact on roads. Moreover, without more information, and in a context where there is no competition, it is difficult to say whether prices reflect efficient or inefficient outcomes. More investigation is required to assess these questions.